ATTACHMENT I

COMPLIANCE OPTIONS

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

I. General Provisions

A. This General Permit authorizes the implementation of the following Compliance Options as a method for compliance with the General Permit provisions specified below. These Compliance Options are optional and Dischargers are not required to implement one of the Compliance Options.

B. A Discharger in compliance with (1) either Section II (On-Site Compliance Option) or Section III (Off-Site Compliance Option) of this Attachment and (2) all applicable requirements of this General Permit is in compliance with Section V.A of this General Permit (once the BMP(s) are implemented and operational).

C. A Discharger in compliance with (1) either Section II (On-Site Compliance Option) or Section III (Off-Site Compliance Option) of this Attachment and (2) all applicable requirements of this General Permit is deemed in compliance with the following sections of this General Permit (once the BMP(s) are implemented and operational):

1. Discharge Prohibitions, Section III.C;

2. Effluent Limitations, Section V.C;

3. Receiving Water Limitations, Section VI.

D. If a Discharger chooses, but fails to comply with the requirements for the On-Site or Off-Site Compliance Option provided below, the Discharger shall comply with this General Permit, including Sections V.A, III.C, V.C, and VI, and this General Permit's requirements from which the Discharger was exempted in Sections II.I or III.G below.

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II. On-Site Compliance Option

A. A Discharger may implement on-site BMP(s) for capture and use, infiltration, and/or evapotranspiration of storm water associated with industrial activities and authorized non-storm water discharges (NSWDs).[1]

B. The Discharger may include BMP(s) that capture and divert the required storm water runoff[2] volumes to a publicly-owned sanitary sewer treatment facility, to an on-site facility for on-site use, to a regional reclaimed water distribution system, or a combination thereof. Proposed discharges to a publicly-owned sanitary sewer or reclaimed water distribution system shall be supported by a permit or by authorization in writing from the system's agency that specifically allows the proposed storm water[2] flow rates. The minimum required storm water[2] volume to be diverted shall be in accordance with the Section E.1 and E.2 below. The diverted or used volume of storm water[2] is not authorized to discharge into a municipal storm sewer system or receiving surface water body from the industrial facility.

C. A California licensed civil engineer shall certify (with a stamp and wet signature) that all hydrologic analyses, hydraulic calculations and BMP(s) operation parameters comply with Section E and IV.B below.[3]

D. The Discharger shall ensure that groundwater is protected, as described in Sections IV.B and IV.C below.

E. The BMP(s) implemented by the Discharger shall:

1. Maintain the effective capacity to capture, infiltrate and/or evapotranspire the volume of runoff produced up to and during the 85th percentile 24-hour precipitation event based upon local, historical precipitation data and records;[4]

2. Be designed to capture, capture and divert, infiltrate, and/or evapotranspire drainage from all areas associated with industrial activity at the facility for only the following water sources:

   a. Authorized sources listed in Section IV of this General Permit;

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[1] Storm water and authorized NSWDs from industrial drainage areas that meet the No Exposure Criteria (NEC) in Section XVII of this General Permit are not considered storm water or non-storm water discharges associated with industrial activity.

[2] Including authorized NSWDs.

[3] All professional engineering documents shall be certified (signed and sealed) in accordance with the requirements of the Professional Engineers Act and any other laws related to the practice of professional engineering and shall be signed and sealed in a manner such that all work can be clearly attributed to the licensee(s) in responsible charge of the work. California licensed professional engineers are not required to certify documents outside of the scope of the Professional Engineers Act and any other laws related to the practice of professional engineering.

[4] Precipitation data shall be collected from the National Oceanic and Atmospheric Agency's website (or other nearby precipitation data available from other government agencies).

b. Storm water associated with industrial activities; and,

c. Non-industrial storm water run-on that commingles with the industrial storm water flowing into the BMP(s).

3. Designed by a California licensed civil engineer with a 24-hour drawdown time[5] or with additional storage volume beyond the compliance storm standard to offset longer drawdown time.

4. The Discharger shall implement measures to ensure the design standards for the life of the BMP(s) are maintained, and as appropriate, include reliability and safety factor calculations.

5. A Discharger implementing infiltration BMP(s) shall include a shutoff mechanism[6] (e.g., a valve that diverts discharge from entering the BMP(s)) in the design and implementation of infiltration BMP(s).

6. The Discharger implementing infiltration BMP(s) shall address possible groundwater contamination from the BMP(s) operation by using one or more of the following methods:

   a. The Discharger shall ensure that all influent[7] entering the infiltration BMP(s) meets applicable Maximum Contaminant Level (MCL) criteria for industrial pollutants at the facility, as specified in Table A below. If the influent concentrations do not meet applicable MCLs, the Discharger shall have a California licensed civil engineer:

      i. Recommend and oversee the installation of the necessary pretreatment controls during the design of the infiltration BMP(s) to ensure all the pollutants associated with industrial activities in the influent of the infiltration BMP(s) meet MCL criteria and include maintenance of all pretreatment controls in the operation and maintenance plan required in Section II.H.3.a.ii below; or

[5] The time to drain from full to empty when no inflows are occurring, and calculated as the maximum water depth divided by the drain rate (e.g., measured percolation rate or allowed sewer discharge rate), considering any relevant safety factor included by the California licensed civil engineer.
[6] If including a shutoff mechanism is infeasible for a BMP, appropriate spill prevention and response, and training shall be implemented.
[7] For the purposes of the compliance options, "influent" means storm water or authorized NSWDs (water as specified in E.2 above) flowing into a reservoir, basin, or treatment control.

ii. Install monitoring devices (including, but not limited to, lysimeters) to collect monthly samples of the infiltrated water below the infiltration BMP(s) to demonstrate compliance with MCLs for pollutants associated with industrial activities in the influent of the infiltration BMP(s). The Discharger shall maintain proper calibration of the installed monitoring device(s). The monthly samples are only required when feasible sampling conditions exist (including, but not limited to, enough moisture in the monitoring device to collect a sample). When monthly samples are not collected, the Discharger shall document this information in an attachment to the Annual Report and update the SWPPP if necessary.

b. The Discharger shall implement 6.a.i or ii above for applicable Table B constituents identified per the requirements in Section IV.

c. The Discharger installing and operating storm water capture and infiltration dry wells[8,9] shall comply with the requirements in Section 6.a.i above and are not eligible to install monitoring devices in lieu of the pretreatment requirements.

d. For influent not meeting MCLs, the Discharger shall pretreat the infiltration BMP(s) influent[10] to comply with the State Water Board's Division of Drinking Water MCLs referenced in Table A below.

[8] "Drywell means a bored, drilled, or driven shaft or a dug hole or subsurface fluid distribution system, whose depth is greater than its largest surface dimension, which is completed above the water table so that its bottom and sides are typically dry except when receiving fluids well. The term does not include improved sinkholes." U.S. EPA. Terms and Acronyms. <https://iaspub.epa.gov/sor_internet/registry/termreg/searchandretrieve/termsandacronyms/search.do?search=&term=drywell&matchCriteria=Contains&checkedAcronym=true&checkedTerm=true&hasDefinitions=false> [as of August 22, 2017].

[9] In the event that the State Water Board develops and approves statewide standards for storm water capture and infiltration dry wells, these standards will be incorporated through a reopener to this General Permit. California Water Code section 13260(a)(3) requires the submittal of a report of waste discharge for construction or operation of an injection well. The U.S. EPA Underground Injection Control Program requires registration of injection wells with the U.S. EPA.

[10] "Maximum Contaminant Level" means the maximum permissible level of a contaminant in water. Title 23 of the California Code of Regulations, State Water Resources Control Board's Division of Drinking Water. <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>; <http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.shtml>; <http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml> [as of July, 27, 2017].

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Table A: Applicable Constituents with Primary or Secondary MCLs

Parameter Category	**MCL Criteria for Industrial Pollutant Pretreatment**[11]
Primary MCLs: • Primary MCLs: Inorganics • Primary MCLs: Volatile Organic Carbon (VOCs) • Primary MCLs: Synthetic Organic Contaminants (SOCs) • Primary MCLs: Disinfection Byproducts	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml
Secondary MCLs: Total Dissolved Solids	Pollutants associated with industrial activities in the influent of the infiltration BMP(s) shall not exceed 500 mg/L.
Secondary MCLs: Chloride	Pollutants associated with industrial activities in the influent of the infiltration BMP(s) shall not exceed 250 mg/L.
Secondary MCLs: Specific Conductance	Pollutants associated with industrial activities in the influent of the infiltration BMP(s) shall not exceed 900 uS/cm.
Secondary MCLs for Sulfate	Pollutants associated with industrial activities in the influent of the infiltration BMP(s) shall not exceed 250 mg/L.

F. Implementation Schedule

1. Baseline Status

A Discharger with Baseline Status for all pollutants *insert the amendment effective date* or on July 1 of the reporting year intending to implement the On-Site Compliance Option shall notify the Water Boards via SMARTS no later than three (3) months prior to the estimated date of the BMP(s) installation and operation or prior to obtaining applicable local approvals for the BMP(s), whichever comes first. The Discharger shall submit the required implementation information and schedule in the facility's site specific Storm Water Pollution Prevention Plan (SWPPP) in accordance with Section II.H.3 below.

2. Level 1 Status[12]

A Discharger with Level 1 Status as of *insert the amendment effective date* or on July 1 of the reporting year intending to implement the On-Site Compliance Option must submit the implementation information required in Section II above in their Level 1 Exceedance Response Action (ERA) Evaluation and Report, per the required schedule in Section XII.C of this General Permit or prior to obtaining applicable local approvals for the BMP(s), whichever comes first.

[11] If the applicable Regional Water Board's Basin Plan contains more stringent water quality objectives for groundwater, the Basin Plan water quality objectives supersede as a pretreatment limit.

[12] Dischargers may amend a facility's certified and submitted Level 1 ERA Report to submit this information when necessary via SMARTS.

3. Level 2 Status[13]

   A Discharger with Level 2 Status as of *insert the amendment effective date* or on July 1 of the reporting year intending to implement the On-Site Compliance Option shall submit the implementation information required in Section II above in their Level 2 ERA Action Plan and Technical Report per the schedule in Section XII.D of this General Permit or prior to obtaining applicable local approvals for the BMP(s), whichever comes first.

4. Upon implementation and operation of the BMP(s), and compliance with the On-Site Compliance Option requirements in this Attachment, the status of Baseline, Level 1, or Level 2 is no longer applicable.

G. Reporting Requirements for BMP(s) Design

   A Discharger complying with the On-Site Compliance Option shall submit the following information via SMARTS 7 days prior to the initial operation of the BMP(s):

   1. Type of BMP(s) being implemented;

   2. A map with the BMP(s) location;

   3. BMP(s) latitude and longitude;

   4. Bypass mechanisms for the discharged volume that is above and beyond the 85th percentile, 24hour storm, into a local municipal storm system or receiving surface water body; and,

   5. Description of pretreatment system used for infiltration BMP(s).

H. Monitoring and Reporting Requirements for a Discharger with implemented and operational On-Site Compliance Option BMP(s).

   1. On-Site Compliance Option Monitoring Requirements

      The Discharger shall:

      a. Conduct representative sampling and analysis of all discharge from the BMP(s) in compliance with the Sampling and Analysis Section XI.B.5-11, C.2, and C.6 of this General Permit and Attachment H,[14] with the exception of comparing monitoring results to NALs in Section XI.B.7;

[13]. Dischargers may amend a facility's certified and submitted Level 2 ERA Action Plan and/or Level 2 ERA Technical Report to submit this information when necessary via SMARTs.

[14] Storm Water Sample Collection and Handling Instructions

b. Submit all sampling and analysis information and results in SMARTS within 30 days after obtaining the information and results;[15]

c. Comply with the Visual Observation and Methods and Exceptions Section XI.A and C,[16] respectively; and,

d. Conduct representative sampling and analysis of the influent entering the infiltration BMP(s) in compliance with the Sampling and Analysis Section XI.B.5-11, C.2, and C.6 of this General Permit and Attachment H[8] of this General Permit, with the exception of comparing monitoring results to NALs in Section XI.B.7. Dischargers shall, at a minimum, collect and analyze samples of influent entering the infiltration BMP(s) two times within the first half of the Reporting Year (July 1 – December 31) and two times within the second half of the Reporting Year (January 1 – June 30).

2. A Discharger complying with the On-Site Compliance Option must submit the following sampling information in SMARTS within 30 days after obtaining the analytical laboratory sampling results:

   a. Monitoring (sampling and analysis) results for the infiltrated water, if applicable;

   b. Monitoring (sampling and analysis) results of influent entering the BMP(s);

   c. The size of each rain event, in inches of rain per hour, that discharges from the BMP(s);[17]

   d. The estimated volume of the corresponding discharge; and,

   e. The date and estimated start and end time of all discharges.

3. Storm Water Pollution Prevention Plan (SWPPP) Requirements[18]

   a. A Discharger complying with the On-Site Compliance Option shall update their SWPPP with the following documentation:

      i. Description and photographs of the facility specific on-site BMP(s);

      ii. Operation and maintenance plan certified by the California licensed civil engineer that includes, but is not limited to, the following items: 1) inspection frequency; 2) titles of personnel authorized to conduct

[15] This information in and of itself is not to be used for enforcement of water quality standards or general permit compliance but to provide feedback on the effectiveness of this Compliance Option.
[16] Not eligible for the Methods and Exceptions in Section XI.C.4, 5, and 7.
[17] Obtained from an on-site rainfall gauge or a National Oceanic and Atmospheric Administration website (or other nearby precipitation data available from other government agencies).
[18] Dischargers shall follow this General Permit's Monitoring and Records Section XXI.J.

the BMP(s) inspections; 3) maintenance procedures for BMP(s) and installed pretreatment; and, 4) a maintenance schedule;

iii. BMP(s) safety factor and reliability calculations required in Section II.E.3 above; and,

iv. Certification required in Section II.C above provided by the California licensed civil engineer; and,

v. Applicable information on any preexisting contamination in the soil or groundwater for any industrial or non-industrial pollutants at the facility that may be discharged or mobilized through infiltration to meet the protections in Section IV below.

b. The updated SWPPP shall be available at the facility 7 days prior to the initial operation of the BMP(s). The Discharger shall certify and submit the updated SWPPP via SMARTS 7 days prior to the initial operation of the BMP(s).

c. The Discharger implementing the On-Site Compliance Option shall, at a minimum, include the BMP(s) design information from Section II.E and the design information for any installed pretreatment systems/devices.

I. The Discharger with BMP(s) implemented and operating in compliance with the On-Site Compliance Option are exempt from the following provisions of this General Permit:

1. Section VIII.A Discharges to Ocean Waters;

2. Section IX Training Qualifications, requirement to obtain a QISP;

3. Section X.A.7, X.H.2. Implementation of Advanced BMPs;

4. Section X.H.6 Design Storm Standards for Treatment Control BMPs; and,

5. Section XII Exceedance Response Actions.

J. Additional Regional Water Board Authorities for Dischargers Implementing the On-Site Compliance Option

1. The applicable Regional Water Board Executive Officer has the authority to review site-specific information, and disapprove any On-Site Infiltration BMP(s) as a permissible Compliance Option for the Discharger to address groundwater concerns under their Regional Water Board jurisdictions.

2. The Regional Water Board Executive Officer may require the Discharger to modify the facility's SWPPP to demonstrate compliance with the On-Site Compliance Option or address other regional groundwater concerns. Upon written request of the Regional Water Board Executive Officer, the Discharger shall submit the required SWPPP modifications by the required due date, or no later than 90 days, whichever is shortest.

3. The Regional Water Board may require additional information or modifications to the facility's SWPPP and/or BMP(s) to address:

   a. Exceedances of applicable water quality objectives;

   b. Impacts to groundwater beneficial uses; or,

   c. Impacts to the groundwater quality due to the infiltration of the industrial authorized NSWDs and/or storm water discharges at the Discharger's industrial facility.

4. The State Water Board Executive Director or the applicable Regional Water Board Executive Officer may authorize the discontinuation of monitoring for the infiltrated water if no threat to groundwater is determined.

III. Off-Site Compliance Option

A. The Discharger may enter into a local agreement with the local jurisdiction(s) to participate in the development, implementation, and operation of an off-site storm water capture and/or infiltration BMP(s) (Off-Site BMP(s)) provided the following criteria are met:

1. The Off-Site BMP must maintain[19] the effective capacity to capture, capture and divert, infiltrate and/or evapotranspire the volume of runoff produced up to and during the 85th percentile 24-hour precipitation event based upon precipitation data from the National Oceanic and Atmospheric Administration and/or local, historical precipitation data and records;[20] and,

2. The authorized non-storm water[21] and industrial storm water must not discharge to a water of the United States or a water of the state prior to reaching the Off-Site BMP(s).

[19] The BMP has met the standards if the BMP is designed with a 24-hour drawdown time or an alternate drawdown time approved by the Regional Board. See footnote 4 for the definition of drawdown time.
[20] Precipitation data shall be collected from the National Oceanic and Atmospheric Agency's website (or other nearby precipitation data available from other government agencies).
[21] Listed in Section IV of this General Permit.

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B. The Discharger shall work with the local jurisdiction(s) to define participation in the development, implementation, and operation of the Off-Site BMP(s).

C. The Discharger and local jurisdiction shall ensure the agreement includes applicable protections for waters of the state for infiltration BMPs to demonstrate meeting the criteria in Section IV.

D. The applicable Regional Water Board Executive Officer and local jurisdiction(s) representatives shall approve the Discharger's participation in the Off-Site Compliance Option.

E. A Discharger may enter into a local agreement with another Discharger(s) to participate in the development, implementation, and operation of an Off-Site BMP provided the criteria in Section III.A.1-2 are met. The agreement between Dischargers shall 1) include equal responsibility of the Off-Site BMP(s) among all parties involved, 2) not involve discharges to a municipal separate storm sewer systems (MS4), and 3) be approved by the applicable Regional Water Board Executive Officer.

F. A Discharger participating in an approved local agreement and discharging into an Off-Site BMP(s) and in compliance with the Off-Site Compliance Option requirements in this Attachment, are exempt from the following provisions and requirements of this General Permit:

1. Section VIII.A Discharges to Ocean Waters;
2. Section IX Training Qualifications, the requirement to obtain a QISP;
3. Section X.A.7, X.H.2. Implementation of Advanced BMPs;
4. Section X.H.6 Design Storm Standards for Treatment Control BMPs;
5. Section X.I.3-5 Monitoring Implementation Plan;
6. Section XI.A.2 Sampling Event Visual Observations
7. Section XI.B Sampling and Analysis; and,
8. Section XII Exceedance Response Actions.

G. Regional Water Board Authorities

The Regional Water Board Executive Officer has the authority to address regional groundwater concerns related to a Discharger's use of an Off-Site

BMP(s) as a permissible Compliance Option through a review of site-specific information.

H. Monitoring, Reporting and Storm Water Pollution Prevention Plan (SWPPP) Update Requirements

The Discharger selecting the Off-Site Compliance Option shall:

1. Comply with the Monitoring and Records requirements in Section XXI.J of this General Permit or any Off-Site agreement-related monitoring and record retention requirements.

2. Update the facility's SWPPP to include:

   a. A copy of the facility's agreement with the local jurisdiction(s);

   b. A copy of the facility's agreement approval from the local jurisdiction;

   c. A copy of the facility's agreement approval from the Regional Water Board Executive Officer;

   d. Information on, and description of, the actions the Discharger must take during the development, implementation, and operation of the Off-Site BMP(s), as established in the approved agreement, that allows the facility's storm water discharge to enter an Off-Site BMP(s);

   e. A milestone schedule that demonstrates compliance with the criteria in Section III.A-C above in accordance with the due dates in Section 3 below; and,

   f. A copy of the operation and maintenance plan(s) for the Off-Site BMP(s) that receives the facility's discharge.

3. The updated SWPPP shall:

   a. Be maintained on-site at least 7 days prior to the initial implementation of the agreement; and

   b. Be certified and submitted via SMARTS by the Discharger at least 7 days prior to the initial implementation of the agreement.

4. A Discharger participating in the Off-Site Compliance Option shall submit and certify via SMARTS the following information as an attachment to the Annual Report to document the status of the local agreement project(s) and implementation progress:

   a. Proof that participation in the local agreement is still valid (e.g., verify agreement effective period);

b. Identification of the local jurisdiction(s) that are part of the agreement including a contact name, title, email, and phone number of the local representative;

c. Summary of actions (including, but not limited to, monitoring, structural BMPs, non-structural BMPs, training) the facility completed the past Reporting Year;[22]

d. Summary of actions (including, but not limited to, monitoring, structural BMPs, non-structural BMPs, training) the facility planned for implementation over the next two years to comply with the agreement with the local jurisdiction;

e. The status and schedule of the local agreement project(s) completed this Reporting Year;

f. The status and schedule of the local agreement project(s) planned for implementation over the next two years; and,

g. A status and schedule implementation update regarding the Discharger's required actions per the local agreement.

IV. Protection of Waters of the State

A. The following discharges are prohibited for any Discharger implementing a Compliance Option:

1. Water related to the cleaning and maintenance of the BMP is an unauthorized NSWD; and,

2. Storm water associated with industrial activities occurring below the 85th percentile 24-hour storm event and/or sources of non-storm water authorized by this General Permit in Section IV.

B. The migration of pollutants that cause or contribute to the exceedance of a water quality objective in groundwater is prohibited. The Discharger shall ensure infiltration BMP(s) implemented for compliance with a Compliance Option shall be designed and operated to:

1. Prevent captured and/or infiltrated storm water from causing or contributing to the exceedance of a water quality objective in groundwater;

2. Ensure the constituents in Table B are not causing a threat to the attainment of the groundwater's beneficial use(s) if identified and have the potential to discharge to groundwater.

[22] This General Permit defines a Reporting Year as July 1st to June 30th.

3. Prevent the migration of existing soil contamination to groundwater and not interfere with any active remedial activities for existing groundwater contamination in the vicinity of the facility and/or Off-Site BMP(s); and,

4. Address other similar factors which may degrade groundwater.

5. For the On-Site Compliance Option, include a determination of Section IV.B.1-4 of this Attachment above in the certification required by the California licensed civil engineer in Section II.C.

C. Infiltration and Groundwater Protection

   1. Infiltration BMPs must not cause or contribute to an exceedance of an applicable groundwater quality objective.

   2. Infiltration BMPs used for Compliance Option implementation shall comply with applicable local municipal ordinances, storm water requirements, and design standards for the infiltration of industrial storm water and authorized non-storm water as listed in Section IV of this General Permit.

   3. The Minimum BMP requirements (Section X.H.1 of this General Permit) shall be implemented to maximize pollution prevention and protection of receiving groundwater quality and beneficial uses.

   4. The soil through which infiltration occurs must have physical and chemical characteristics necessary to support infiltration rates and storm water treatment to meet the compliance storm standards in this Attachment I.

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TABLE B: Constituents of Concern

Pollutant/Constituent[23]
1,1-Dichloroethane (1,1-DCA)
1,1-Dichloroethylene (1,1-DCE)
1,2,3-Trichloropropane (1,2,3 TCP)
1,2-Dichloroethane (1,2-DCA)
1,4 Dioxane (as Dioxane)
Arsenic
Benzene
Cadmium
Carbon Tetrachloride *
Chromium, Total
cis-1,2-Dichloroethylene *
Cyanide
DBCP
Di(2-ethylhexyl) phthalate (DEHP) *
Fluoride
Lead
Manganese
Methylene Chloride
Nickel
Nitrite Plus Nitrate (as N)
N-Nitrosodimethylamine (NDMA)
Perchlorate *
Polychlorinated Biphenyls (PCBs)
Polycyclic Aromatic Hydrocarbons (PAHs)
Tertiary Butyl Alcohol (TBA) *
Tetrachloroethylene (PCE) *
Total Trihalomethanes *
Trichloroethylene (TCE) *
Triclosan *
Vanadium
Vinyl chloride

[23] * Constituents currently without a 40 C.F.R. 136 approved test method. The Discharger may request approval from the appropriate Regional Water Board or the State Water Board to review and approve a proposed test method for sampling and analysis.