



State Water Resources Control Board
Attention: Ms. Jeanine Townsend, Clerk of the Board
P.O. Box 100
1001 I Street, 24th Floor
Sacramento, California 95812-2000

February 14, 2018

RE: Comment Letter –Proposed Industrial General Permit Amendment

The purpose of this letter is to provide comments on the proposed Industrial General Permit (IGP) Amendment (Amendment) issued by the State Water Resources Control Board (Board) on December 15, 2017. The Board adopted Order 2014-0057-DWQ (known as the IGP or General Order) on April 1, 2014 regulating storm water discharges associated with industrial activities. The new IGP became effective on July 15, 2015 and so has been in place for about 30 months. The proposed Amendment to the IGP incorporates Total Maximum Daily Load (TMDL) requirements for implementing the TMDLs identified as an industrial source of the receiving water impairment. This comment letter provides both general comments and specific comments (addressed by section) to the proposed Amendment of the IGP and some related to the new (2015) IGP.

General Comments

The new IGP has been in effect since July 2015 with, at most, two (2) years of data available to evaluate the impacts to the regulated industry and storm water improvements. The changes implemented in 2015 to the IGP required major effort on the part of industry to put the new compliance systems, site plans, staffing, professional assistance, and BMPs into place in order to meet the new monitoring and reporting requirements. Our company expended significant effort and funds to implement the changes required by the new IGP, and we are still in the process of implementing the necessary changes required to meet the requirements. During this process we found numerous areas of the IGP that could be improved or revised to meet the real world applications of these regulations. We have also seen significantly cleaner run off from our sites since the implementation of the IGP in 2015 and, as a result, lowered the impacts from storm water discharge to the receiving water bodies.

We believe more time is needed for the State and industry to work out issues that have been encountered with the new IGP and to evaluate how the new permit helped to clean up storm water. In our opinion, the State is moving too quickly with the current proposed Amendment and we would like you to consider allowing more time to figure out evaluate the issues with the current permit.

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One example of a case that requires more time for evaluation of the IGP is sites that are located in “arid” environments. Typically those sites only receive one QSE (or less) in a 12 month period of time, and some of these sites have not received any QSEs since implementation of the new IGP in 2015. The result is a significant disadvantage for those sites since they cannot use the QSE averaging approach that is spelled out in the new IGP. If any of the NALs at those sites are exceeded (with results above the annual NAL but below the instantaneous maximum NAL, if applicable), and only one QSE occurs, that site goes to Level 1 and may go to Level 2 without any averaging being applied. This is a major problem for those sites because the current IGP language acts as a de-facto instantaneous exceedance for any of the required monitoring parameters at a given site. This also makes getting back to Baseline status very problematic. The State should consider changing the IGP for sites in arid environments so at least two (2) separate QSE storm sampling events are required before going to Level 1 or Level 2. If there is only 1 QSE in a reporting year, the results could be averaged across multiple reporting years to see if the average should bump the given parameter up a level.

The current IGP requirement for an 85th percentile design storm for infiltration design is still in an evaluation mode and may not work across the board for every site. We have implemented infiltration BMPs at a couple of our sites and the use of the 85th percentile design appears to be working so far based on very limited information. However, the jury is still out because the storms since the new 2015 IGP have not reached design levels. Also, the impact of required (regular) maintenance on the long term sustainability of infiltration systems is not fully understood. Based on our experience, it is too early to evaluate the impact of regular maintenance may have on the long term performance of the systems. There is not enough experience yet with the use of this design approach and the other parameters involved in the overall design to know if it is adequate for implementation by industry and adequate for decreasing impacts to storm water.

In some cases the use of the 85th percentile design cannot be used because the systems will not physically fit into the site due to the size requirements. In addition, each site has different geologic and hydrogeologic conditions that result in significantly different outcomes with regard to the size of the system. Our understanding based on public comments is that some groups are asking for an increase in this design parameter to the 95th percentile design storm requirement. Based on our personal experience, changing the requirement with the proposed Amendment to the IGP to a 95th percentile design storm could make that option physically impossible for most or all sites due to the size requirements, as well as being cost prohibitive for any infiltration treatment system to be installed. More time is needed for industry and the State to evaluate the current design requirements which may or may not be very effective in reaching the goals of cleaner storm water discharge. The State should delay any decision on changes to this design requirement until more evaluation is conducted of the existing system designs, and installations which have only been in place for months or one year.



The proposed Amendment to the IGP includes TNALs and NELs for triggering Level 1 and/or 2 requirements. We support the continued use of the NALs for evaluation of the BMPs implemented at the sites with IGP permits and are open to the including TMDL requirements. However, not providing translation of the TMDLs in the proposed Amendment will leave the TMDLs open to interpretation. During workshops conducted by the Board staff regarding the proposed Amendment, the translation of TMDLs was explained to have various methods, depending on how the TMDLs were written. This uncertainty could lead to a vast array of requirements for different sites based on the same TMDL and open the permit holders to citizen suit enforcement if there is a disagreement. If the Board provides those translations with the proposed Amendment, it will remove much of the availability for interpretation, and should provide a pathway for all parties involved to protect the environment, and avoid costly and unproductive litigation as well. This will also aid the representatives of the industry that take their environmental stewardship seriously and are currently doing their best to follow the IGP requirements.

Specific Comments

The following presents the specific comments from CR&R for the proposed changes to the IGP with reference to each section. The revised IGP section is provided in bold text and the comment from CR&R is provided below the section text in italics. The specific comments are solely regarding the sections contained within the Attachment I - On-Site Infiltration Systems subsection of the proposed Amendment to the IGP.

II.E.1: Maintain² 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 up local, historical precipitation data and records³; 2 The BMP has not met the standards if the BMP is not able to recover its capacity through use, infiltration and/or evapotranspiration within a 24-hour period. The BMP will completely dewater and its capacity be fully available within 24 hours should back-to-back rainfall events occur. The 24 hours is defined as 12:00a.m.-11:59p.m.

Comment: Based on the referenced information provided below and our own experience, the proposed 24-hour drawdown period should be extended to a minimum of 48 hour, or up to 96 hours given proper design. The Caltrans Project Planning and Design Guide include a 96-hour drawdown time. The City of Los Angeles Low Impact Development Handbook allows a 48-hour drawdown time for surface basins and a 96-hour drawdown time for subsurface basins. The Orange County Technical Guidance Document allows a 48-hour drawdown period for surface and subsurface basins. The Orange County TGD also allows for a 96-hour drawdown time for surface basins and allows the 96 hours to be exceeded for subsurface basins if additional volume is provided to compensate for longer drawdown time by following the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs. This comment also applies to section II.E.3.



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

Comment: Are existing infiltration BMPs (installed prior to the proposed Amendment to the IGP) without shutoff valves required to be retrofitted or are they grandfathered in since having a shutoff mechanism was not required at the time of installation?

II.E.6.a.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;

Comment: The probability of storm water runoff from any ground surface meeting MCL criteria is highly unlikely, even with pretreatment (notwithstanding mechanical/chemical treatment) regardless of whether or not the storm water is impacted by an industrial activity. The requirement to treat to MCL levels is very problematic for industry since the water arrives at our locations with many MCL's exceeded prior to touching our facilities. If a treatment system of that type (capable of producing effluent that meets MCL criteria) is installed at a site to pretreat storm water, it would make more sense to retain and reuse the water on site or redistribute the product as potable water rather than to infiltrate it into the ground. For many reasons, this is not a feasible approach for industrial site infiltration BMPs and would preclude this as an option for our industry. The State should reconsider this requirement and propose an alternative performance based pre-treatment option (i.e. minimum BMPs, installation of standard clarifiers with regular maintenance, and infiltration system effluent monitoring). The Boards staff should also make it clear if this requirement will apply to existing infiltration systems installed before the proposed Amendment was issued.

II.E.6.a.ii. Install groundwater monitoring devices (e.g., 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).

Comment: What about areas with significant depth to groundwater? For example, the depth to groundwater in the San Fernando Valley can be over 200 feet. What depth would be required for ground water monitoring or for the lysimeters in that case? In some cases where the groundwater is very far below the ground surface, a site would need to conduct a significant groundwater/vadose zone investigation into the feasibility of infiltration, because it may not be known if there are already man made or naturally occurring contaminants in the groundwater (or vadose zone) under the proposed infiltration BMP or between the monitoring locations and the infiltration BMP. If the groundwater is already impacted by other sources of contamination other than the subject site, how will the State or citizen suits evaluate that condition? If there are exceedances of MCLs up-gradient of the infiltration BMP, and there is minimal impact to the contaminant levels downgradient of the infiltration BMP, will this monitoring provide sufficient evidence that the infiltration BMP is treating the storm water properly? Based on our experience, most groundwater in California requires treatment prior to meeting



MCL limits so the receiving water quality has to be considered by the Board staff in the establishment of these treatment criteria. In addition, soil moisture may not be readily available enough to collect monthly samples. If there is not enough water to sample monthly, how will the facility maintain compliance with this requirement?

II.H.1.d. Conduct representative analytical sampling of the influent entering the BMP(s) in compliance with the Sampling and Analysis Section XI.B.6-11 and Attachment H8 of this General Permit, with the exception of comparing monitoring results to NALs in Section XI.B.7;

Comment: How many influent samples will be required to be collected? Will QSE criteria apply to these samples?

II.H.3.i. Description and photographs of the facility specific BMP(s) used on-site;

Comment: In the case of an underground infiltration BMP, are photographs during installation required to show the infiltration BMP? Otherwise, the photograph would simply show a catch basin or similar input device located at the ground surface. Many of the existing infiltration BMPs are installed below parking lots in order to avoid the loss of valuable space and to meet building code requirements.

II.J.3.d. The soil through which infiltration occurs must have physical and chemical characteristics including the appropriate cation exchange capacity, organic content, and clay content that supports compliance with required infiltration rates and storm water treatment.

Comment: What exactly is the “appropriate cation exchange capacity, organic content, and clay content that supports compliance with required infiltration rates and storm water treatment” and where is the documentation or research to back up the appropriateness of the soil conditions? The information we have obtained from the literature varies regarding the appropriate soil conditions for infiltration, and we are not aware of literature regarding specific cation exchange capacity, organic content, and clay content for infiltration and storm water treatment. Also, how will this requirement be applied to existing infiltration BMPs (installed prior to the proposed Amendment to the IGP)?

II.K.1. The applicable Regional Water Board Executive Officer has the authority to review site-specific information, and disapprove any On-Site Compliance Option as a permissible Compliance Option for the Discharger to address regional groundwater concerns.

Comment: What is the timeframe between a discharger submitting a plan to install an On-Site Compliance Option (i.e. infiltration BMP) and the applicable Regional Water Board Executive Officer disapproving the submitted plan? How long must the discharger wait before proceeding with the submitted plan if no word has been received? Again, how will this authority be applied to existing infiltration BMPs (installed prior to the proposed Amendment to the IGP)?

**II.K.3.b. Impacts to groundwater beneficial uses;**

Comment: If the groundwater is not designated with a beneficial use, do any of these requirements apply? What about ground water basins that have long standing (well known) contamination problems, in some cases for over 30 years) and are under investigation or remedial action by another agency (i.e. Superfund Sites)?

II.K.4. The State Water Board Executive Director or the applicable Regional Water Board Executive Officer may authorized the discontinuation of groundwater monitoring if no threat to groundwater is determined.

Comment: How many samples and what criteria would be necessary to discontinue groundwater monitoring?

CR&R appreciates the opportunity to provide comments to the SWRCB on the proposed Amendment to the IGP. Please do not hesitate to contact the undersigned at johnm2@crrmail.com or at (714) 372-8281 if you have any questions or require additional information.

Sincerely,

CR&R Inc.

John McNamara, PG/CEG Vice President, Environmental Compliance

Attachments: none

Cc: Mr. Dean Ruffridge/CR&R