

IGP

QISP Renewal **Issue #1**

THIS ISSUE: Up & Coming IGP Topics

- Proposed amendment to the IGP
 - TMDLs
 - Sufficiently Sensitive Test Methods
 - Compliance Options
- ERAs
- Treatment Chemicals



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QISP Renewal

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Training Team**

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QISP RENEWAL

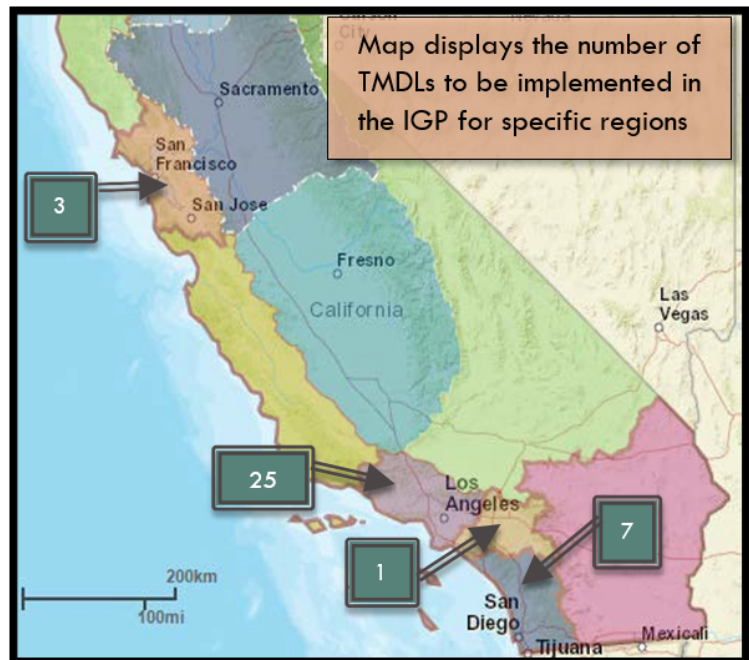
This renewal issue is a collection of new and commonly misunderstood Industrial Stormwater General Permit (IGP) topics for QISPs to review for the first QISP certificate renewal process. This renewal issue also provides a review of key processes in Stormwater Multiple Application and Report Tracking System (SMARTS).

Proposed Amendment to the Industrial General Permit | One

The permit amendment contains 3 new requirements for implementation: 1) Total Maximum Daily Loads (TMDLs), 2) Sufficiently Sensitive Test Methods, and 3) Compliance Options.

1) TOTAL MAXIMUM DAILY LOADS (TMDLS)

The Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (Industrial General Permit or IGP) included a reopener to incorporate TMDLs through a future permit amendment. The San Francisco Bay, Los Angeles, Santa Ana, and San Diego Regional Water Quality Control Boards have adopted TMDLs with identified industrial stormwater sources. These adopted TMDLs are listed in Attachment E of the IGP. A TMDL is a set of requirements that allocate the maximum amount of a pollutant that can be discharged for attainment of water quality standards and are incorporated into Regional Water Quality Control Boards (Regional Water Boards) Basin Plans. Requirements must be implemented through a permitting action to be enforceable. The proposed IGP amendment's intent is to align the TMDL objectives with the existing IGP multi-level regulatory process (i.e. numeric action levels (NALs) that trigger higher levels of Best Management Practice (BMP) implementation). If the TMDL's objectives are not aligned with the IGP's requirements, additional TMDL-specific requirements are proposed. State Water Resources Control Board (State Water Board) staff developed proposed TMDL implementation requirements that include TMDL numeric action levels and/or numeric effluent limitations (TNALs and/or NELs) applicable to industrial stormwater discharges for impaired water bodies or watersheds with adopted TMDLs. As identified in IGP Section X.B., when a Discharger significantly changes their IGP compliance method the facility's Storm Water Pollution Prevention Plan (SWPPP) must be updated. For example a SWPPP update is required when a TMDL



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compliance evaluation is conducted. The table below includes a summary of the pollutants included in the adopted TMDLs associated with industrial stormwater discharges and the proposed implementation requirements for the WLAs.

Proposed Pollutant Category Translations:

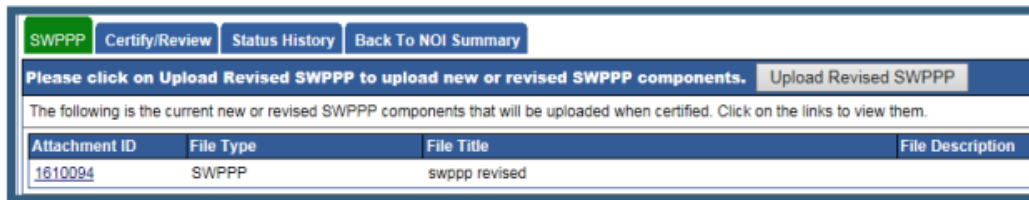
Pollutant Category Translations	
TMDL Pollutants	Proposed Compliance Variations
Indicator Bacteria (8 TMDLs)	Comply with General Permit only, or Additional TMDL-numeric action levels
Metals (12 TMDLs)	Additional TMDL-numeric action levels, or Additional numeric effluent limitations
Nutrients (5 TMDLs)	Comply with General Permit only, or Additional numeric effluent limitations
Toxics/Pesticides (6 TMDLs)	Comply with General Permit only, Additional TMDL-numeric action levels, or Additional numeric effluent limitations
Trash/Debris (2 TMDLs)	Comply with General Permit only, and implementation of trash controls
Salts (3 TMDLs)	Comply with General Permit only, or Additional site-specific numeric effluent limitations
Sediment (3 TMDLs)	Comply with General Permit only One TMDL adds required discharge flow estimation

Below is the correct way to update a SWPPP in SMARTS:

Update the SWPPP!

The Change of Information (COI) is used to update information such as facility name, address, Standard Industrial Classification (SIC) code, and/or the SWPPP.

The COI can be completed and submitted by anyone linked to the facility in SMARTS. An authorized signatory may be required to certify and submit other COI operations.

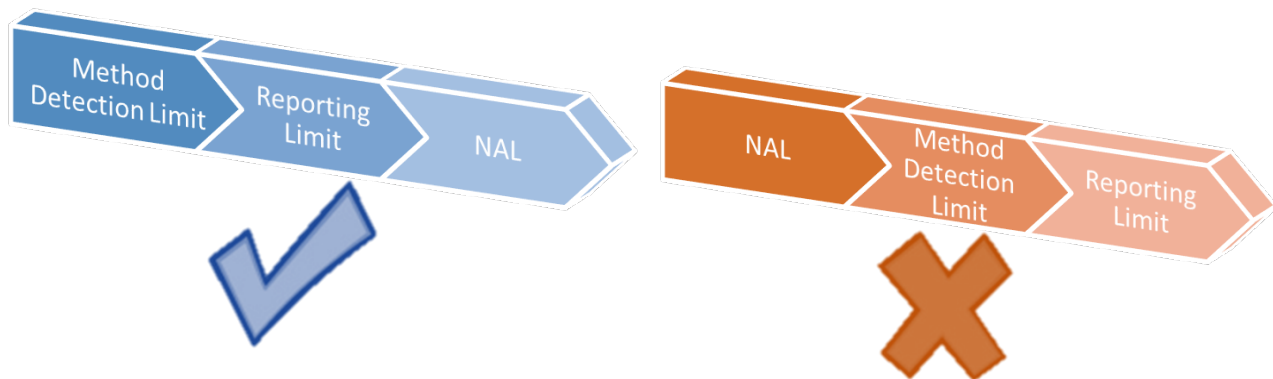


A SMARTS Help Guide has been created to help walk a SMARTS user through the COI process. The guide can be found by visiting the [SMARTS Resources page](https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/coi_guide.pdf) (https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/coi_guide.pdf) from the State Water Board Stormwater Program Page. The [SMARTS IGP Help link](https://www.waterboards.ca.gov/water_issues/programs/stormwater/smarts/industrial/ind_st_help_guides.html) (https://www.waterboards.ca.gov/water_issues/programs/stormwater/smarts/industrial/ind_st_help_guides.html) includes this guide and other to assist users.

2) SUFFICIENTLY SENSITIVE TEST METHODS

The U.S. Environmental Protection Agency (U.S. EPA) issued new regulations on September 18, 2014 requiring National Pollutant Discharge Elimination System (NPDES) Dischargers to use sufficiently sensitive analytical methods when quantifying the presence of pollutants in a discharge, however this was after the IGP was adopted on April 1, 2014. The U.S. EPA finalized Clean Water Act regulations to require NPDES program Dischargers to use promulgated U.S. EPA approved analytical methods or otherwise approved analytical methods under 40 Code of Federal Regulation (CFR) Part 136, or 40 CFR Chapter I, subchapters N and O. The purpose of this required ruling is to clarify that Dischargers must use U.S. EPA approved analytical methods that are capable of detecting and measuring the pollutants at, or below, the applicable water quality criteria or permit limits. In the IGP an applicable permit limit is a NAL, TNAL, or NEL. This is important for all Dischargers including any Dischargers that will be discharging into a TMDL-waterbody as the appropriate permit limit (TNALs or NELs) may be a more stringent value than current NALs.

The graphic below represents a general hierarchy of where the reporting limits should be in relation to permit limits. The graphic on the left displays the correct use of sufficiently sensitive methods and the graphic on the right displays an incorrect use.



3) COMPLIANCE OPTIONS

The proposed amendment also incorporates statewide IGP compliance options consisting of the on-site or off-site capture of industrial stormwater and any authorized non-stormwater discharges. The compliance options are available for complying with the IGP including applicable TMDL requirements. The on-site compliance option is proposed to require the capture and use of industrial stormwater and authorized non-stormwater discharges up to and including the daily volume of the 85th percentile 24-hour storm event. The second proposed option for off-site compliance would require the participation in agreements with municipalities resulting in off-site 85th percentile 24-hour storm event capture BMPs. As currently proposed, Dischargers that successfully implement a compliance option (per Attachment I) are deemed in compliance with: 1) discharge prohibitions (Section III.C), 2) effluent limitations (Section V.C), 3) receiving water limitations (Section VI.), and 4) the specified IGP requirements in Attachment I.

Exceedance Response Actions (ERAs) | Two

All Dischargers have Baseline status for all parameters at the beginning of a Discharger’s Notice of Intent (NOI) coverage in the IGP. A Level status will be assigned to the facility if sampling results from the previous reporting year indicates that the stormwater discharge from an industrial facility exceeds an annual or instantaneous maximum NAL for an applicable parameter. The IGP reporting year (also referred to as reporting period) is July 1st through June 30th. SMARTS assigns a regulatory “Level” status annually on July 1st (the end of each reporting year) to each facility based on the required monitoring data submitted into SMARTS. The NAL calculation in SMARTS is provided to assist the facility and Water Board staff with compliance determinations, but it is ultimately the responsibility of the Discharger to demonstrate and record IGP compliance.

An annual exceedance occurs within a reporting year for a single parameter when the average of all Qualifying Storm Event (QSE) results for the entire facility exceeds the annual NAL value (reporting period average > annual NAL value). An instantaneous maximum NAL exceedance occurs within a reporting year for a single parameter for the entire facility when two or more reported QSE results are over the NAL (reported result(x2) > instantaneous NAL). The IGP has three parameters with an instantaneous maximum NAL (pH, Total Suspended Solids (TSS), and Total Oil & Grease (O&G)). A facility would have to exceed the instantaneous value two times for a parameter in one reporting year for that parameter to move into a higher Level.

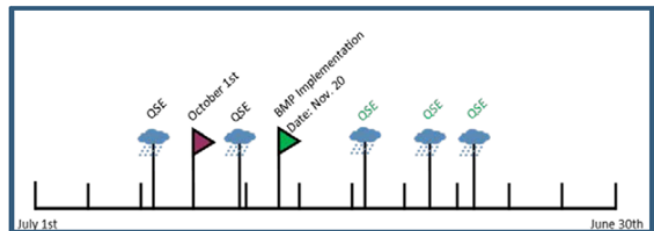
Returning to Baseline: Many Dischargers are unsure of how returning to Baseline works. It is important to make sure Dischargers are aware of their facility’s status at all times. The requirements for returning to Baseline are laid out for each level in IGP Section XII.

Requirements to return to Baseline from Level 1:

- ✓ Level 1 ERA Report submitted;
- ✓ All Addition BMPs Implemented; and,
- ✓ 4 consecutive QSEs with no NAL exceedances.

Requirements to return to Baseline from Level 2:

- ✓ Level 2 ERA Action Plan submitted,
- ✓ Level 2 ERA Technical Report submitted (Can only return to Baseline using the Industrial BMP Demonstration Section XII.D.2.a.i-iii), and,
- ✓ 4 consecutive QSEs with no NAL exceedances



The figure shows a facility that sampled only three of the four required QSEs after the BMP Implementation date to be eligible to return to Baseline. The four consecutive QSEs could span multiple reporting years if the reporting year would exclude the QSE before Oct. 1 per Section XII.C.3. All QSEs after Oct 1 would count towards the reporting year calculation, if an exceedance occurs the facility moves to Level 2, if there are no exceedances the facility remains Level 1 until it meets the requirements.

When all requirements are met for the facility to return to Baseline, the status in SMARTS changes immediately. Returning to Baseline could happen at any time during the year but moving up a Level due to exceedances only happens at the end of the reporting year. If a facility returns to Baseline from Level 2 and has a subsequent exceedance for the parameter, the facility will return directly to Level 2.

NAL Exceedance Calculation Example:

The data below is from a facility with three industrial stormwater discharge locations. The facility sampled 4 QSEs and submitted results for the required parameters. Results displayed in the table below are an example of a NAL exceedance for TSS.

TSS annual NAL: 100 mg/L

TSS instantaneous maximum NAL: 400 mg/L

Compliance Point:	Date:	Result (mg/L):
Monitoring Location 1	11/14/2016	15
Monitoring Location 2	11/14/2016	55
Monitoring Location 3	11/14/2016	125
<i>Monitoring Location 1</i>	<i>12/6/2016</i>	410
<i>Monitoring Location 2</i>	<i>12/6/2016</i>	40
<i>Monitoring Location 3</i>	<i>12/6/2016</i>	425
Monitoring Location 1	2/3/2017	10
Monitoring Location 2	2/3/2017	15
Monitoring Location 3	2/3/2017	23
<u>Monitoring Location 1</u>	<u>3/22/2017</u>	10
<u>Monitoring Location 2</u>	<u>3/22/2017</u>	15
<u>Monitoring Location 3</u>	<u>3/22/2017</u>	20

$$\frac{15 + 55 + 125 + 410 + 40 + 425 + 10 + 15 + 23 + 10 + 15 + 20}{12} = 96.916$$

The TSS annual NAL is 100 mg/L and the facility reporting period average is 96.91 mg/L, resulting in no annual NAL exceedance.

100 mg/L > 96.61mg/L = **No annual NAL exceedance**

The TSS instantaneous maximum NAL is 400 mg/L. The facility has two sampling results over the instantaneous maximum NAL value in the reporting period, 410 mg/L and 425 mg/L, resulting in an Instantaneous Maximum NAL exceedance.

410 mg/L & 425 mg/L > 400 mg/L = **instantaneous maximum NAL exceedance**

This facility would trigger Exceedance Response Actions for TSS the following reporting year.

Use of Treatment Chemicals | Three

Treatment systems (passive or active) can be very effective in reducing pollutants in stormwater runoff if designed, operated, and maintained correctly. Systems that use additives, polymers and other chemicals to remove or reduce pollutants pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The IGP requires the preparation of a SWPPP which must include an assessment of Potential Pollutant Sources (Section X.G.2) and requires assessment of all areas of industrial activity with potential industrial pollutant sources. This assessment includes identification of chemicals and potential pollutants that come from the use of treatment chemicals from either active or passive treatment of industrial stormwater.

Upon identification of these additional parameters, the new parameters must be included in their monitoring implementation plan as indicated in IGP Section XI.B.6.c. Dischargers need to comply with all provisions of the IGP and not cause or contribute to any exceedance of water quality standards when using passive or active treatment BMPs

to remove/reduce industrial pollutants or otherwise chemically alter industrial stormwater or non-stormwater discharges prior to discharging to waters of the United States. The Regional Water Boards may require additional monitoring or testing to determine potential water quality impacts after obtaining facility specific information per IGP Section XIX and XI.B.6.f.

