

## **Section E—Provisions for Traditional Small MS4 Permittees**

### **E. PROVISIONS FOR ALL TRADITIONAL SMALL MS4 PERMITTEES**

#### **E.1. RENEWAL TRADITIONAL SMALL MS4 PERMITTEES**

All Renewal Traditional Small MS4s Permittees shall comply with this Section. Where the requirements of a certain subsection provide a compliance date that is past the effective date of this Order, the Renewal Traditional Small MS4 shall implement its existing program until that date.

#### **E.2. NEW TRADITIONAL SMALL MS4 PERMITTEES**

New Traditional Small MS4s shall comply with this Section.

#### **E.3. NON-TRADITIONAL SMALL MS4S PERMITTEES**

**E.3.a.** All Renewal Non-Traditional Small MS4 Permittees shall comply with Section F of this Order. Where the requirements of a certain subsection provide a compliance date that is past the effective date of this Order, the Renewal Non-Traditional Small MS4 shall implement its existing program until that date.

**E.3.b.** New Non-Traditional Small MS4s Permittees shall comply with Section F of this Order.

#### **E.4. SMALL MS4 ASBS PERMITTEES**

Both Traditional and Non-traditional Small MS4s Permittees that discharge to ASBS as listed on Attachment D shall comply with Attachment C in addition to all other applicable provisions of this Order.

**E.5. SEPARATE IMPLEMENTING ENTITY (SIE)**

Permittees, both Traditional and Non-traditional Small MS4s, may rely on a SIE to satisfy one or more of the permit obligations, if the SIE can appropriately and adequately address the storm water issues of the Permittee. The SIE must agree to implement the BMPs, or components thereof, to achieve compliance with this Order. If the SIE fails to implement the BMPs, the Permittee remains responsible for compliance with this Order.

**E.6. PROGRAM MANAGEMENT ELEMENT**

To effectively implement a coordinated storm water program, the Permittee shall have an overarching Program Management element in its storm water management program. The Program Management element shall include the following:

**E.6.a. Legal Authority**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall review and revise relevant ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms, to obtain adequate legal authority, to the extent allowable under state or local law, to control pollutant discharges into and from, as applicable, its MS4, and to meet the requirements of this Order.
- (ii) **Implementation Level** –At a minimum, the Permittee shall have adequate legal authority to:
  - (a) Effectively prohibit non-storm water discharges through the MS4. Exceptions to this prohibition are NPDES-permitted discharges of non-storm water and non-storm water discharges in B.3 that are considered non-significant contributors of pollutants. Where the non-storm water discharge is to a segment of an MS4 that discharges directly to an ASBS, exceptions to the non-storm water prohibition are specified in Attachment C.
  - (b) Detect and eliminate illicit discharges and illegal connections to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include all non-storm water discharges not otherwise authorized in this Order, including discharges from organized car washes, mobile cleaning and pressure wash operations,
  - (c) Respond to the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.
  - (d) Require parties responsible for runoff in excess of incidental runoff to implement Discharge Prohibition B.4.a-e.
  - (e) Require operators of construction sites, new or redeveloped land; and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 through the installation, implementation, or maintenance of BMPs consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent.
  - (f) Require information deemed necessary to assess compliance with this Order. The Permittee shall only require information in compliance with the Homeland Security Act or any other federal law that concerns security in the United States. The Permittee shall also have the authority to review designs and proposals for new development and redevelopment to determine whether adequate BMPs will be

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

installed, implemented, and maintained during construction and after final stabilization (post-construction).

- (g) Enter private property for the purpose of inspecting, at reasonable times, any facilities, equipment, practices, or operations for active or potential storm water discharges, or non-compliance with local ordinances/standards or requirements in this Order, as consistent with any applicable state and federal laws.
- (h) Require that dischargers promptly cease and desist discharging and/or cleanup and abate a discharge, including the ability to:
  - 1) Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within 72 hours of notification; high risk spill should be cleaned up as soon as possible.
  - 2) Require abatement within 30 days of notification, for uncontrolled sources of pollutants that could pose an environmental threat;
  - 3) Perform the clean-up and abatement work and bill the responsible party, if necessary;
  - 4) Provide the option to order the cessation of activities until such problems are adequately addressed if a situation persists where pollutant-causing sources or activities are not abated;
  - 5) Require a new timeframe and notify the appropriate Regional Water Board when all parties agree that clean-up activities cannot be completed within the original timeframe and notify the appropriate Regional Water Board in writing within five business days of the determination that the timeframe requires revision.
- (i) When warranted, have the ability to:
  - 1) Levy citations or administrative fines against responsible parties either immediately at the site, or within a few days.
  - 2) Require recovery and remediation costs from responsible parties.
- (j) Impose more substantial civil or criminal sanctions (including referral to a city or district attorney) and escalate corrective response, consistent with its Enforcement Response Plan developed pursuant to Section E.6.c., for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.

### **E.6.b. Certification**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall certify by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative as described in 40 Code of Federal Regulations section 122.22(b) that the Permittee has and will maintain full legal authority to implement and enforce each of the requirements contained in this Order.
- (ii) **Implementation Level** – The Permittee’s certification statement shall include the following:
  - (a) Identification of all departments within the Permittee’s jurisdiction that conduct storm water-related activities and their roles and responsibilities under this Order.
  - (b) Citation of storm water runoff related ordinances, identification of the topics each ordinance addresses;

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (c) Identification of the local administrative and legal procedures and ordinances available to mandate compliance with storm water-related ordinances and therefore with the conditions of this Order.
  - (d) A description of how storm water related-ordinances are reviewed and implemented.
  - (e) A statement that the municipality will implement enforcement actions consistent with its Enforcement Response Plan developed pursuant to Section E.6.c.
- (iii) **Reporting** – All Permittees shall submit in the second year online Annual Report, a statement signed by an authorized signatory certifying the Permittee has adequate legal authority to comply with all Order requirements.

**E.6.c. Enforcement Measures and Tracking**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall develop and implement an Enforcement Response Plan. The Enforcement Response Plan shall contain enforcement procedures and actions and identify the Permittee’s responses to violations and describe how the Permittee will address repeat and continuing violations by implementing progressively stricter responses as needed to achieve compliance.
- (ii) **Implementation Level** - The Enforcement Response Plan shall describe how the Permittee will use each of the following types of enforcement responses based on the type of violation:
  - (a) Verbal Warnings – Verbal warnings are primarily consultative in nature. At a minimum, verbal warnings shall specify the nature of the violation and required corrective action.
  - (b) Written Notices – Written notices shall include nature of the violation and the required corrective action, with deadlines for taking such action.
  - (c) Escalated Enforcement Measures – The Permittee shall establish legal authority to employ any combination of the enforcement actions below (or their functional equivalent), and to escalate enforcement responses where necessary to correct persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm:
    - 1) Citations (with Fines) – The Enforcement Response Plan shall describe when the Permittee will assess monetary fines, which may include civil and administrative penalties.
    - 2) Stop Work Orders – The Enforcement Response Plan shall describe when the Permittee will issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate BMPs.
    - 3) Withholding of Plan Approvals or Other Authorizations – Where a facility is in non-compliance, the Enforcement Response Plan shall describe how the Permittee’s own approval or authorization processes that affect the facility’s ability to discharge to the MS4 can be used to abate the violation.
    - 4) Additional Measures – The Enforcement Response Plan may also describe other escalated measures the Permittee has under its local legal authorities. For example, the Permittee may need to improve erosion control measures and collect the funds to pay for work and materials from the responsible party by

*UNOFFICIAL DRAFT — Not Certified by Clerk*

either collecting against the project's bond or directly billing the responsible party.

- (d) NPDES Permit Referrals—For those construction projects or industrial facilities subject to the State's Construction General Permit (CGP) or Industrial General Permit (IGP), the Permittee shall:
- 1) Refer non-filers (i.e., those facilities that cannot demonstrate that they obtained permit coverage) to the appropriate Regional Water Board within 30 days of making that determination, or [file a complaint on the State Water Board's website](http://www.dtsc.ca.gov/database/CalEPA_Complaint/index.cfm): [http://www.dtsc.ca.gov/database/CalEPA\\_Complaint/index.cfm](http://www.dtsc.ca.gov/database/CalEPA_Complaint/index.cfm). In making such referrals, at a minimum include the following documentation:
    - a) Construction project or industrial facility location.
    - b) Name of owner or operator.
    - c) Estimated construction project size or type of industrial activity (including the Standard Industrial or the North American Industry Classification, if known).
    - d) Records of communication with the owner or operator regarding filing requirements.
  - 2) Refer ongoing violations to the appropriate Regional Water Board provided that the Permittee has made a good faith effort of progressive enforcement to achieve compliance with its own ordinances. At a minimum, the Permittee's good faith effort shall include documentation of two follow-up inspections and two warning letters or notices of violation. In making such referrals, the Permittee shall include, at a minimum, the following information:
    - a) Construction project or industrial facility location;
    - b) Name of owner or operator;
    - c) Estimated construction project size or type of industrial activity (including Standard Industrial Classification or North American Industry Classification System if known);
    - d) Records of communication with the owner or operator regarding the violation, including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator;
    - e) Enforcement Tracking –Track instances of non-compliance via hard-copy files or electronically. The enforcement tracking documentation shall include, at a minimum, the following:
      - (1) Name of owner/operator.
      - (2) Location of construction project or industrial facility.
      - (3) Description of violation.
      - (4) Required schedule for returning to compliance.
      - (5) Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved within the time specified in the enforcement action.
      - (6) Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations, etc.)

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

- (7) Any referrals to different departments or agencies; and
- f) Recidivism Reduction – The Permittee shall identify chronic violators of any provision of this Order or of any related local ordinance or regulation and reduce the rate of noncompliance recidivism. The Permittee shall develop incentives, disincentives, or increase inspection frequency at the operator’s sites to prevent chronic violations.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

### **E.7. EDUCATION AND OUTREACH PROGRAM**

Traditional Small MS4 Permittees may be required to implement Community-Based Social Marketing (CBSM) requirements as detailed in Attachment E upon determination by a Regional Board Executive Officer. The Regional Board Executive Officer shall notify Permittees within three months of the permit adoption date of their determination to require CBSM.<sup>9</sup> The notification shall include a statement of reasons why the Executive Officer finds that implementation of CBSM is appropriate. If the Permittee disagrees with the Executive Officer determination, the Permittee may bring the dispute to the State Water Board Executive Director or his designee as specified under the Dispute Resolution provision of this Order.

#### **E.7.a. Public Education and Outreach**

Within the first year of the effective date of the permit, all Permittees shall comply with the requirements in this Section by selecting one or more of the following Public Education and Outreach options:

- 1) Contributing to a countywide storm water program, as determined appropriate by the Permittee members, so that the countywide storm water program conducts outreach and education on behalf of its members; or
- 2) Contributing to a regional outreach and education collaborative effort (a regional outreach and education collaborative effort occurs when all or a majority of the Permittees collaborate to conduct regional outreach and education. Regional outreach and education collaboration includes Permittees defining a uniform and consistent message, deciding how best to communicate the message, and how to facilitate behavioral changes, then collaboratively apply what is learned through local jurisdiction groups, pooling resources and skills.); or
- 3) Fulfilling outreach and education requirements within their jurisdictional boundaries on their own; or

---

<sup>9</sup> Getting in Step, A Guide to, Conducting Watershed Outreach Campaigns, 3<sup>rd</sup> Edition, November 2010, EPA 841-B-10-002, USEPA, Office of Water.



*UNOFFICIAL DRAFT — Not Certified by Clerk*

4) A combination of the previous options, so that all requirements are fulfilled.

**Reporting** – By the first year Annual Report, the Permittee shall submit information indicating which Public Education and Outreach option(s) it will use to comply with this Section. For each option involving a contribution to a countywide storm water program or regional outreach and education collaborative effort, the Permittee shall complete and have available in the first year Annual Report documentation, such as a written agreement, letter or similar document, which confirms the collaboration with other MS4s.

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall develop and implement a comprehensive storm water public education and outreach program. The public education and outreach program shall be designed to reduce pollutant discharges in storm water runoff and non-storm water discharges to the MS4 through increased storm water knowledge and awareness in target communities. The Public Education and Outreach Program shall be designed to measurably increase the knowledge and awareness of targeted audience regarding the municipal storm drain system, impacts of urban runoff and non-storm water discharges on receiving waters, and potential BMP solutions for the target audiences, thereby reducing pollutant releases to the MS4 and the environment.
- (ii) **Implementation Level** – The Permittee shall, at a minimum:
- (a) Develop and implement a public education strategy that establishes education tasks based on water quality problems, target audiences, and anticipated task effectiveness. The strategy must include identification of who is responsible for implementing specific tasks and a schedule for task implementation. The strategy must demonstrate how specific high priority storm water quality issues in the community or local pollutants of concern are addressed.
  - (b) Implement surveys at least twice during the permit term to gauge the level of awareness in target audiences and effectiveness of education tasks.
  - (c) Develop and convey a specific storm water message that focuses on the following:
    - 1) Local pollutants of concern
    - 2) Target audience
    - 3) Regional water quality issues
  - (d) Develop and disseminate appropriate educational materials to target audiences and translate into applicable languages when appropriate (e.g. the materials can utilize various media such as printed materials, billboard and mass transit advertisements, signage at select locations, stenciling at storm drain inlets, radio advertisements, television advertisements, and websites);
  - (e) Utilize public input (e.g., the opportunity for public comment, or public meetings) in the development of the program;
  - (f) Distribute the educational materials, using whichever methods and procedures determined appropriate during development of the public education strategy;
  - (g) Convey messages to explain the benefits of water-efficient and storm water-friendly landscaping<sup>10</sup>, using existing information if available;

---

<sup>10</sup> For example, [Surfrider's Ocean Friendly Garden Program](http://www.surfrider.org/programs/ocean-friendly-gardens) (<http://www.surfrider.org/programs/ocean-friendly-gardens>) and the Water Efficient Landscape Ordinance (WELO)

## UNOFFICIAL DRAFT — Not Certified by Clerk

- (h) Develop and convey messages specific to reducing illicit discharges with information about how the public can report incidents to the appropriate authorities. The Permittee must promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including phone numbers for complaints and spill reporting, and publicize to both internal Permittee staff and the public. If 911 is selected, the Permittee must also create, maintain, and publicize a staffed, nonemergency phone number with voicemail, which is checked daily;
  - (i) Develop and convey messages specific to proper application of pesticides, herbicides, and fertilizers;
  - (j) Within the Permittee's jurisdiction, provide independent, parochial, and public schools with materials to effectively educate school –age children about storm water runoff and how they can help protect water quality habitat in their local watershed (s). The Permittee is encouraged to use environmental and place-based, experiential learning materials that are integrated into school curricula and school facility management<sup>11</sup>. In the case that an environmental and place-based, experiential learning local program does not exist, the Permittee may use [California's Education and Environment Initiative Curriculum](#)<sup>12</sup> or equivalent.
  - (k) Develop (or coordinate with existing, effective programs) and convey messages specific to reducing discharges from organized car washes, mobile cleaning and pressure washing operations, and landscape irrigation.
  - (l) Conduct storm water-friendly education for organized car wash participants and provide information pertaining to car wash discharge reduction. The Permittee may use [the Sacramento Stormwater Quality Partnership's River Friendly Carwash Program](#)<sup>13</sup>, or equivalent, for guidance.
  - (m) Develop and convey messages specific to mobile cleaning and pressure wash businesses.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

### E.7.b. Staff and Site Operator Training and Education

#### E.7.b.1. Illicit Discharge Detection and Elimination Training

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall develop and implement a training program for all Permittee staff who, as part of their normal job responsibilities, may be notified of, come into contact with,

---

<sup>11</sup> For example, [Sacramento Splash Organization](http://www.sacsplash.org/) (www.sacsplash.org/), [Effie Yeaw Nature Center](http://www.sacnaturecenter.net) (www.sacnaturecenter.net) or [Yolo Basin Organization](http://yolobasin.org) (yolobasin.org)

<sup>12</sup> <http://www.californiaeei.org/>

<sup>13</sup> <http://www.beriverfriendly.net/riverfriendlycarwashing/>



## *UNOFFICIAL DRAFT — Not Certified by Clerk*

or otherwise observe an illicit discharge or illegal connection to the storm drain system.

- (ii) **Implementation Level** – The training program shall include at a minimum:
  - (a) Identification of an illicit discharge or illegal connection.
  - (b) Proper procedures for reporting and responding to the illicit discharge or illegal connection.
  - (c) Follow-up training shall be provided as needed to address changes in procedures, techniques, or staffing.
  - (d) An annual assessment of their trained staff's knowledge of illicit discharge response and refresher training as needed.
  - (e) Training for new staff who, as part of their normal job responsibilities may be notified of, come into contact with, or otherwise observe an illicit discharge or illegal connection shall be trained no later than six months after the start of employment.
  - (f) Contact information, including the procedure for reporting an illicit discharge, shall be included in each of the Permittee's fleet vehicles that are used by field staff.
  - (g) Focused education on identified illicit discharges and associated illicit discharge locations.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

### **E.7.b.2. Construction Outreach and Education**

#### **(a) Permittee Staff Training**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall ensure that all staff implementing the construction site storm water runoff control program are adequately trained.
- (ii) **Implementation Level** – The Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:
  - (a) Plan Reviewers and Permitting Staff - The Permittee shall ensure plan reviewers and permitting staff are qualified individuals, knowledgeable in the technical review of local erosion and sediment control plans, (including proper control measure selection, installation, implementation, and maintenance, as well as administrative requirements such as inspection reporting/tracking and the use of the Permittee's enforcement responses), and are certified pursuant to a State Water Board sponsored program as a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD), or a designated person on staff possesses the QSD credential.
  - (b) Erosion Sediment Control/Storm Water Inspectors - The Permittee shall ensure inspectors are qualified individuals, knowledgeable in inspection procedures, and are certified pursuant to a State Water Board sponsored program as either (1) a Qualified SWPPP Developer (QSD); (2) a Qualified SWPPP Practitioner (QSP); or

*UNOFFICIAL DRAFT — Not Certified by Clerk*

(3) a designated person on staff possesses each credential (QSD to supervise plan review, QSP to supervise inspection operations).

(c) Third-Party Plan Reviewers, Permitting Staff, and Inspectors - If the Permittee utilizes outside parties to review plans and/or conduct inspections, the Permittee shall ensure these staff are trained.

(iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**(b) Construction Site Operator Education**

(i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall develop and distribute educational materials to construction site operators.

(ii) **Implementation Level** – The Permittee shall do the following:

(a) Each year provide information on training opportunities for construction operators on BMP selection, installation, implementation, and maintenance as well as overall program compliance.

(b) Develop or utilize existing outreach tools (i.e. brochures, posters, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of storm water BMPs, as well as overall program compliance.

(c) Distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The Permittee's contact information and website shall be included in these materials.

(d) Update the existing storm water website, as necessary, to include information on appropriate selection, installation, implementation, and maintenance of BMPs.

(iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.7.b.3. Pollution Prevention and Good Housekeeping Staff Training**

The Permittee shall train employees on how to incorporate pollution prevention/good housekeeping techniques into Permittee operations.

(i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall develop a biennial employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices as specified in Section E.11. Pollution Prevention/Good Housekeeping for Permittee Operations of this Order. The Permittee shall determine the need for interim

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

training during alternate years when training is not conducted, through an evaluation of employee Pollution Prevention/Good Housekeeping knowledge. All new hires whose jobs include implementation of pollution prevention and good housekeeping practices must receive this training within the first year of their hire date.

- (ii) **Implementation Level** – The training program shall include the following:
  - (a) Biennial training for all employees implementing this program element. This biennial training shall include a general storm water education component, any new technologies, operations, or responsibilities that arise during the year, and the permit requirements that apply to the staff being trained. Employees shall receive clear guidance on appropriate storm water BMPs to use at municipal facilities and during typical O&M activities.
  - (b) A biennial assessment of trained staff's knowledge of pollution prevention and good housekeeping and shall revise the training as needed.
  - (c) A requirement that any contractors hired by the Permittee to perform O&M activities shall be contractually required to comply with all of the storm water BMPs, good housekeeping practices, and standard operating procedures described above.
  - (d) The Permittee shall provide oversight of contractor activities to ensure that contractors are using appropriate BMPs, good housekeeping practices and following standard operating procedures.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

### **E.8. PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall involve the public in the development and implementation of activities related to the program. The public participation and involvement program shall encourage volunteerism, public comment and input on policy, and activism in the community. The Permittee shall also be involved in their Integrated Regional Water Management Plan (IRWMP) or other watershed-level planning effort, if applicable.
- (ii) **Implementation Level** – At a minimum, the Permittee shall:
  - (a) Develop a public involvement and participation strategy that establishes who is responsible for specific tasks and goals.
  - (b) Consider development of a citizen advisory group (either a stand-alone group or utilize an existing group or process). The advisory group may consist of a balanced representation of all affected parties, including residents, business owners, and environmental organizations in the MS4 service area and/or affected watershed. The Permittee may invite the citizen advisory group to participate in the development and implementation of all parts of the community's storm water program.

## UNOFFICIAL DRAFT — Not Certified by Clerk

- (c) Create opportunities for citizens to participate in the implementation of BMPs through sponsoring activities (e.g., stream/beach/lake clean-ups, storm drain stenciling, volunteer monitoring and educational activities).
- (d) Ensure the public can easily find information about the Permittee's storm water program.
- (e) Actively engage in the Permittee's IRWMP or other watershed-level planning effort.

**(iii) Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

### E.9. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Permittee shall develop an Illicit Discharge Detection and Elimination program to detect, investigate, and eliminate illicit discharges, including illegal dumping, into its system, to the extent allowable under law.<sup>14</sup> The Permittee may utilize the CWP's guide on Illicit Discharge Detection and Elimination as guidance.

#### E.9.a. Outfall Mapping

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall create and maintain an up-to-date and accurate outfall map<sup>15</sup>. The map may be in hard copy and/or electronic form or within a geographic information system (GIS) the development of the outfall map shall include a visual outfall inventory involving a site visit to each outfall. Renewal Permittees that have an existing up-to-date outfall map that includes the minimum requirements specified in Section E.9.a.(ii)(a-e) are not required to re-create the outfall map. This does not exempt Renewal Permittees with an existing outfall map from conducting the field sampling specified in Section E.9.c.
- (ii) **Implementation Level** – The outfall map shall at a minimum show:
  - (a) The location of all outfalls<sup>16</sup> that are operated by the Permittee within the urbanized area, drainage areas, and land use(s) contributing to those outfalls that are

---

<sup>14</sup> The Permittee shall use the [Center for Watershed Protection's](http://www.cwp.org) (available at [www.cwp.org](http://www.cwp.org)) guide on Illicit Discharge Detection and Elimination (IDDE): A Guidance Manual for Program Development and Technical Assistance or equivalent when developing an IDDE program. [IDDE program Guidance](http://cfpub.epa.gov/npdes/stormwater/idde.cfm) can also be found at: <http://cfpub.epa.gov/npdes/stormwater/idde.cfm>.

<sup>15</sup> The Permittee may utilize existing forms such as [the CWP Outfall Reconnaissance Inventory/Sample Collection Field Sheet](http://cfpub.epa.gov/npdes/stormwater/idde.cfm) (<http://cfpub.epa.gov/npdes/stormwater/idde.cfm>) while conducting the mapping inventory and Field Sampling as specified below, in Section E.9.c.

<sup>16</sup> Submerged outfalls or other outfalls that may pose a threat to public safety and/or that are inaccessible are not required to be inventoried.

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

operated by the Permittee, and that discharge within the Permittee's jurisdiction to a receiving water. Each mapped outfall shall be located using coordinates obtained from a global positioning system (GPS) and given an individual alphanumeric identifier, which shall be noted on the map. Photographs or an electronic database shall be utilized to provide baseline information and track operation and maintenance needs over time.

(b) The location (and name, where known to the Permittee) of all water bodies receiving direct discharges from those outfall pipes.

(c) Priority areas, including, but not limited to the following:

- 1) Areas with older infrastructure that are more likely to have illegal connections and a history of sewer overflows or cross-connections
- 2) Industrial, commercial, or mixed use areas;
- 3) Areas with a history of past illicit discharges;
- 4) Areas with a history of illegal dumping;
- 5) Areas with onsite sewage disposal systems;
- 6) Areas upstream of sensitive water bodies;
- 7) Areas that drain to outfalls greater than 36 inches that directly discharge to the ocean; and
- 8) Other areas that are likely to have illicit discharges.

The priority area list shall be updated annually.

(d) Field sampling stations

(e) The permit boundary

Submerged outfalls or other outfalls that may pose a threat to public safety and/or that are inaccessible are not required to be inventoried.

(iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

### **E.9.b. Illicit Discharge Source/Facility Inventory**

(i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall maintain an inventory of all industrial/commercial facilities/sources within the Permittee's jurisdiction (regardless of ownership) that could discharge pollutants in storm water to the MS4. The Permittee shall utilize the inventory to identify facilities for inspections of potential illicit discharges.

(ii) **Implementation Level** - The inventory shall include the following:

(a) Minimum information for each industrial facility/source:

- Facility name;
- Address;
- Nature of business or activity;
- Physical location (decimal latitude-longitude) of storm drain receiving discharge;



*UNOFFICIAL DRAFT — Not Certified by Clerk*

- Name of receiving water and if the facility/source is tributary to a Clean Water Act Section 303(d) listed water body segment or water body segment subject to a TMDL;
  - Incorporation of facility information into GIS is optional.
- (b) At a minimum, the following industrial and commercial facilities/sources shall be included in the inventory.
- Vehicle salvage yards
  - Metal and other recycled materials collection facilities
  - Waste transfer facilities
  - Vehicle mechanical repair, maintenance or cleaning
  - Building trade central facilities or yards
  - Corporation yards
  - Landscape nurseries and greenhouses
  - Building material retailers and storage
  - Plastic manufacturers
  - Other facilities designated by the Permittees or Regional Water Boards to have reasonable potential to contribute to pollution of storm water runoff
- (c) The Permittee shall determine if the facilities that are required to be covered under the Statewide Industrial General Permit have done so. Upon discovering any facilities requiring permit coverage but are not yet permitted, the Permittee shall notify the appropriate Regional Water Board, and include copies of the notification in the online Annual Report.
- (d) The Permittee shall update the inventory annually. The update shall be accomplished through collection of new information obtained during inspections and contacts with commercial and industrial facility operators and owners, or through other readily available intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer hook-up permits, and SMARTS database).
- (e) The Permittee shall develop and implement procedures to proactively identify illicit discharges originating from priority areas identified in Section E.9.a.(ii).(c). The Permittee shall implement the procedures to assess priority areas for the presence of illicit discharges at least once over the length of the permit term. The procedures shall include field observations, field screening, inspections, and any other appropriate and effective survey methods. Alternatively, Permittees may establish a self-certification program where Permittees require reports from authorized parties demonstrating the prevention and elimination of illicit discharges at their facilities in priority areas at least once over the length of the permit term.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.



**E.9.c. Field Sampling to Detect Illicit Discharges**

- (i) **Task Description** – Within the second year of the effective date of the permit (e.g. while conducting the outfall inventory under Section E.9.a.), the Permittee shall sample any outfalls that are flowing or ponding more than 72 hours after the last rain event. The Permittee shall also conduct dry weather sampling (more than 72 hours since the last rain event) of outfalls annually identified as priority areas.
- (ii) **Implementation Level** – The Permittee shall:
  - (a) Conduct monitoring<sup>17</sup> for the following indicator parameters identified in Table 1 to help determine the source of the discharge. Alternatively, the Permittee may select parameters based on local knowledge of pollutants of concern in lieu of sampling for the parameters listed in Table 1. Modifications and associated justifications shall be identified within SMARTS prior to conducting field sampling as specified in Section E.9.c.(i).

---

<sup>17</sup> A description of indicator parameter sampling equipment is described in Chapter 12: [Indicator Monitoring in the CWP IDDE: Guidance Manual](http://www.epa.gov/npdes/pubs/idde_manualwithappendices.pdf) found at: [http://www.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](http://www.epa.gov/npdes/pubs/idde_manualwithappendices.pdf). Sampling may be conducted using field test kits.

**Table 1. Indicator Parameters**

**Note:** > = greater than  
 > 80% — Can almost always (>80% of samples) distinguish this discharge from clean flow types (e.g., tap water or natural water). For tap water, can distinguish from natural water.  
 > 50% — Can sometimes (>50% of samples) distinguish this discharge from clean flow types depending on regional characteristics, or can be helpful in combination with another parameter.  
 Poor — Poor indicator. Cannot reliably detect illicit discharges, or cannot detect tap water  
 Data sources: Pitt (  
 \* Fluoride is a poor indicator when used as a single parameter, but when combined with additional parameters (such as detergents, ammonia and potassium), it can almost always distinguish between sewage and wash water.

Parameter	Discharge Types It Can Detect				Laboratory/Analytical Challenges
	Sewage	Washwater	Tap Water	Industrial or Commercial Liquid Wastes	
Ammonia	> 80%	> 50%	Poor	> 50%	Can change into other nitrogen forms as the flow travels to the outfall
Color	> 50%	> 50%	Poor	> 50%	
Conductivity	> 50%	> 50%	Poor	> 50%	Ineffective in saline waters
Detergents – Surfactants	> 80%	> 80%	Poor	> 50%	Reagent is a hazardous waste
Fluoride*	Poor	Poor	>80%	> 50%	Reagent is a hazardous waste Exception for communities that do not fluoridate their tap water
Hardness	> 50%	> 50%	>50%	> 50%	
pH	Poor	> 50%	Poor	> 50%	
Potassium	> 50%	Poor	Poor	> 80%	May need to use two separate analytical techniques, depending on the concentration
Turbidity	> 50%	>50%	Poor	> 50%	

(b) Verify that indicator parameters, as specified in Table 2. Action Level Concentrations for Indicator Parameters are not exceeded. Alternatively, the Permittee may tailor Table 2 to align with parameters based on local knowledge of pollutants of concern. Modifications and associated justifications shall be

*UNOFFICIAL DRAFT — Not Certified by Clerk*

identified within SMARTS prior to conducting field sampling as specified in Section E.9.c.(i).

**Table 2. Action Level Concentrations for Indicator Parameters**

<b>Indicator Parameter</b>	<b>Action Level Concentration</b>
Ammonia	≥ 50 milligram per liter
Color	≥ 500 units
Conductivity	≥ 2,000 microsiemens per centimeter
Hardness	≤ 10 milligram per liter as CaCO <sub>3</sub> or ≥ 2,000 milligram per liter as CaCO <sub>3</sub>
pH	≤ 5 or ≥ 9
Potassium	≥ 20 milligram per liter
Turbidity	≥ 1,000 Nephelometric Turbidity Units

(c) Conduct follow up investigations per Section E.9.d. if the action level concentrations are exceeded.

(iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.9.d. Illicit Discharge Detection and Elimination Source Investigations and Corrective Actions**

(i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall develop written procedures for conducting investigations into the source of all non-storm water discharges suspected to be illicit discharges, including approaches to requiring such discharges to be eliminated, and procedures to implement corrective actions (e.g., BMPs). These procedures shall be included as part of the Illicit Discharge Detection and Elimination program. The Permittee may leverage existing inspection procedures and personnel to conduct illicit discharge detection and elimination source investigations and corrective actions.

(ii) **Implementation Level** - At a minimum, the Permittee shall conduct an investigation(s) to identify and locate the source of any suspected illicit discharge within 72 hours of becoming aware of the suspected illicit discharge. For investigations that require more than 72 hours, the Permittee shall identify the actions being taken to identify and locate the source of the suspected illicit discharge.

(a) Non-storm water discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated within 24 hours.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (b) The Permittee shall prioritize investigations of suspected sanitary sewage and/or significantly contaminated discharges over investigations of non-storm water discharges suspected of being cooling water, wash water, or natural flows.
  - (c) Report immediately the occurrence of any flows believed to be an immediate threat to human health or the environment to local Health Department.
  - (d) Determine and document through its investigations the source of all non-storm water discharges. If the source of the non-storm water discharge is found to be a discharge authorized under this General Permit, or authorized under another NPDES permit, no further action is required.
  - (e) Corrective Action to Eliminate Illicit Discharge – Once the source of the illicit discharge has been determined, the Permittee shall immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non- storm water discharge within 72 hours of notification. Upon being notified that the discharge has been eliminated, conduct a follow-up investigation and field screening to verify that the discharge has been eliminated using BMPs or some other corrective action. The Permittee shall document its follow-up investigation. The Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of field screening and investigations. Resulting enforcement actions shall follow the program’s Enforcement Response Plan as specified in E.6.c.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.9.e. Spill Response Plan**

- (i) **Task Description** – Within the first year of the effective date of the permit, the Permittee shall develop and implement a spill response plan.
- (ii) **Implementation Level** - At a minimum, the spill response plan will incorporate the information from Section E.9.c. and outline the following:
  - (a) Agency roles and responsibilities (e.g. County Department of Environmental Health, local police department, local fire department, etc.)
  - (b) The procedures for responding to complaints
  - (c) How investigations are to be conducted
  - (d) How clean up is initiated or conducted
  - (e) How reporting is completed and what information is required
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

## **E.10. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM**

The Permittee shall develop, implement, and enforce a program to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The program shall include the development of an enforceable construction site storm water runoff control ordinance for all projects that disturb less than one acre of soil. The construction site storm water runoff control ordinance shall include, at a minimum, requirements for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures and prohibited discharges.

Projects that disturb one acre or more of soil or disturb less than one acre but are part of a larger common plan or development or sale are subject to the CGP in addition to the construction site storm water runoff control ordinance.

### **E.10.a. Construction Site Inventory**

- (i) **Task Description** - Within the first year of the effective date of the permit, the Permittee shall maintain an inventory of all projects subject to the local construction site storm water runoff control ordinance within its jurisdiction.
- (ii) **Implementation Level** –The Permittee shall maintain an inventory of all construction projects and continuously update as new projects are permitted and projects are completed. The inventory shall address all projects subject to the local construction site storm water runoff control ordinance. For projects subject to the CGP the Permittee may obtain the inventory from the SMARTS database and shall supplement as needed by the Permittee.

The inventory shall contain, at a minimum:

- (a) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor);
  - (b) The basic site information including location, status, size of the project and area of disturbance;
  - (c) The location of the project with respect to all waterbodies, waterbodies listed as impaired by sediment-related pollutants, and waterbodies listed as impaired for sediment or turbidity under the CWA Section 303(d) and approved by U.S. EPA;
  - (d) Project threat to water quality;
  - (e) Current construction phase;
  - (f) The required inspection frequency per the local construction site storm water runoff control ordinance;
  - (g) The project start and anticipated completion dates; and
  - (h) The date the Permittee approved the erosion and sediment control plan in accordance with this Section.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.10.b. Construction Plan Review and Approval Procedures**

- (i) **Task Description** – Within the first year of the effective date of the permit, the Permittee shall develop procedures to review and approve relevant construction plan documents.
- (ii) **Implementation Level** – The review procedures shall meet the following minimum requirements:
  - (a) Prior to issuing a grading or building permit, the Permittee shall require each operator of a construction activity within its jurisdiction to prepare and submit an erosion and sediment control plan for the Permittee’s review and written approval. The Permittee shall not approve any erosion and sediment control plan unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of the Permittee’s construction site storm water runoff control ordinance. If the erosion and sediment control plan is revised, the Permittee shall review and approve those revisions.
  - (b) Require that the erosion and sediment control plan include the rationale used for selecting BMPs including supporting soil loss calculations, if necessary.
  - (c) Require that the erosion and sediment control plan list applicable permits directly associated with the grading activity, including, but not limited to the State Water Board’s CGP, State Water Board 401 Water Quality Certification, U.S. Army Corps 404 permit, and California Department of Fish and Game 1600 Agreement. Include as a condition of the grading permit that the operator submit evidence to the MS4 that all permits directly associated with the grading activity have been obtained prior to commencing the soil disturbing activities authorized by the grading permit.
  - (d) Conduct and document review of each erosion and sediment control plan using a checklist or similar process.
  - (e) The SWPPP developed pursuant to the CGP may substitute for the erosion and sediment control plan for projects where a SWPPP is developed. The Permittee is responsible for reviewing applicable portions of the SWPPP for compliance with the Permittee’s construction site storm water runoff control ordinance and this Order.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.10.c. Construction Site Inspection and Enforcement**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall use legal authority to implement procedures for inspecting public and private construction projects and conduct enforcement if necessary. The Permittee may leverage existing inspection procedures and personnel to conduct construction site inspections and enforcement.



- (ii) **Implementation Level** – The inspection procedures shall be implemented to verify compliance with the Permittee’s construction site storm water control ordinance. At a minimum, inspections must be conducted at priority construction sites (defined below) prior to land disturbance (during the rainy season), during active construction and following active construction. Construction site inspections shall include assessment of compliance with the Permittee’s construction site storm water runoff control ordinance, and other applicable ordinances. A Permittee may propose, for Regional Water Board Executive Officer approval, an alternative approach for construction site oversight, provided the Permittee demonstrates the approach will be equally effective at reducing the discharge of pollutants from construction sites to the maximum extent practicable.

Prior to allowing an operator to commence land disturbance during the rainy season, the Permittee must perform an inspection, to ensure all necessary sediment controls are in place. During active construction, the Permittee shall conduct inspections, based on prioritization of construction sites. Active construction inspections shall include at a minimum: inspection of maintenance of BMPs, effectiveness of BMPs installed and verification that pollutants of concern are not discharged into receiving water bodies.

Prioritization criteria shall be based on project threat to water quality. Project threat to water quality includes soil erosion potential, site slope, projects size and type, sensitivity of receiving water bodies, proximity to receiving water bodies, non-storm water discharges, projects more than one acre that are not subject to the CGP (sites that have obtained an Erosivity Waiver) and past record of non-compliance by the operator of the construction site. Inspection frequencies shall be conducted based on the prioritization criteria described above.

At the conclusion of the project, the Permittee must inspect to ensure that all disturbed areas have been stabilized and that all temporary erosion and sediment control measures that are no longer needed have been removed as required by the local construction site storm water control ordinance.

- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

#### **E.11. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR PERMITTEE OPERATIONS PROGRAM**

The Permittee shall develop and implement a program to prevent or reduce the amount of pollutant runoff from Permittee operations. The Permittee shall implement appropriate BMPs for preventing or reducing the amount of storm water pollution generated by Permittee operations.

**E.11.a. Inventory of Permittee-Owned and Operated Facilities**

- (i) **Task Description** - Within the second year of the effective date of the permit, the Permittee shall develop and maintain an inventory of Permittee-owned or operated facilities within their jurisdiction that are a threat to water quality, if applicable.
- (ii) **Implementation Level** - The inventory shall include all Permittee-owned or operated facilities within their jurisdiction that are potential significant sources of pollution in storm water, including the following if applicable:
- Airports
  - Animal control facilities
  - Chemical storage facilities
  - Composting facilities
  - Equipment storage and maintenance facilities (including landscape-related operations)
  - Fuel farms
  - Hazardous waste disposal facilities
  - Hazardous waste handling and transfer facilities
  - Incinerators
  - Landfills
  - Materials storage yards
  - Pesticide storage facilities
  - Public buildings, including schools, libraries, police stations, fire stations, Permittee (municipal) buildings, restrooms, and similar buildings (i.e., buildings with a similar potential to be sources of storm water pollution as the examples provided)
  - Public parking lots
  - Public golf courses
  - Public swimming pools
  - Public parks
  - Public works yards
  - Public marinas
  - Recycling facilities
  - Salt or de-icing storage facilities
  - Solid waste handling and transfer facilities
  - Transportation hubs (e.g. bus transfer stations)
  - Vehicle storage and maintenance areas
  - Vehicle fueling facilities
  - Other (as directed by appropriate Regional Water Board)
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.b. Map of Permittee-Owned or Operated Facilities**

- (i) **Task Description** – Within the second year of the effective date of the permit, submit a map of the area within the permit boundary and identify where the inventoried Permittee-owned or operated facilities are located.
- (ii) **Implementation Level** - The map identifying the location of the inventoried Permittee-owned or operated facilities shall identify the storm water drainage system (e.g., storm water outfalls or other mechanisms in which storm water leaves the site) corresponding to each of the facilities as well as the receiving waters to which these facilities discharge. The map shall also show the facility and the manager of each facility, including contact information.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.c. Facility Assessment**

- (i) **Task Description** – Within the third year of the effective date of the permit, for all the inventoried Permittee-owned or operated facilities, the Permittee shall conduct a comprehensive inspection and assessment of pollutant discharge potential and identification of pollutant hotspots using the Center for Watershed Protection's (CWP) guide on Urban Subwatershed and Site Reconnaissance, or equivalent.<sup>18</sup>
- (ii) **Implementation Levels** - Conduct an annual review and assessment of all municipally owned or operated facilities to determine their potential to impact surface waters. The assessment shall include the following:
  - (a) Identification of pollutant hotspots:

Based on the annual assessment, the Permittee shall identify those facilities that have a high potential to generate storm water and non- storm water pollutants as pollutant hotspots and assign them a high priority. Among the factors to be considered are the type and volume of pollutants stored at the site, the presence of improperly stored materials, activities that should not be performed outside (e.g., changing automotive fluids, vehicle washing), proximity to water bodies, poor housekeeping practices, and the discharge of pollutant(s) of concern to receiving water(s). Pollutant hotspots shall include, at a minimum, the Permittee's maintenance yards, hazardous waste facilities, fuel storage and/or dispensing locations, airports marinas, and any other facilities at which chemicals or other materials have a high potential to be discharged in storm water.

---

<sup>18</sup> The Permittee shall use the [Center for Watershed Protection](http://www.cwp.org)'s Restoration Manual Series Guide on Urban Subwatershed and Site Reconnaissance: A User's Manual (available as a free download at [www.cwp.org](http://www.cwp.org)) or equivalent when identifying priority areas. Hotspots are specific operations in a subwatershed that may generate high storm water pollution.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

(b) Documentation of the comprehensive assessment procedures and results:

The Permittee shall document the procedures it uses for conducting the comprehensive assessment along with a copy of any site evaluation checklists used to conduct the comprehensive assessment.

- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.11.d. Storm Water Pollution Prevention Plans**

- (i) **Task Description** – Within the fourth year of the effective date of the permit, the Permittee shall develop and implement SWPPPs for pollutant hotspots. If a Permittee has an existing document such as Hazardous Materials Business Plan, Spill Prevention Plan, or other equivalent document the Permittee is not required to develop a SWPPP.

- (ii) **Implementation Level** – The Permittee shall implement the following:

(a) The Permittee shall develop and implement a site-specific SWPPP that identifies existing storm water BMPs and a set of storm water BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants to protect water quality. The Permittee may utilize the CWP guide on Urban Subwatershed and Site Reconnaissance, or equivalent, as guidance.

(b) The SWPPP(s) shall be kept on-site at each of the Permittee-owned or operated facilities' offices for which it was completed. The SWPPP shall be updated as necessary.

(c) At a minimum the SWPPP will address the following:

- 1) Facility specific information (location, owner, address, etc.)
- 2) Purpose of the document
- 3) Key staff/contacts at the facility
- 4) Site map with drainage identified
- 5) Identification of significant materials that are handled and stored at the facility that may be exposed to storm water
- 6) Description of potential pollutant sources
- 7) Facility BMPs
- 8) Spill control and cleanup – response to spills
- 9) Inspection schedule
- 10) Inspection procedures and checklist for inspections conducted to ensure proper selection, implementation, and maintenance of all BMPs

- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.11.e. Inspections, Visual Monitoring and Remedial Action**

- (i) **Task Description** – Within the fifth year of the effective date of the Permit, the Permittee shall conduct regular inspections of Permittee-owned and operated facilities.
- (ii) **Implementation Level** – Inspections shall be conducted as follows:
  - (a) Quarterly visual hotspot inspections – Perform quarterly visual inspections, in accordance with the inspection procedures and inspection checklist developed for each Permittee-owned or operated hotspot, to ensure materials and equipment are clean and orderly; to minimize the potential for pollutant discharge; and to ensure effective selection, implementation, and maintenance of BMPs. The Permittee shall look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff. The quarterly inspections shall be tracked in a log for every facility, and records kept with the SWPPP (records may be kept electronically). The inspection report shall also include any identified deficiencies and the corrective actions taken to correct the deficiencies.
  - (b) Annual Hotspot comprehensive inspections – At least once per year, the Permittee shall conduct a comprehensive inspection of each hotspot facility, including all storm water BMPs, in accordance with the facility-specific inspection procedures and inspection checklist. The Permittee shall pay specific attention, without limiting its attention, to: waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar potential pollutant-generating areas. The annual inspection results shall be documented and records kept with the SWPPP. The inspection report shall also include any identified deficiencies and the corrective actions taken to correct deficiencies.
  - (c) Quarterly Hotspot visual observation of storm water and non-storm water discharges – At least once per quarter visually observe discharge locations from hotspot facilities. Where discharges are observed identify any observed problems (e.g., color, foam, sheen, turbidity) associated with pollutant sources or BMPs shall be remedied as soon as practicable or before the next storm event, whichever is sooner. Visual observations shall be documented, and records kept with the SWPPP. This inspection shall be done in accordance with the developed standard operating procedures. The inspection report shall also include any identified deficiencies and the corrective actions taken to correct the deficiencies.
  - (d) Non-Hotspot Inspection – At a minimum, inspect each inventoried municipal facility that is not a hotspot, once per permit term.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.f. Storm Drain System Assessment and Prioritization**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall develop and implement procedures to assess and prioritize MS4 storm drain system maintenance, including but not limited to, catch basins, pipe and pump infrastructure, above-ground conveyances, including receiving water bodies within the Permittee's urbanized area and detention basins.

If flood conveyance maintenance is undertaken by another entity, the Permittee shall coordinate with the flood conveyance management entity by year three to assess and prioritize maintenance of the MS4 storm drain system.

- (ii) **Implementation Level** – The Permittee shall:  
Assess/prioritize storm drain system facilities for cleanout – Assign a priority to MS4 storm drain facilities within the Permittee's urbanized areas based on accumulation of sediment, trash and/or debris. In particular, assign high priority to catch basin meeting any of the following criteria:
- 1) Catch basins known to accumulate a significant amount of sediment, trash, and/or debris;
  - 2) Catch basins collecting large volumes of runoff;
  - 3) Catch basin collecting runoff from area that do not receive regular street sweeping;
  - 4) Catch basins collecting runoff from drainage areas with exposed or disturbed soil;  
or
  - 5) Catch basins that receive citizen complaints/reports.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.g. Maintenance of Storm Drain System**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall begin maintenance of all high priority storm drain systems on an ongoing schedule.

- (ii) **Implementation Level** – The Permittee shall begin maintenance of storm drain systems according to the procedures and priorities developed according to this Section. At a minimum the Permittee shall:

- (a) Inspect storm drain systems – Based on the priorities assigned above in Section E.11.f.(ii)(a), develop and implement a strategy to inspect storm drain systems within the Permittee's jurisdiction. At a minimum, inspect all high priority catch basins and systems annually.
- (b) Clean storm drains – Develop and implement a schedule to clean high priority catch basins and other systems. Cleaning frequencies shall be based on priority areas, with higher priority areas receiving more frequent maintenance.



*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (c) Labeling catch basins – Ensure that each catch basin in high foot traffic areas includes a legible storm water awareness message (e.g., a label, stencil, marker, or pre-cast message such as “drains to the creek” or “only rain in the drain”). Catch basins with illegible or missing labels shall be recorded and re-labeled within one month of inspection.
  - (d) Maintain surface drainage structures – High priority facilities, such as those with recurrent illegal dumping, shall be reviewed and maintained annually as needed. Non-priority facilities shall be reviewed as needed. Removal of trash and debris from high priority areas shall occur annually prior to the rainy season.
  - (e) Dispose of waste materials – Develop and implement a procedure to dewater and dispose of materials extracted from catch basins. This procedure shall ensure that water removed during the catch basin cleaning process and waste material will not reenter the MS4.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.h. Permittee Operations and Maintenance Activities (O&M)**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall assess their O&M activities for potential to discharge pollutants in storm water and inspect all O&M BMPs on a quarterly basis.
- (ii) **Implementation Level** - The Permittee shall:
  - (a) Develop and implement a program to assess O&M activities and subsequently develop applicable BMPs. The following Permittee O&M activities shall be included in the assessment for their potential to discharge pollutants in storm water:
    - 1) Road and parking lot maintenance, including sidewalk repair, curb and gutter repair, pothole repair, pavement marking, sealing, and re-paving
    - 2) Bridge maintenance, including re-chipping, grinding, saw cutting, and painting
    - 3) Cold weather operations, including plowing, sanding, and application of deicing compounds and maintenance of snow disposal areas
    - 4) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation
    - 5) Storm water relevant Permittee-sponsored or sanctioned events such as large outdoor festivals, parades, or street fairs (e.g., Earth Day, Coastal Cleanup Day, Creek Week)
    - 6) Green waste deposited in the street
    - 7) Graffiti removal
    - 8) Hydrant flushing
  - (b) Identify all materials that could be discharged from each of these O&M activities, and which materials contain pollutants. Typical pollutants associated with these activities include metals, chlorides, hydrocarbons (e.g. benzene, toluene,

*UNOFFICIAL DRAFT — Not Certified by Clerk*

ethylbenzene, and xylene), sediment, green waste, herbicide, pesticide, dried paint, and trash.

- (c) Develop and implement a set of BMPs that, when applied during Permittee O&M activities, will reduce pollutants in storm water and non-storm water discharges. The Permittee shall use the CASQA Municipal Handbook or equivalent.
  - (d) Evaluate BMPs – All BMPs implemented during O&M activities shall be evaluated quarterly.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.i. Incorporation of Water Quality and Habitat Enhancement Features in New Flood Management Facilities**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall develop and implement a process for incorporating water quality and habitat enhancement features into new and rehabilitated flood management facilities.
- (ii) **Implementation Level** – The Permittee shall develop and implement a process to incorporate water quality and habitat enhancement features in the design of all new and rehabilitated flood management projects that are associated with the MS4 or that discharge to the MS4.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

**E.11.j. Landscape Design and Maintenance**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall implement a landscape design and maintenance program to reduce the amount of water, pesticides, herbicides and fertilizers used during Permittee operations and activities<sup>19</sup>.
- (ii) **Implementation Tasks** – At a minimum, the Permittee shall:
  - (a) Evaluate pesticides, herbicides and fertilizers used and application activities performed and identify pollution prevention and source control opportunities.
  - (b) Implement practices that reduce the discharge of pesticides, herbicides and fertilizers. At a minimum the Permittee shall:

---

<sup>19</sup> [Water Efficient Landscape Ordinance](http://www.water.ca.gov/wateruseefficiency/docs/MWEL009-10-09.pdf) can be found at:  
<http://www.water.ca.gov/wateruseefficiency/docs/MWEL009-10-09.pdf>

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 1) Implement educational activities for municipal applicators and distributors.
  - 2) Implement landscape management measures that rely on non-chemical solutions, including:
    - a) Create drought-resistant soils by amending soils with compost;
    - b) Create soil microbial community through the use of compost, compost tea, or inoculation;
    - c) Use native and/or climate appropriate plants to reduce the amount of water, pesticides, herbicides and fertilizers used;
    - d) Practice grasscycling on decorative turf landscapes to reduce water use and the need for fertilizers;
    - e) Keeping grass clippings and leaves away from waterways and out of the street using mulching, composting, or landfilling;
    - f) Preventing application of pesticides, herbicides and fertilizers during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by [National Oceanic and Atmospheric Administration \(NOAA\)](#)<sup>20</sup>;
    - g) Limiting or replacing herbicide and pesticide use (e.g., conducting manual weed and insect removal);
    - h) Prohibiting application of pesticides, herbicides and fertilizers as required by the regulations DPR 11-004 Prevention of Surface Water Contamination by Pesticides enacted by the Department of Pesticide Regulation;
    - i) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing public safety.
  - 3) Collect and properly dispose of unused pesticides, herbicides, and fertilizers.
  - 4) Minimize irrigation run-off by using an evapotranspiration-based irrigation schedule and rain sensors.
- (c) Record the types and amounts of pesticides, herbicides and fertilizers used in the permit area.
- (iii) **Reporting** - The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

## **E.12. POST CONSTRUCTION STORM WATER MANAGEMENT PROGRAM**

### **E.12.a. Post-Construction Measures**

Permittees shall regulate development to comply with the following Sections:

- E.12.b Site Design Measures
- E.12.c. Regulated Projects
- E.12.d. Source Control Measures

---

<sup>20</sup> <https://www.weather.gov/forecast>

- E.12.e. Low Impact Development (LID) Design Standards
- E.12.f. Hydromodification Measures
- E.12.g. Enforceable Mechanisms
- E.12.h. Operation and Maintenance of Storm Water Control Measures
- E.12.i. Post-Construction Best Management Practice Condition Assessment
- E.12.j. Planning and Development Review Process
- E.12.k. Post-Construction Storm Water Management Requirements Based on Assessment and Maintenance of Watershed Processes
- E.12.l. Alternative Post-Construction Storm Water Management Program

**E.12.b. Site Design Measures**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall require implementation of site design measures for all projects that create and/or replace (including projects with no net increase in impervious footprint) between 2,500 square feet and 5,000 square feet of impervious surface, including detached single family homes that create and/or replace 2,500 square feet or more of impervious surface and are not part of a larger plan of development. Site design measures as specified in this section are not applicable to linear underground/overhead projects (LUPs).
- (ii) **Implementation Level** - Projects shall implement one or more of the following site design measures to reduce project site runoff:
- (a) Stream Setbacks and Buffers — a vegetated area including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake reservoir, or coastal estuarine area;
  - (b) Soil Quality Improvement and Maintenance — improvement and maintenance soil through soil amendments and creation of microbial community;
  - (c) Tree Planting and Preservation — planting and preservation of healthy, established trees that include both evergreens and deciduous, as applicable;
  - (d) Rooftop and Impervious Area Disconnection — rerouting of rooftop drainage pipes to drain rainwater to rain barrels, cisterns, or permeable areas instead of the storm sewer;
  - (e) Porous Pavement — pavement that allows runoff to pass through it, thereby reducing the runoff from a site and surrounding areas and filtering pollutants;
  - (f) Green Roofs — a vegetative layer grown on a roof (rooftop garden);
  - (g) Vegetated Swales — a vegetated, open-channel management practice designed specifically to treat and attenuate storm water runoff;
  - (h) Rain Barrels and Cisterns — system that collects and stores storm water runoff from a roof or other impervious surface.

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

Project proponents shall use the State Water Board SMARTS Post-Construction Calculator<sup>21</sup>, or equivalent to quantify the runoff reduction resulting from implementation of site design measures.

- (iii) **Reporting** - The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

### **E.12.c. Regulated Projects**

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall implement standards to effectively reduce runoff and pollutants associated with runoff from Regulated Projects as defined below.
- (ii) **Implementation Level** - The Permittee shall regulate all projects that create and/or replace 5,000 square feet or more of impervious surface (Regulated Projects). The Permittee shall require these Regulated Projects to implement measures for site design, source control, runoff reduction, storm water treatment and baseline hydromodification management as defined in this Order.

Regulated Projects do not include:

- Detached single family home projects that are not part of a larger plan of development;
- Interior remodels;
- Routine maintenance or repair such as: exterior wall surface replacement, pavement resurfacing within the existing footprint.
- LUPs - Unless the LUP has a discrete location that has 5,000 square feet or more of newly constructed contiguous impervious surface. When the LUP has a discrete location that has 5,000 sq-ft or more of new contiguous impervious surface, only that specific discrete location is subject to Section E.12.c.

Regulated Projects include development projects. Development includes new and redevelopment projects on public or private land that fall under the planning and permitting authority of a Permittee. Redevelopment is any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a site on which some past development has occurred. Redevelopment does not include trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway. The following (a-c) describe specific Regulated Project requirements for redevelopment, road projects and LUPs:

---

<sup>21</sup> [The State Water Board SMARTS Post-Construction Calculator](https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp) can be found at:  
<https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>



*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (a) Where a redevelopment project results in an increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included to the extent feasible.
- (b) Where a redevelopment project results in an increase of less than 50 percent of the impervious surface of a previously existing development, only runoff from the new and/or replaced impervious surface of the project must be included.
- (c) Road Projects and LUPs - Any of the following types of road projects and LUPs that create 5,000 square feet or more of newly constructed contiguous impervious surface and that are public road projects and/or fall under the building and planning authority of a Permittee shall comply with Section E.12.e. Low Impact Development Standards except that treatment of runoff of the 85<sup>th</sup> percentile that cannot be infiltrated onsite shall follow U.S. EPA guidance regarding green infrastructure to the extent feasible. Types of projects include:
  - 1) Construction of new streets or roads, including sidewalks and bicycle lanes built as part of the new streets or roads.
  - 2) Widening of existing streets or roads with additional traffic lanes.
    - a) Where the addition of traffic lanes results in an alteration of more than 50 percent of the impervious surface of an existing street or road, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included in the treatment system design.
    - b) Where the addition of traffic lanes results in an alteration of less than 50 percent (but 5,000 square feet or more) of the impervious surface of an existing street or road, only the runoff from new and/or replaced impervious surface of the project must be included in the treatment system design.
  - 3) Construction of linear underground/overhead projects (LUPs)
  - 4) Specific exclusions are:
    - a) Sidewalks built as part of new streets or roads and built to direct storm water runoff to adjacent vegetated areas.
    - b) Bicycle lanes that are built as part of new streets or roads that direct storm water runoff to adjacent vegetated areas.
    - c) Impervious trails built to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas, preferably away from creeks or towards the outboard side of levees.
    - d) Sidewalks, bicycle lanes, or trails constructed with permeable surfaces.
    - e) Trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways and parking lots; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway.

Effective Date for Applicability of Low Impact Development Runoff Standards to Regulated Projects: By the second year of the effective date of the permit, the Permittee shall require these Post-Construction Standards be applied on applicable new and redevelopment Regulated Projects, both private development requiring municipal permits and public projects, to the extent allowable by applicable law. These include discretionary permit projects that have not been deemed complete for



## *UNOFFICIAL DRAFT — Not Certified by Clerk*

processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

Discretionary projects that have been deemed complete prior to the second year of the effective date of this Order are not subject to the Post- Construction Standards herein. For the Permittee's Regulated Projects, the effective date shall be the date their governing body or designee approves initiation of the project design.

Permittee's Development Projects - The Permittee shall develop and implement an equivalent approach, to the approach used for private development projects, to apply the most current version of the low impact development runoff standards to applicable public development projects, to the extent allowable by applicable law.

### **E.12.d. Source Control Measures**

- (i) **Task Description** – Regulated Projects with pollutant-generating activities and sources shall be required to implement standard permanent and/or operation source control measures as applicable.
- (ii) **Implementation Level** - Measures for the following pollutant generating activities and sources shall be designed consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment or equivalent manual, and include:
  - (a) Accidental spills or leaks
  - (b) Interior floor drains
  - (c) Parking/storage areas and maintenance
  - (d) Indoor and structural pest control
  - (e) Landscape/outdoor pesticide use
  - (f) Pools, spas, ponds, decorative fountains, and other water features
  - (g) Restaurants, grocery stores, and other food service operations
  - (h) Refuse areas
  - (i) Industrial processes
  - (j) Outdoor storage of equipment or materials
  - (k) Vehicle and equipment cleaning
  - (l) Vehicle and equipment repair and maintenance
  - (m) Fuel dispensing areas
  - (n) Loading docks
  - (o) Fire sprinkler test water
  - (p) Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources
  - (q) Unauthorized non-storm water discharges
  - (r) Building and grounds maintenance

### **E.12.e. Low Impact Development (LID) Design Standards**

- (i) **Task Description** – The Permittee shall require all Regulated Projects to implement low impact development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management to the extent feasible, to meet

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

the Numeric Sizing Criteria for Storm Water Retention and Treatment under Section E.12.e(ii)(c).

- (ii) **Implementation Level** – The Permittee shall adopt and implement requirements and standards to ensure design and construction of development projects achieve the following LID Design Standards.

(a) **Site Assessment**

At the earliest planning stages, the Permittee shall require Regulated Projects to assess and evaluate how site conditions, such as soils, vegetation, and flow paths, will influence the placement of buildings and paved surfaces. The evaluation will be used to meet the goals of capturing and treating runoff and assuring these goals are incorporated into the project design. The Permittee may adopt or reference an existing LID site assessment methodology.<sup>22</sup> Permittees shall require Regulated Projects to consider optimizing the site layout through the following methods:

- 1) Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.
- 2) Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.
- 3) Limit overall impervious coverage of the site with paving and roofs.
- 4) Set back development from creeks, wetlands, and riparian habitats.
- 5) Preserve significant trees.
- 6) Conform the site layout along natural landforms.
- 7) Avoid excessive grading and disturbance of vegetation and soils.
- 8) Replicate the site's natural drainage patterns.
- 9) Detain and retain runoff throughout the site.

(b) **Drainage Management Areas**

The Permittee shall require each Regulated Project to provide a map or diagram dividing the developed portions of the project site into discrete Drainage Management Areas (DMAs), and to manage runoff from each DMA using Site Design Measures, Source Controls and/or Storm Water Treatment and Baseline Hydromodification Measures.

(c) **Numeric Sizing Criteria for Storm Water Retention and Treatment**

The Permittees shall require facilities designed to evapotranspire, infiltrate, harvest/use, and biotreat storm water to meet at least one of the following hydraulic sizing design criteria:

- 1) Volumetric Criteria:
  - a) The maximized capture storm water volume for the tributary area, on the basis of historical rainfall records, determined using the formula and volume capture coefficients in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998) pages 175-178 (that is, approximately the 85th percentile 24-hour storm runoff event); or

---

<sup>22</sup> Low Impact Development Manual for Southern California (Low Impact Development Center – See [CASQA's LID website](https://www.casqa.org/resources/lid/socal-lid-manual) at: <https://www.casqa.org/resources/lid/socal-lid-manual>.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- b) The volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology in Section 5 of the CASQA's Stormwater Best Management Practice Handbook, New Development and Redevelopment (2003), using local rainfall data.

2) Flow-based Criteria:

- a) The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or
- b) The flow of runoff produced from a rain event equal to at least 2 times the 85th percentile hourly rainfall intensity as determined from local rainfall records.

**(d) Site Design Measures**

The Permittee shall implement Site Design Measures (as defined in Section E.12.b. Site Design Measures and Section E.12.e(ii)(a) Site Assessment), site layout and design measures, based on the objective of achieving infiltration, evapotranspiration and/or harvesting/reuse of the 85th percentile 24-hour storm runoff event. Site design measures shall be used to reduce the amount of runoff, to the extent technically feasible, for which retention and runoff is required. Any remaining runoff from impervious DMAs may then be directed to one or more bioretention facilities as specified in Section E.12.e.(ii)(f), below.

**(e) Source Controls**

The Permittee shall implement Source Controls as defined in Section E.12.d. Source Control Measures.

**(f) Storm Water Treatment Measures and Baseline Hydromodification Management Measures**

After implementation of Site Design Measures, remaining runoff from impervious DMAs must be directed to one or more facilities designed to infiltrate, evapotranspire, and/or bioretain the amount of runoff specified in Section E.12.e(ii)(c) Numeric Sizing Criteria for Storm Water Retention and Treatment. The facilities must be demonstrated to be at least as effective as a bioretention system with the following design parameters:

- 1) Maximum surface loading rate of 5 inches per hour, based on the flow rates calculated. A sizing factor of 4% of tributary impervious area may be used.
- 2) Minimum surface reservoir volume equal to surface area times a depth of 6 inches.
- 3) Minimum planting medium depth of 18 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used.
- 4) Subsurface drainage/storage (gravel) layer with an area equal to the surface area and having a minimum depth of 12 inches.
- 5) Underdrain with discharge elevation at top of gravel layer.
- 6) No compaction of soils beneath the facility, or ripping/loosening of soils if compacted.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 7) No liners or other barriers interfering with infiltration.
  - 8) Appropriate plant palette for the specified soil mix and maximum available water use.
- (g) **Alternative Designs** — Facilities, or a combination of facilities, of a different design than in Section E.12.e.(ii)(f) may be permitted if all of the following measures of equivalent effectiveness are demonstrated:
- 1) Equal or greater amount of runoff infiltrated or evapotranspired;
  - 2) Equal or lower pollutant concentrations in runoff that is discharged after biotreatment;
  - 3) Equal or greater protection against shock loadings and spills;
  - 4) Equal or greater accessibility and ease of inspection and maintenance.
- (h) **Allowed Variations for Special Site Conditions** - The bioretention system design parameters in Section E.12.e.(ii)(f) may be adjusted for the following special site conditions:
- 1) Facilities located within 10 feet of structures or other potential geotechnical hazards established by the geotechnical expert for the project may incorporate an impervious cutoff wall between the bioretention facility and the structure or other geotechnical hazard.
  - 2) Facilities with documented high concentrations of pollutants in underlying soil or groundwater, facilities located where infiltration could contribute to a geotechnical hazard, and facilities located on elevated plazas or other structures may incorporate an impervious liner and may locate the underdrain discharge at the bottom of the subsurface drainage/storage layer (this configuration is commonly known as a “flow-through planter”).
  - 3) Facilities located in areas of high groundwater, highly infiltrative soils or where connection of underdrain to a surface drain or to a subsurface storm drain are infeasible, may omit the underdrain.
  - 4) Facilities serving high-risk areas such as fueling stations, truck stops, auto repairs, and heavy industrial sites may be required to provide additional treatment to address pollutants of concern unless these high- risk areas are isolated from storm water runoff or bioretention areas with little chance of spill migration.
- (i) **Exceptions to Requirements for Bioretention Facilities** - Contingent on a demonstration that use of bioretention or a facility of equivalent effectiveness is infeasible, other types of biotreatment or media filters (such as tree-box- type biofilters or in-vault media filters) may be used for the following categories of Regulated Projects:
- 1) Projects creating or replacing an acre or less of impervious area, and located in a designated pedestrian-oriented commercial district (i.e., smart growth projects), and having at least 85% of the entire project site covered by permanent structures;
  - 2) Facilities receiving runoff solely from existing (pre-project) impervious areas;  
and

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 3) Historic sites, structures or landscapes that cannot alter their original configuration in order to maintain their historic integrity.

By the second year of the effective date of the permit, each Permittee shall adopt or reference appropriate performance criteria for such biotreatment and media filters.

- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.12.f. Hydromodification Management**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall develop and implement Hydromodification Management procedures. Hydromodification management projects are Regulated Projects that create and/or replace one acre or more of impervious surface. A project that does not increase impervious surface area over the pre-project condition is not a hydromodification management project.
- (ii) **Implementation Level** - The Permittee shall implement the following Hydromodification Standard:
- (a) Post-project runoff shall not exceed estimated pre-project flow rate for the 2-year, 24-hour storm in the following geomorphic provinces (Figure 1):
- Coast Ranges
  - Klamath Mountains
  - Cascade Range
  - Modoc Plateau
  - Basin and Range
  - Sierra Nevada
  - Great Valley
- (b) Post-project runoff shall not exceed estimated pre-project flow rate for the 10-year, 24-hour storm in the following geomorphic provinces (Figure 1):
- Transverse Ranges
  - Peninsular Ranges
  - Mojave Desert
  - Colorado Desert



**Figure 1 — California Geomorphic Provinces**

Alternatively, the Permittee may use a geomorphically based hydromodification standard or set of standards and analysis procedures designed to ensure that Regulated Projects do not cause a decrease in lateral (bank) and vertical (channel bed) stability in receiving stream channels. The alternative hydromodification standard or set of standards and analysis procedures must be reviewed and approved by the Regional Board Executive Officer.



- (iii) **Reporting** –The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long- term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.12.g. Enforceable Mechanisms**

- (i) **Task Description** - Within the third year of the effective date of the permit, the Permittee shall develop and/or modify enforceable mechanisms that will effectively implement the requirements in Section E.12.b through f (if necessary).
- (ii) **Implementation Level** - The Permittee shall develop and/or modify enforceable mechanisms that will effectively implement the requirements in Section E.12.b through E.12.f and may include municipal codes, regulations, standards, and specifications. The Permittee shall:
- (a) Conduct an analysis of all applicable codes, regulations, standards, and/or specifications to identify modifications and/or additions necessary to fill gaps and remove impediments to effective implementation of project-scale development requirements.
  - (b) Approve new and/or modified enforceable mechanisms that effectively resolve regulatory conflicts and implement the requirements in Sections E.12.b through E.12.f (if necessary)
  - (c) Apply new and/or modified enforceable mechanisms to all applicable new and redevelopment projects. Develop and make available specific guidance for LID BMP design
  - (d) Complete a Tracking Report indicating the Permittee's accomplishments in education and outreach supporting implementation of LID requirements for new and redevelopment projects.

**E.12.h. Operation and Maintenance of Post-Construction Storm Water Management Measures**

- (i) **Task Description** –Within the second year of the effective date of the permit, the Permittee shall implement an O&M Verification Program for storm water treatment and baseline hydromodification management structural control measures defined in Section E.12.e(ii)(f). Storm Water Treatment Measures and Baseline Hydromodification Management Measures on all Regulated Projects.
- (ii) **Implementation Level** – At a minimum, the O&M Verification Program shall include the following elements:
- (a) All Regulated Projects shall at a minimum, require at least one of the following from all project proponents and their successors in control of the Project or successors in fee title:
    - 1) The project proponent's signed statement accepting responsibility for the O&M of structural control measure(s) until such responsibility is legally transferred to another entity;

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 2) Written conditions in the sales or lease agreements or deed for the project that requires the buyer or lessee to assume responsibility for the O&M of the installed treatment system(s) and hydromodification control(s) (if any) until such responsibility is legally transferred to another entity;
  - 3) Written text in project deeds, or conditions, covenants and restrictions for multi-unit residential projects that require the homeowners association or, if there is no association, each individual owner to assume responsibility for the O&M of the installed treatment system(s) and hydromodification control(s) (if any) until such responsibility is legally transferred to another entity; or
  - 4) Any other legally enforceable agreement or mechanism, such as recordation in the property deed, that assigns the O&M responsibility for the installed treatment system(s) and hydromodification control(s) (if any) to the project owner(s) or the Permittee.
- (b) Coordination with the appropriate mosquito<sup>23</sup> and vector control agency with jurisdiction to establish a protocol for notification of installed treatment systems and hydromodification management controls. On an annual basis, before the wet season, prepare a list of newly installed (installed within the reporting period) storm water treatment systems and hydromodification management controls to the local mosquito and vector control agency and the appropriate Regional Water Board. The Permittee may submit the list of Regulated Projects as described in Section E.12.h.(ii)(e). This list shall include the facility locations and a description of the storm water treatment measures and hydromodification management controls installed.
- (c) Conditions of approval or other legally enforceable agreements or mechanisms for all Regulated Projects that require the granting of site access to all representatives of the Permittee for the sole purpose of performing O&M inspections of the installed treatment system(s) and hydromodification control(s) (if any).
- (d) A written implementation plan that describes O&M (including inspection) of all Regional Projects and regional controls that are Permittee-owned and/or operated.
- (e) A database or equivalent tabular format of all Regulated Projects (public and private) that have installed treatment systems. This database or equivalent tabular format shall include the following information for each Regulated Project:
- 1) Name and address of the Regulated Project;
  - 2) Specific description of the location (or a map showing the location) of the installed treatment system(s) and hydromodification control(s) (if any);
  - 3) Date(s) that the treatment system(s) and hydromodification controls (if any) is/are installed;
  - 4) Description of the type and size of the treatment system(s) and hydromodification control(s) (if any) installed;
  - 5) Responsible operator(s) of each treatment system and hydromodification control (if any);

---

<sup>23</sup> [California Department of Public Health. \(2012\). Best Management Practices for Mosquito Control in California.](http://www.westnile.ca.gov/resources.php) Retrieved on July 20, 2012 from <http://www.westnile.ca.gov/resources.php>

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 6) Dates and findings of inspections (routine and follow-up) of the treatment system(s) and hydromodification control(s) (if any) by the Permittee; and
  - 7) Any problems and corrective or enforcement actions taken.
  - 8) Maintenance Approvals: The Permittee shall ensure that systems and hydromodification controls installed at Regulated Projects are properly operated and maintained for the life of the projects. In cases where the responsible party for a treatment system or hydromodification control has worked diligently and in good faith with the appropriate state and federal agencies and the Permittee to obtain approvals necessary to complete maintenance activities for the treatment system or hydromodification management control, but these approvals are not granted, the Permittee shall be deemed to be in compliance with this Provision.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long- term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a.for compliance directions.

**E.12.i. Post-Construction Best Management Practice Condition Assessment**

- (i) **Task Description** – Within the third year of the effective date of the permit, the Permittee shall inventory and assess the maintenance condition of structural post-construction BMPs (including BMPs used for flood control) within the Permittee's jurisdiction.
- (ii) **Implementation Level** – The Permittee shall develop and implement a plan to inventory, map, and determine the relative maintenance condition of structural post-construction BMPs. Maintenance condition shall be determined through a self-certification program where Permittees require annual reports from authorized parties demonstrating proper maintenance and operations. The plan shall include:
  - (a) An inventory and map of existing structural post-construction BMPs, in GIS if available.
  - (b) Assessments of the self-certification program annual reports. Assessment shall include a ranking of structural BMPs and verification that BMPs are operating to remove pollutants as designed. Regional BMPs should receive higher priority than lot-scale BMPs, and BMPs designed to remove pollutants for which receiving water is impaired should receive priority attention over other BMPs.
  - (c) Appropriate escalating enforcement based on the Permittee Enforcement Response Plan to ensure proper maintenance of BMPs and submittal of self-certification annual reports.
  - (d) Self-Certification Annual Reports. At a minimum, the self-certification annual reports shall include:
    - 1) Field observations to determine the effectiveness of the structural post construction BMPs in removing pollutants of concern from storm water runoff and/or reducing hydromodification impacts as designed.

- 2) Long-term plan for conducting regular maintenance of BMPs, including the frequency of such maintenance.
- (iii) **Reporting** – The Permittee shall use State Water Board SMARTS to submit a summary of the past year activities and certify compliance with all requirements of this program element. The summary shall also address the relationship between the program element activities and the Permittee's Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. If a Permittee is unable to certify compliance with a requirement in this program element see Section E.16.a. for compliance directions.

#### **E.12.j. Planning and Development Review Process**

- (i) **Task Description** – The Permittee shall review their planning and permitting process to assess any gaps or impediments impacting effective implementation of these post-construction requirements specified in Section E.12, and where these are found to exist, seek solutions to promote implementation of these requirements within the context of public safety and community goals for land use. The Permittee shall prioritize review of the landscape code (code detailing landscaping requirements and considerations which should be implemented to protect environmental quality) to correct gaps and impediments impacting effective implementation of post-construction requirements.
- (ii) **Implementation Level** – During years 1–3, the Permittee shall conduct the review using an existing guide or template already developed for MS4s (such as the [Municipal Regulatory Update Assistance Program \(MRUAP\)](#)<sup>24</sup> conducted by AHBL, Inc. for the Low Impact Development Initiative (LIDI) on the Central Coast). By the fourth year of the effective date of the permit, any changes to the planning and permitting process will be completed to effectively administer these provisions. Priority shall be placed on review of the landscape code, with the following implementation level.
- (a) Within the first year of the effective date of this permit, the Permittee shall conduct an analysis of the landscape code to correct gaps and impediments impacting effective implementation of post-construction requirements.
- (b) Within the second year of the effective date of the permit, the Permittee shall complete any changes to the landscape code to effectively administer post-construction requirements.
- (iii) **Reporting** – By the second year Annual Report and annually thereafter, complete and have available a summary of the review process, and any proposed or completed changes to the Permittee's program.

#### **E.12.k. Post-Construction Storm Water Management Requirements Based on Assessment and Maintenance of Watershed Processes**

Small MS4s subject to Section E of this Order, in place of complying with the requirements set forth in Section E.12, except for Sections E.12.j. Planning and Development Review Process and E.12.e(ii)(e) Source Control Requirements, shall comply with post-construction storm water management requirements based on a

---

<sup>24</sup> <http://www.casqa.org/LIDDemo/LIDTraining/tabid/246/Default.aspx>

## *UNOFFICIAL DRAFT — Not Certified by Clerk*

watershed-process approach developed by Regional Water Board that include the following:

- Completion of a comprehensive assessment of dominant watershed processes affected by urban storm water
- LID site design and runoff reduction measures, numeric runoff treatment and retention controls, and hydromodification controls that will maintain watershed processes and protect water quality and beneficial uses.
- A process by which Regional Board staff will actively engage Permittees to adaptively manage requirements as determined by the assessment of watershed processes.
- An annual reporting program that involves Regional Board staff and State Board staff to inform statewide watershed process based criteria.

The regional watershed-process based approach must be approved by the Regional Water Board following a public process.

### **E.12.I. Alternative Post-Construction Storm Water Management Program**

A Permittee may propose alternative post-construction measures in lieu of some or all of Section E.12. requirements for multiple benefit projects. Multiple-benefit projects include projects that may address any of the following, in addition to water quality: water supply, flood control, habitat enhancement, open space preservation, recreation, climate change. Multiple-benefit projects may be applied at various scales including project site, municipal or sub-watershed level. Multiple-benefit projects may include, but are not limited to, projects developed under Watershed Improvement Plans (Water Code §16100 et seq.), IRWMP implementation and green infrastructure projects. Multiple benefit projects must be equally or more protective of water quality than Section E.12. requirements.

The Regional Water Board or the Executive Officer, may approve alternative post-construction measures for multiple-benefit projects, as described above, after an opportunity for public comment, if the Regional Water Board or Executive Officer finds that the alternative measures are consistent with the MEP standard.

### **E.13. WATER QUALITY MONITORING**

Traditional Small MS4 Permittees that are required to conduct monitoring of discharges to ASBS, TMDL, or 303(d) impaired water bodies, as described in Sections E.13.(a)–(c), are not required to perform additional monitoring as specified in Sections E.13.d.1. and E.13.d.2.

Permittees are encouraged to participate in a regional monitoring program in order to cost-effectively combine resources and water quality information. Regional monitoring is the collaboration of local and regional monitoring programs that are designed to create a more comprehensive picture of water quality conditions within a watershed.



## *UNOFFICIAL DRAFT — Not Certified by Clerk*

The following management questions may be used to assist in guiding the development of a regional monitoring program, as applicable<sup>25</sup>:

- 1) Are water quality standards being met in receiving waters?
- 2) What is the extent and magnitude of the current or potential receiving water problems<sup>26</sup>?
- 3) What is the relative urban runoff contribution to the receiving water problem(s)?
- 4) What are the sources to urban runoff that contribute to the receiving water problem(s)?
- 5) Are conditions in receiving waters getting better or worse?

Regional monitoring programs shall be reviewed and approved by the Executive Officer of the applicable Regional Water Board<sup>27</sup>.

Where a regional monitoring group has initiated plans, before the effective date of this Order, to conduct monitoring that achieves Section E.13. compliance, the Permittee may request the Executive Officer of the applicable Regional Board tailor compliance dates to synchronize with such efforts. Additionally, existing regional water monitoring efforts shall be reviewed and approved by a Regional Water Board Executive Officer.

Where a Permittee receives grant funding to conduct monitoring that achieves Section E.13. compliance, the Permittee may request the Regional Water Board Executive Officer tailor compliance dates to synchronize with such efforts.

### **E.13.a. ASBS Monitoring**

All Permittees that discharge to an ASBS and are covered by an Ocean Plan exception shall comply with the monitoring requirements described in the terms, prohibitions and special conditions in Attachment C.

### **E.13.b. TMDL Monitoring**

Permittees shall implement any monitoring requirements assigned to them in Attachment G. The Regional Water Board Executive Officer may require additional monitoring, per Water Code § 13383.

---

<sup>25</sup> The five core management questions are based on the Stormwater Monitoring Coalition's Model Monitoring Technical Committee Technical Report # 419: Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California.

<sup>26</sup> Water quality problems include exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

<sup>27</sup> The regional monitoring programs may deviate from the specific requirements in Section E.13.a. to the extent approved by the Executive Officer, except that the regional monitoring program shall be SWAMP comparable and that all data shall be placed in the California Environmental Data Exchange Network (CEDEN).



### E.13.c. 303(d) Monitoring

All Permittees that discharge to [waterbodies listed as impaired on the 303\(d\) list](#)<sup>28</sup> where urban runoff is listed as the source, shall consult with the Regional Water Board within one year of the effective date of the permit to assess whether monitoring is necessary and if so, determine the monitoring study design and a monitoring implementation schedule. Permittees shall implement monitoring of 303(d) impaired water bodies as specified by the Regional Water Board Executive Officer.

### E.13.d. Receiving Water Monitoring and Special Studies

Traditional Small MS4 Permittees with a population greater than 50,000 listed in Attachment A that are not already conducting ASBS, TMDL or 303(d) monitoring efforts shall participate in one of the following monitoring programs, subject to Regional Water Board Executive Officer approval:

E.13.d.1. Receiving Water Monitoring

E.13.d.2. Special Studies

#### E.13.d.1. Receiving Water Monitoring

- (i) **Task Description** – Within the second year of the effective date of the permit, the Permittee shall develop and implement a receiving water monitoring program to Monitor receiving water quality at upstream location in an area undergoing development and evaluate changes in receiving water quality over time, and Monitor receiving water quality at a downstream location in an urban area and evaluate changes in receiving water quality over time. Permittees may, to the extent allowed by law, establish a monitoring fund into which all new development contributes on a proportional basis (% development fee, size/number of lots, etc.). Monitoring funding may be overseen by municipalities or coalition of municipalities.
- (ii) **Implementation Level** – By the first year of the permit, the Permittee shall select one urban/rural interface monitoring site to monitor receiving water quality at an upstream location in an area undergoing development and evaluate changes in receiving water quality over time, and; one (1) urban area monitoring site to monitor receiving water quality at a downstream location in an urban area and evaluate changes in receiving water quality over time. Site selection shall include the following:
  - (a) Urban/Rural Interface. Identify one characteristic waterway at the top, or upstream, of a HUC 12 level watershed planned for development in the near future that traverses an urban/rural interface, using the 2010 Census Data and urban area maps, and establish a permanent monitoring location at the identified urban/rural interface<sup>29</sup>. Monitoring at the urban/rural interface shall address the question: Does receiving water quality change as LID BMPs are integrated into new development?
  - (b) Urban Downstream. Identify one characteristic waterway at the bottom, or downstream, of the same HUC 12 watershed as the urban/rural interface

---

<sup>28</sup> [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2010.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml).

<sup>29</sup> The urban/rural interface is identified as the geographical location at which urban land use and rural land use interact.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

monitoring location and within an urbanized area and establish a permanent monitoring location at the identified urbanized area waterway. Monitoring at the urban area site shall address the question: Does receiving water quality improve as a result of efforts to control the sources of pollution and educate the public?

By the second year of the permit term and after establishment of site selection, the Permittee shall monitor the urban/rural interface site to address the hypothesis that receiving water quality will remain the same as new development proceeds, and the urban area site to address the hypothesis that receiving water quality will improve over time as storm water and other water quality programmatic efforts are implemented. Monitoring shall be implemented in accordance with Table 3: Receiving Water Monitoring Parameters and Protocols.

**Table 3: Receiving Water Monitoring Parameters and Protocol**

**Information on Receiving Water Monitoring Parameters and Protocol for Table 3 includes:**

**Urban/Rural Interface:**  
Objective: Monitor receiving water quality at upstream location in an area undergoing development. Evaluate changes in receiving water quality over time.  
Question: Does receiving water quality change as LID BMPs are integrated into new development?  
Hypothesis: Receiving water quality will remain the same as new development proceeds.

**Urban Downstream:**  
Objective: Monitor receiving water quality at a downstream location in an urban area. Evaluate changes in receiving water quality over time.  
Question: Does receiving water quality improve as a result of efforts to control the sources of pollution and educate the public?  
Hypothesis: Receiving water quality will improve over time as storm water and other water quality programmatic efforts are implemented.

\* Pyrethroid monitoring is required at the urban/rural interface site only.  
 \*\* Currently, pyrethroids are the pesticide of greatest concern and abundance in urban/suburban waterways. However, new regulations enacted by the Dept. of Pesticide Regulation restrict how pyrethroids may be applied. Initial models by UC Davis researchers suggest that this could result in a runoff reduction of 80-90%, depending on the amount of impervious cover in the watershed. In the future, other pesticides may become more of a threat to aquatic life in urban waterways. One pesticide that is being used with greater frequency is fipronil, a phenylpyrazole insecticide, that is more water soluble than pyrethroids. In order to use the resources of the permittees most efficiently, the State Water Resource Control Board reserves the right to modify the terms and conditions of the permit based on new information on pesticide use and toxicity. This could include substituting another pesticide for monitoring or eliminating this endpoint.

Parameter	Endpoint	Beneficial Used Protected	Justification	Protocol
Water Quality	Pyrethroids* (sediment)	Aquatic Life	Pyrethroids** among the most ubiquitous urban contaminant in storm water. Highly toxic to aquatic life.	Method with detection limit of 1 pptr (5 pptr for permethrin only) such as the GC-MS-MS method of Water Pollution Control Lab. Yearly in spring at urban/rural interface only. Refer to pending SWAMP guidelines.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

<b>Parameter</b>	<b>Endpoint</b>	<b>Beneficial Used Protected</b>	<b>Justification</b>	<b>Protocol</b>
<b>Water Quality</b>	Dissolved oxygen (DO)	Aquatic life, recreation	DO reports on presence of excessive nutrients (Nitrogen, Phosphorus) and effects of organic matter loading into a waterbody. High DO during day, low DO at night suggests algae overgrowth.	Option 1: One week of evening grab samples (a minimum of 2 hours after dusk or 2 hours before sunrise) in spring (as soon as safe to get into waterway), summer, & fall. OR Option 2: Continuous sampling. 1 week in spring summer, fall. In rivers or lakes, 2 samplers to obtain depth-integrated values.
<b>Water Quality</b>	Temperature	Aquatic life	Aquatic life can survive within a temperature window, exceedances lethal. If loggers are deployed, DO probes often also measure temperature.	Option 1: Daytime measurement between noon – 5 pm, at the same time of day, for 2 weeks in the spring, summer, and fall. Option 2: Continuous sample. Same as for dissolved oxygen.
<b>Water Quality</b>	Bacteria	Recreation	Increase cell count linked to poor management practices, high bacteria levels limit recreational use of waterways.	Once yearly in later summer or fall. Collect 1 sample weekly x 4 weeks. Calculate geometric mean. Measure E. coli.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

<b>Parameter</b>	<b>Endpoint</b>	<b>Beneficial Used Protected</b>	<b>Justification</b>	<b>Protocol</b>
<b>Water Quality</b>	Nutrients	Aquatic life Recreation Other	Excess nutrients can cause eutrophication of waterways leading to low dissolved oxygen which harms aquatic life. Algal overgrowth can also impair flows, adversely affect aesthetics, limiting recreation.	Benthic algal biomass and % cover (benthic chlorophyll a) from sediment in wadeable and non-wadeable streams or planktonic algal biomass (water column chlorophyll) from non-wadeable rivers and lakes. 3 times per year at beginning, middle, and end of growing season. Use SWAMP protocol.
<b>Physical Habitat</b>	PHAB assessment	Aquatic life	Expect to see few changes in habitat with effective LID implementation	Once yearly in spring. Use SWAMP protocol.
<b>Physical Habitat</b>	Channel cross sections	Aquatic life	Reports on stability of creek/river channel	Once yearly in spring.
<b>Physical Habitat</b>	Flow	Aquatic life	Expect minimal changes in flow rate if Low Impact Development practices minimizes changes in hydrograph usually seen with urbanization	Option 1: Pressure transducer. Use channel cross sections put in same time as DO probe. Measure spring, summer, and fall. Option 2: Install stage gage, develop rating curve. Evaluate spring, summer, and fall for 2 weeks.
<b>Physical Habitat</b>	Photo documentation	Overall conditions	Pictures and flood prone area will aid in the interpretation of the data	Once yearly in spring.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

<b>Parameter</b>	<b>Endpoint</b>	<b>Beneficial Used Protected</b>	<b>Justification</b>	<b>Protocol</b>
<b>Aquatic Life</b>	Bioassessment	Aquatic life	Benthic macroinvertebrates (BMIs) integrate the sum of all conditions. Use early measurements as the baseline. In some cases, expect improved BMIs, depending on previous use of land.	In spring as soon as safe to enter water, use SWAMP protocol



- (iii) **Reporting** – By the second year Annual Report, the Permittee shall complete and have available a report (50 page maximum) that includes a summary of baseline data collections and discussion of monitoring program results;

By the fifth year Annual Report, the Permittee shall complete and have available a report (50 page maximum) that includes a comparison of data collection to baseline data, and discussion of monitoring program results.

At a minimum, the second and fifth year Annual Reports shall include the following information:

- (a) The purpose of the monitoring, brief contextual background and a brief description of the study design and rationale.
- (b) Sampling site(s) locations, including latitude and longitude coordinates, water body name and water body segment if applicable. Sampling design, including sampling protocol, time of year, sampling frequency and length of sampling.
- (c) Methods used for sample collection: list methods used for sample collection, sample or data collection identification, collection date, and media if applicable.
- (d) Results of data collection, including concentration detected, measurement units, and detection limits if applicable.
- (e) Quantifiable assessment, analysis and interpretation of data for each monitoring parameter.
- (f) Comparison to reference sites (if applicable), guidelines or targets
- (g) Discussion of whether data collected addresses the objective(s) or question(s) of study design
- (h) Quantifiable discussion of program/study pollutant reduction effectiveness.

Where applicable, the Permittee shall prepare, maintain, and implement a Quality Assurance Project Plan (QAPP) in accordance with the Surface Water Ambient Monitoring Program. All monitoring samples shall be collected and analyzed according to the Program QAPP developed for the purpose of compliance with this Order.

[SWAMP Quality Assurance Program Plan \(2008\)](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf) is available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/qapp/qaprp082209.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf).

A formatted Microsoft Word [document that includes guidelines and boilerplate language for developing the permit QAPP](#) is available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/tools.shtml#qa](http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa).

Water quality data shall be uploaded to SMARTS and must conform to California Environmental Data Exchange Network (CEDEN) Minimum Data Templates format.

[CEDEN Minimum Data Templates](http://ceden.org/) are also available at: <http://ceden.org/>.

#### **E.13.d.2. Special Studies**

- (i) **Task Description** – Within the first year of the effective date of the permit, the Permittee, as an alternative to Section E.13.d.1. Receiving Water Monitoring may develop and implement a special study monitoring program to assess and evaluate the effectiveness of water quality projects or storm water program elements designed to

*UNOFFICIAL DRAFT — Not Certified by Clerk*

reduce specific water quality pollutants that are causing or contributing to beneficial use impairment. The special studies must demonstrate the nexus between storm water program implementation, water quality protection and pollutant reduction effectiveness and may include, but are not limited to:

- (a) Assessment of effectiveness of habitat enhancement efforts and assessment of effectiveness of stream restoration projects (i.e., stream channel restoration as related to implementation of hydromodification standards);
  - (b) Assessment of effectiveness of low impact development pilot projects, and assessment of storm water program components through pollutant load reduction quantification and/or discharge water quality monitoring (i.e., reduction of impervious surface related to implementation of Post- Construction Storm Water Management Program).
- (ii) **Implementation Level** – By the first year of the permit, the Permittee shall develop and implement a special study plan and shall submit to an applicable Regional Board for review and approval. Within the second year of the effective date of the permit, the Permittee shall begin implementation of the approved special study plan. The study plan shall include, at a minimum:
- (a) Purpose/objective of the monitoring (sampling rationale), including reasoning to implement a special study in lieu of the Receiving Water Monitoring described in Section E.13.d.1.
  - (b) Brief project background information and overall study design (i.e., surrounding land uses, reference monitoring data, if applicable, and site conditions)
  - (c) Parameters that are being measured, how parameters are measured and rationale for parameter selection.
  - (d) Frequency that parameters are being measured (sampling frequency)
  - (e) Sampling site location
  - (f) Description of how the data will be managed, analyzed (including statistical analysis) and reported
  - (g) Expected results based on study plan design and hypothesis
- (iii) **Reporting** – By the second year Annual Report, the Permittee shall complete and have available a report (50 pages maximum) that includes a summary of baseline data collections and discussion of monitoring program results.

By the fifth year Annual Report, the Permittee shall complete and have available a report (50 pages maximum) that includes a comparison of data collection to baseline data, and discussion of monitoring program results.

At a minimum, the second and fifth year Annual Reports shall include the following information:

- (a) The purpose of the monitoring, contextual background and a description of the study design and rationale.
- (b) Sampling site(s) locations, including latitude and longitude coordinates, water body name and water body segment if applicable. Sampling design, including sampling protocol, time of year, sampling frequency and length of sampling.

## UNOFFICIAL DRAFT — Not Certified by Clerk

- (c) Methods used for sample collection: list methods used for sample collection, sample or data collection identification, collection date, and media if applicable.
- (d) Results of data collection, including concentration detected, measurement units, and detection limits if applicable.
- (e) Quantifiable assessment analysis and interpretation of data for each monitoring parameter or other data type.
- (f) Comparison to reference sites (if applicable), guidelines or targets
- (g) Discussion of whether data collected addresses the objective(s) or question(s) in the study plan
- (h) Quantifiable discussion of program/study pollutant reduction effectiveness.

Where applicable, the Permittee shall prepare, maintain, and implement a QAPP in accordance with SWAMP. All monitoring samples shall be collected and analyzed according to the Program QAPP developed for the purpose of compliance with this Order. [SWAMP Quality Assurance Program Plan \(2008\)](#) is available at: [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/qapp/qaprp082209.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf).

A formatted Microsoft Word [document that includes guidelines and boilerplate language for developing the permit QAPP](#) is available at: [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/tools.shtml#qa](http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa).

Water quality data shall be uploaded to the Storm Water Multi-Application Reporting and Tracking System (SMARTS) and must conform to “CEDEN Minimum Data Templates” format. [CEDEN Minimum Data Templates](#) are also available at: <http://ceden.org/>

### E.14. PROGRAM EFFECTIVENESS ASSESSMENT AND IMPROVEMENT

#### E.14.a. Program Effectiveness Assessment and improvement Plan

- (i) **Task Description** - The Permittee shall develop and implement a Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. The Program Effectiveness Assessment and Improvement Plan will assist the Permittee to document compliance with permit conditions and to adaptively manage its storm water program and make necessary modifications to the program to improve program effectiveness at reducing pollutants of concern, achieving the MEP standard, and protecting water quality. The Program Effectiveness Assessment and Improvement Plan shall identify the strategy used to gauge the effectiveness of prioritized BMPs and program implementation as a whole. Prioritized BMPs include BMPs implemented based on pollutants of concern. Where pollutants of concern are unidentified, prioritized BMPs are based on common urban pollutants (i.e., sediment, bacteria, trash, nutrients). The annual effectiveness assessments will help identify potential modifications to the program to ensure long-term effectiveness.
- (ii) **Implementation Level** - The Program Effectiveness Assessment and Improvement Plan may be modeled upon the most recent version (if applicable) Municipal Storm Water Program Effectiveness Assessment Guidance (CASQA, May 2007) or equivalent.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (a) The Program Effectiveness Assessment and Improvement Plan shall include the following elements, at a minimum as applicable:
  - 1) Identification of overall program goals including pollutants of concern and prioritized BMPs
  - 2) Documentation of the level of implementation of storm water program elements
  - 3) Identification and targeting of target audience(s)
  - 4) Assessment of BMP performance at achieving outcome levels
  - 5) Assessment of pollutant source reductions achieved by individual BMPs
  - 6) Quantification of pollutant loads and pollutant load reductions achieved by the program as a whole
  - 7) MS4 discharge quality, where available, including analysis of the data
  - 8) Receiving water quality data, including analysis of the data
  - 9) Identification of long-term effectiveness assessment, to be implemented beyond the permit term
- (b) The Program Effectiveness Assessment and Improvement Plan shall assess BMP and program effectiveness in terms of the following Outcome Levels:
  - 1) Storm water program activities
  - 2) Awareness
  - 3) Behavior
  - 4) Pollutant load reductions
  - 5) MS4 discharge quality (where assessment is supported by MS4 discharge quality data)
  - 6) Receiving water conditions
- (c) The Program Effectiveness Assessment and Improvement Plan shall identify assessment methods for privately owned BMPs.
- (d) The Program Effectiveness Assessment and Improvement Plan shall identify assessment methods the Permittee will use to quantitatively assess BMP performance at reducing pollutant loads wherever feasible, using the following or equivalent methods:
  - 1) Direct quantitative measurement of pollutant load removal for BMPs that lend themselves to such measurement (e.g., measuring sediment collected through street-sweeping activities);
  - 2) Science-based estimates of pollutant load removal for BMPs where direct measurement of pollutant removal is overly challenging (e.g., removal of heavy metals through a bioswale);
  - 3) Direct quantitative measurement of behaviors that serve as proxies of pollutant removal or reduction (e.g., the percentage of construction sites demonstrated by inspection to be in compliance with permit conditions); or
  - 4) Visual comparison (e.g., using photographs to compare the amount of trash in a creek between one year and the next).
- (e) The Program Effectiveness Assessment and Improvement Plan shall ask and answer the following Management Questions for prioritized BMPs for which answers to management questions can be based on quantitative data appropriate to the question being answered.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- 1) Were prioritized BMPs or group of BMPs implemented in accordance with the permit requirements? The Permittee shall develop quantitative data using the following or equivalent methods:
    - a) Confirmation – Documenting whether an activity or task has been completed, expressed as positive or negative outcome (i.e., yes or no)
    - b) Tabulation – Simple accounting expressed in absolute (e.g., number of people participating), or relative terms (e.g. percent increase in recycled household hazardous waste)
  - 2) To what extent did prioritized BMPs or group of BMPs change the target audience's behavior? The Permittee shall develop quantitative data using the following or equivalent methods:
    - a) Surveys or interviews to discern knowledge, attitudes, awareness, behavior of specific population, etc.
    - b) Interviews of site personnel to discern awareness and behavior
    - c) Inspections or site visits to directly observe or assess a practice.
  - 3) To what extent did prioritized BMPs or group of BMPs reduce pollutant loads from their sources to the storm drain system?
- (f) The Program Effectiveness Assessment and Improvement Plan shall include water quality monitoring data, where available, to answer the following long-term management questions, effectiveness of BMPs and the overall storm water program will be assessed in future permit terms.
- 1) To what extent did implementation of the BMP, group of BMPs, or storm water program enhance or change the urban runoff and discharge quality?
  - 2) To what extent did implementation of the BMP, group of BMPs, or storm water program enhance or change receiving water quality?
  - 3) Did exceedance(s) of water quality objectives or water quality standards persist notwithstanding implementation of the storm water program?
- The Program Effectiveness Assessment and Improvement Plan shall include documentation of the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4 to the MEP and protect water quality.

- (iii) **Reporting** – By the second year Annual Report complete and submit the Program Effectiveness Assessment and Improvement Plan. The Plan shall include the strategy the Permittee will use to assess the effectiveness of the program, the specific measures the Permittee will use to assess the effectiveness of BMPs and/or groups of BMPs, and how the Permittee will use the information obtained through effectiveness assessment to modify individual BMPs and the program as a whole to increase short and long-term effectiveness. In subsequent Annual Reports, describe implementation of the Program Effectiveness Assessment and Improvement Plan, summarize data obtained through effectiveness assessment measures and the short and long-term progress of the storm water program, and provide an analysis of the data to improve program effectiveness, to achieve the MEP standard, protect water quality, and to document the Permittee's compliance with permit conditions. Permittees that have a Program Effectiveness Assessment and Improvement Plans, or equivalent, approved by the applicable Regional Board, or that have a schedule approved by the applicable Regional Board to develop and implement such a Plan, shall adhere to the Plan and/or



## UNOFFICIAL DRAFT — Not Certified by Clerk

schedule approved by the Regional Board unless otherwise directed by the Regional Board. By the fifth-year annual report, complete and submit an analysis of the effectiveness of modifications made at improving BMP and/or program effectiveness.

### E.14.b. Storm Water Program Modifications

- (i) **Task Description** –The Permittee shall modify BMPs and/or the program as a whole to improve compliance with permit conditions and improve program effectiveness at reducing pollutant loads, achieving the MEP standard, and protecting water quality. The Permittee shall use information gained through effectiveness assessment and MS4 discharge and receiving water monitoring to identify priority areas for program improvement. In addition, the Permittee shall identify and make modifications to BMPs, including new BMPs or modification to existing BMPs, to improve effectiveness in each priority area. The Permittee shall consult with the applicable Regional Water Board in setting expectations for the scope, timing, and frequency of BMP modifications.
- (ii) **Implementation Level** – Within the fifth year of the effective date of the permit, the Permittee shall identify and summarize BMP and/or program modifications identified in priority program areas. Modifications shall include:
  - (a) Improving upon BMPs that are underperforming
  - (b) Continuing and expanding upon BMPs that proved to be effective, including identifying new BMPs or modifications to existing BMPs designed to increase pollutant load reductions;
  - (c) Discontinuing BMPs that may no longer be productive and replacing with more effective BMPs; and
  - (d) Shifting priorities to make more effective use of resources
- (iii) **Reporting** – By the fifth year Annual Report, complete and submit the list of BMP and/or program modifications, as specified in E.14.c(ii), the Permittee will make for priority program areas, including identification of priority program areas and the schedule the Permittee will follow to complete identified modifications during the next permit term. The modifications shall be aimed at the goal of reducing pollutant loads, achieving the MEP standard and protecting water quality.

### E.15. TOTAL MAXIMUM DAILY LOADS COMPLIANCE REQUIREMENTS

Attachment G contains a list of TMDL-specific, BMP-based water quality based effluent limitations (WQBELs) and other permit requirements, applicable to identified permittees, consistent with the assumptions and requirements of the applicable wasteload allocations of the TMDLs.

**E.15.a.** Permittees shall comply with the requirement in Section C.1 to reduce the discharge of pollutants to achieve applicable TMDL wasteload allocations as follows:

- (i) Prior to the deadline to attain the final wasteload allocation, a permittee is deemed in compliance with the requirement in Section C.1 to *reduce the discharge of pollutants to achieve applicable TMDL wasteload allocations*, if the permittee is timely implementing all BMP-based WQBELs and other requirements specified in



*UNOFFICIAL DRAFT — Not Certified by Clerk*

Attachment G for that TMDL. The permittee may alternatively make a demonstration in accordance with section E.15.a.ii. below.

- (ii) On or after the deadline to attain the final wasteload allocation, a permittee is deemed in compliance with the requirement in Section C.1 to *reduce the discharge of pollutants to achieve applicable TMDL wasteload allocations* if the permittee meets one or more of the criteria in subsections (a)-(g) below. For purposes of this section only, the wasteload allocations specified in the applicable TMDLs (as identified in the Fact Sheet) are incorporated by reference.
- (a) Receiving water monitoring and analysis by the permittee or other responsible parties under the TMDL, as approved by the Regional Water Board or its designee, demonstrates attainment of the applicable receiving water limitation in the waterbody as determined at the TMDL monitoring attainment locations or as determined at or immediately downstream of the permittee's discharge; or
  - (b) Receiving water monitoring does not demonstrate attainment of the applicable receiving water limitation in the waterbody, but the permittee demonstrates, through an approach approved by the Regional Water Board or its designee, that exceedances of the receiving water limitations for the receiving water are due to loads from other sources and pollutant loads from the permittee are not causing or contributing to the exceedances; or
  - (c) Where the wasteload allocation is expressed as a concentration, sampling of the permittee's discharge, as approved by the Regional Water Board or its designee, indicates that the discharge has attained the applicable wasteload; or
  - (d) Where a mass-based wasteload has been allocated to an individual or jointly to a group or is expressed as a percent reduction in load, the permittee demonstrates, through an approach approved by the Regional Water Board or its designee, that the permittee's discharge is attaining the individual or joint allocation or the percent reduction; or
  - (e) Where a wasteload allocation is expressed as the number of allowable exceedance days, the permittee demonstrates, through an approach approved by the Regional Water Board or its designee, that the permittee's discharge conforms to the allowable exceedance days; or
  - (f) The permittee demonstrates, in a manner approved by the Regional Water Board or its designee, that no discharges, either directly or indirectly, from the permittee's MS4 to the applicable water body occurred during the relevant time period; or
  - (g) The permittee demonstrates the attainment of the wasteload allocation through other factors as described by the specific TMDL(s)<sup>30</sup> and as approved by the Regional Water Board or its designee.

---

<sup>30</sup> As an example, the TMDL for Sacramento and San Joaquin Delta - Diazinon and Chlorpyrifos states "In determining compliance with the wasteload allocations, the Regional Water Board will consider any data or information submitted by the discharger regarding diazinon and chlorpyrifos inputs from sources outside of the jurisdiction of the permitted discharger, including any diazinon and chlorpyrifos present in precipitation and other available relevant information, and any applicable provisions In the discharger's NPDES

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (iii) Pursuant to Section D, a permittee deemed in compliance with Section C.1 in accordance with subsections i) and ii) of this section is also deemed in compliance with the Section D requirement to *not cause or contribute to an exceedance of water quality standards* for the specific pollutants and water bodies addressed.

**E.15.b.** In some cases, Attachment G includes dates that fall outside the term of this Order. Attainment dates for BMP-based WQBELs and other permit requirements that exceed the term of this Order are included for reference, and become enforceable in the event that this Order is administratively extended.

Wasteload allocation attainment dates that have already passed are enforceable on the effective date of this Order and have been assigned a due date of January 1, 2019.

- (i) If the Regional Water Board Executive Officer makes a determination, on a case by case basis, that the language of a particular TMDL allows flexibility to extend a final deadline to attain a wasteload allocation, the State Water Board Executive Director may amend Attachment G to provide an extended deadline following public notice and comment.

Where a final deadline to attain a wasteload allocation is past and the permittee has not demonstrated compliance as specified in Section E.15.a.(ii) above, the permittee may seek a time schedule order pursuant to Water Code section 13300 from the Regional Water Board. Permittees may either individually request a time schedule order or may jointly request a time schedule order with all Permittees subject to the TMDL in Attachment G. Permittees may also request time schedule orders where the permittee has not timely complied with a BMP-based WQBEL or other permit requirement in Attachment G.

A request to the applicable Regional Water Board for a time schedule order shall include the following information:

- (a) Any available data demonstrating the current quality of the MS4 discharge(s) in terms of the applicable wasteload allocation units (i.e. concentration and/or load) of the target pollutant(s) to the receiving waters subject to the TMDL;
- (b) A description and chronology of structural controls and source control efforts carried out by the permittee since the effective date of the TMDL to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- (c) Justification of the need for additional time to achieve the requirements;
- (d) The specific actions the Permittee will take in order to meet the TMDL requirements and a time schedule of interim and final deadlines proposed to implement those actions. The actions will reflect the requirements specified for the TMDL in Attachment G; and
- (e) A demonstration that the time schedule requested is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the TMDL requirements.

---

permit requiring the discharger to reduce the discharge of pollutants to the maximum extent possible.” Resolution No. R5-2006-0061, Attachment 1, #11 Page 4.

*UNOFFICIAL DRAFT — Not Certified by Clerk*

- (ii) It is not the intention of the State Water Board or the Regional Water Boards to bring an enforcement action for non-attainment of the wasteload allocation where:
  - (a) A permittee is in compliance with a time schedule order's implementation requirements and compliance schedule;
  - (b) A permittee has in good faith requested a time schedule order from the Regional Water Board and is in compliance with all BMP-based WQBELs and other permit requirements of Attachment G, except the requirement to attain the applicable wasteload allocation by the final attainment deadline;
  - (c) A Regional Water Board has initiated proceedings to revise the TMDL to provide additional time for attainment or to modify TMDL wasteload allocations and the permittee is in compliance with all BMP-based WQBELs and other permit requirements in Attachment G, except the requirement to attain the applicable wasteload allocation by the final attainment deadline.
- E.15.c.** The State Water Board may revise this Order through a reopener to incorporate any modifications or revisions to the TMDLs in Attachment G, or to incorporate any new TMDLs adopted during the term of this Order that assign a wasteload allocation to a Regulated Small MS4 or that identify a Regulated Small MS4 as a responsible party. In revising Attachment G, the State Water Board will allow adequate notice and public review.
- E.15.d.** The Permittee shall complete and report the status of their implementation of the specific TMDL implementation requirements that have been incorporated into the permit with each Annual Report via SMARTS. Reporting on TMDL implementation shall include the following information:
  - (i) A description of BMPs implemented, including types, number, and locations; and
  - (ii) All supplemental information and reports required under the specific TMDL implementation requirements in Attachment G; and
  - (iii) An assessment of the effectiveness of implemented BMPs in progressing towards attainment of wasteload allocations within the TMDLs' specified timeframes; and
  - (iv) All monitoring data, including a statistical analysis of the data to assess progress towards attainment of wasteload allocations within the TMDLs' specified timeframes; and
  - (v) Based on results of the effectiveness assessment and monitoring, a description of the additional BMPs that will be implemented to attain wasteload allocations within the TMDLs specified timeframes.

- E.15.e.** The Permittee shall comply with implementation requirements specified in Category 4b demonstrations associated with Clean Water Act Sections 303d, 306b, and 314 Integrated Reporting and Listing Decisions. Implementation requirements described in Category 4b demonstrations are effective upon Regional Water Board approval of that region's Integrated Reporting and Listing Decisions and associated Category 4b demonstrations. [The most recent Integrated Reporting and Listing Decisions and associated Category 4b demonstrations](#) are available at:  
[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2010.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml)

## **E.16. ANNUAL REPORTING PROGRAM**

- E.16.a. By October 15 of each year**, the Permittee shall use State Water Board SMARTS to submit a summary of the past year activities for each program element and certify compliance with all requirements of this permit. If a Permittee is unable to certify compliance with a requirement, the Permittee must submit in SMARTS the reason for failure to comply, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance.
- E.16.b.** Permittees shall complete and retain all Annual Report information on the previous fiscal year beginning July 1 and ending June 30. The Annual Reporting requirements are set forth in Provisions E. The Permittee shall retain documentation as necessary to support their Annual Report. The Permittee shall make this supporting information available during normal business hours, unless agreed to by the applicable Regional Water Board's Executive Officer.
- E.16.c.** The Permittee shall submit when requested by the Executive Officer of the applicable Regional Water Board a detailed written online annual report or in-person presentation of the annual report that addresses the activities described in Provision E. The detailed Annual Report must clearly refer to the permit requirements and describe in quantifiable terms, the status of activities undertaken to comply with each requirement.
- E.16.d.** Permittees involved in regional programs may coordinate with the members to identify reporting responsibility. The one report submitted on behalf of Permittees involved in a regional program must include a summary of the past year activities for each program element and certification of compliance with all requirements of this Order for each of the Permittees in the regional program.