



The Port of  
**LONG BEACH**  
The Green Port

#71

October 19, 2012



Ms. Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
101 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814

Subject: Port of Long Beach Comments on the Draft National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Industrial Activities

Dear Ms. Townsend and Members of the Board:

The Port of Long Beach (Port) appreciates the opportunity to provide comments regarding the July 16, 2012, draft of the General National Pollutant Discharge Elimination System (NPDES) Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit or IGP). The Port also appreciates the efforts put forth by State Water Resources Control Board (SWRCB) staff to develop this revised draft, and to respond to its comments on the previous draft. The Port is committed to the protection and improvement of the harbor waters, as exemplified when the Port, working with the Port of Los Angeles, the Los Angeles Regional Water Quality Control Board, EPA, and other stakeholders adopted the Water Resources Action Plan (WRAP). This voluntary, proactive action taken by both ports reinforced existing programs and put in motion many additional programs, best management practices (BMPs), and measures that will be needed to meet many of the requirements of the re-issued IGP when adopted.

There are a variety of unique compliance and engineering challenges associated with industrial operations within a port complex, particularly related to the relative size and impervious nature of marine terminals. The Port currently manages the entire Port property under a single WDID Number, and includes tenants as participants in the Port's Industrial Stormwater Program. Our comments focus on the key issues that we believe will have significant negative impacts on the Port and our tenants, without a clear linkage to what receiving water benefits, if any, will be obtained.

**1 Significant Costs Associated with the Exceedance Response Actions**

The Port recognizes SWRCB's effort to analyze and compare costs associated with the 2012 draft IGP, but the Port still has significant concerns related to the costs to implement this draft IGP at a large, complex site such as the Port of Long Beach. Our concerns are particularly related to the use of inappropriate numeric action levels (NALs) that are not based on BAT/BCT, but will potentially have the effect of pushing the Port toward Exceedance Response Action (ERA) Level 2 and the need to install structural/treatment controls for stormwater discharges. Based on our analysis,

we estimate this permit could cost the Port as much as **\$73,000,000** in initial capital costs (see Attachment 1) if the current NAL values for metals remain in the permit and require the Port to design and install stormwater treatment systems. In addition, annual land use costs and operations/maintenance are estimated to be approximately **\$1,586,000** per year.

The SWRCB's cost analysis report indicates a range of \$4,536 to \$185,725 for sites that are required to evaluate/install structural and/or treatment controls as required in ERA Level 2. Using the high-end estimate by the SWRCB (design and installation of one (1) media filter system), the Port estimates costs for the Port properties to be more than **39,000%** higher. **The Port is also concerned that the SWRCB has not evaluated the performance of the selected treatment systems identified in the Cost Analysis, particularly as they relate to the ability to meet the proposed NAL values.**

In addition, the SWRCB estimates structural/treatment control BMP Operation and Maintenance will be between \$104 and \$11,793 each year, a cost that the Port estimates will be more than **8300%** higher for the Port properties.

An actual example of the potential costs to address benchmark/NAL value exceedances can be found at a shipping container terminal at the Port of Seattle. As a result of EPA benchmark exceedances and third-party litigation, the terminal recently completed the design to convey and treat stormwater discharge from an 85-acre impervious site. The cost estimates ranged between **\$6,000,000** and **\$7,000,000** to construct the treatment system. These costs are more than **3600%** higher than SWRCB estimates. Additional information is provided in Attachment 2.

The Port recommends that the SWRCB consider making the changes below to reduce cost impacts upon permittees, and to ensure compliance with the IGP is both attainable and economically feasible.

## **B. Use of EPA Benchmarks as the basis for NALs**

The Port supports the development of properly derived and statistically valid Numeric Action Levels (NALs) and continues to support the development of appropriately derived industry-sector specific NALs. While we support the inclusion of "off-ramps" in this draft permit, we are **concerned the current NAL/Exceedance Response Action (ERA) approach in the permit has shifted the burden of proof significantly onto the individual discharger to make BAT/BCT determinations, without the benefit of sufficient guidance for both the dischargers and regulators to fully understand how the ERA and off-ramp process will actually work.**

The Port supports using properly derived action levels as recommended by the Blue Ribbon Panel report (as upset values), as one of many mechanisms to assess program effectiveness. While the use of upset values – similar to the Instantaneous NALs developed by the SWRCB – is a step in right direction, **the use of the EPA Multi-Sector General Permit (MSGP) benchmarks as annual NALs values is not consistent with the recommendations from the Blue Ribbon Panel and creates "de facto" numeric effluent limits (NELs) which, if exceeded, create an obligation for the discharger to either implement additional BMPs or the take one of the ERA off-ramps which, as described**

above, is a process with considerable uncertainty – particularly at a state-wide implementation scale. The Fact Sheet included with the draft permit describes in great detail the challenges with establishing NELs and NALs, the quality problems with the existing effluent characterization Water Board data set, and indicates that the SWRCB staff agrees with the assessment and findings of the Blue Ribbon Panel. However, **6** the inclusion of the EPA benchmarks as NALs appears to contradict both the Blue Ribbon Panel report findings and recommendations, and the Fact Sheet.

- 7** The EPA benchmark values have no correlation to California receiving water quality impacts, conditions expected during a storm event, or discharge quality from industrial sites. The basis for the EPA benchmark values, (provided in 60 Fed Reg. 50825, September 29, 1995, along with updated justifications/sources in the 2008 MSGP Fact Sheet, Table 2) have no bearing on evaluating what constitutes BAT/BCT for an industrial site in California. EPA references a variety of sources for the benchmark values, including National Recommended Water Quality Criteria (chronic and acute aquatic life freshwater), secondary treatment regulations (wastewater), national urban runoff program data, laboratory method detection limits (times a factor of 3.18), and even a North Carolina stormwater benchmark (times a factor of 4). EPA clearly states that the benchmarks are not effluent limits and were not established in accordance with CWA guidance to establish BAT/BCT. The Port **8** is concerned that the use of inappropriate benchmarks in this draft IGP that were not derived from stormwater discharge data, and strict requirements that must be followed through the ERA process, give added weight to these benchmarks and in effect create de facto effluent limits.

Recent preliminary results from a study conducted at Pier S, an undeveloped, non-industrial parcel of land located within the Port, have increased the Port's concern with NALs based on benchmark values. For example, a sample of pure rainwater which fell into a series of buckets placed on Pier S, was collected before it contacted the ground and analyzed for copper. The result was **74 ug/L, more than double the EPA benchmark for copper**. These results greatly concern the Port and indicate **9** that EPA Benchmarks are far too conservative and not reasonably attainable.

- 10** We recommend the SWRCB remove the Annual NAL values based on the EPA benchmark values from the draft IGP, and include only the instantaneous NAL values derived from California Discharger data. Additional instantaneous NAL values representing upset conditions can be developed for other parameters as appropriate, based on the California discharger data collected and analyzed on an industry/sector-wide basis during this Permit term.

### C. Submittal of Demonstration Technical Reports (DTRs).

- The Port appreciated SWRCBs efforts to incorporate appropriate off-ramps from the ERA process, through development of a variety of DTRs. The ability to demonstrate that the source of potential pollutants is not generated from on-site industrial activities is important in properly assessing appropriate source control BMPs. As currently written, **11** the draft IGP does not allow for submittal of the DTRs until a site has moved through the ERA process and is in Level 2.

The Port requests that the permit allow dischargers to file a DTR that would satisfy the Background or Non-Industrial Sources off-ramps at Level 1, if they choose to do so. This would not relieve the discharger from the obligation to perform a Level 1 evaluation and to adopt additional operational source control BMPs, if necessary. There are circumstances where this will be more efficient for the discharger; for example, the Port has initiated a background contribution/aerial deposition source study and expects to have the results of the study ready for use in a DTR early in the permit term, if needed. The Port should not be required to delay submittal of relevant analysis to show off-site pollutant source contribution, while waiting to collect additional data and move through the ERA process.

**D. TMDL Incorporation**  
**Location in IGP: V.C (Page 22)**

The Port agrees with Findings 36-41 and TMDL Requirements Section VII.A., in that many existing TMDLs do not provide sufficient clarity as to requirements applicable to industrial stormwater dischargers. Once those TMDLs are further clarified and refined by the Regional Water Boards in accordance with the process outlined in Finding 38, the Port also agrees that industrial stormwater-related TMDL-specific requirements must first be incorporated into the permit before those requirements are enforceable against permittees, as prescribed by Section VII.A. However, the P<sup>12</sup> is concerned that Effluent Limitation V.C. is in direct conflict with Findings 38-40 and TMDL Requirements Section VII.A. by requiring blanket incorporation by reference, and immediate compliance with existing and/or future approved TMDLs in violation of Water Code sections 13000 and 13263.

More importantly, the language included in Section V.C. exposes permittees to premature and inappropriate administrative or third party actions to enforce TMDL requirements before the TMDLs are clarified for application to specific industrial stormwater dischargers, and before those refined requirements are incorporated into the permit. Fur<sup>13</sup> Section V.C. is not supported by the express findings of the permit, or the evidence in the administrative record. Orders adopted by the State Water Board not supported by the findings, or findings not supported by the evidence, constitute an abuse of discretion. See 40 C.F.R. § 124.8(b)(4); *Topanga Ass'n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515 (1974); *California Edison v. SWRCB*, 116 Cal. App. 3d 751, 761 (1981); see also *In re Petition of the City and County of San Francisco*, State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995).

<sup>14</sup> Finally, Section V.C. would result in the Regional Water Boards and State Water Board abdicating their responsibility under 40 C.F.R. §122.44(k), to determine whether a BMP approach, rather than numeric effluent limitations, is appropriate given the site-specific TMDL and the scope and impact of industrial stormwater discharges.

Therefore, we request the following change to Section V.C. of the draft permit:

“After TMDL-specific permit requirements are incorporated into this General Permit following the process outlined in Section VII.A., dischargers subject to one or more

identified Total Maximum Daily Loads (TMDLs) shall comply with the applicable requirements listed in Attachment D.”

#### **E. Receiving Water Language**

**Location in IGP: Section XI. A 1 and 2 (pages 36-38)**

- 15 The draft Industrial General Permit (Section VI [p. 22] of the Draft Permit, together with Section XX.B [p. 65]), substantially change the receiving water limitations, eliminating the existing permit’s description of a process which maintains a Discharger’s compliance with the permit. In addition, the language 16 Section VI.A should not include the phrase “or contribute,” because, as recognized by EPA when it eliminated those words in the MSGP in 2008, that phrase is not required by regulations in effluent limits but comes from the threshold that simply shows “reasonable potential” triggering the need to simply have a limit. The phrase “or contribute” is not found in the Clean Water Act or clarified by precedent when used in an effluent limitation.

The Port requests the SWRCB modify Sections VI A and D to clarify that a Discharger *will not be in violation of Receiving Water Limitation C.2. as long as the Discharger has fully complied with the procedure described in Special Condition XX.B.*

#### **F. Electronic Submittal of Sensitive Information**

- 17 The Port is concerned that information required in the SWPPP, which will be submitted electronically, may result in the release of sensitive information that must be protected for homeland security reasons and to prevent terrorism. The Port requests that in this case electronic SWPPPs uploaded into the SMARTS system not contain maps or other information deemed sensitive or dangerous.

#### **G. Requirement to Collect Samples for Subsequent QSE’s When a Discharge Does not Occur**

**Location in IGP: Section XI.B.4 (page 38)**

- 18 The Port has significant concerns regarding the new requirement for a Discharger failing to collect a quarterly sample at one or more sampling locations not producing a discharge within that quarter, to remobilize and collect additional samples from those “non-discharging” outfalls during subsequent events or quarters. Rain events over an area as widespread as the Port can be sporadic, with some areas receiving enough rain to produce runoff, and others not.

The Port expends significant effort and expense on the implementation of an extensive regional stormwater sampling program, including mobilizing sampling crews on boats to access discharge points to the receiving water during qualifying storm events and installation and operation of expensive automated samplers at other locations. The requirement to re-mobilize sampling crews to collect samples from discharge points that occasionally do not discharge is impractical and cost prohibitive. The Port asserts that valuable information is still garnered from documentation of “no discharge” during events that meet the “qualifying storm event” criteria. Tributary areas that do not discharge during typical rain events are often less impervious and promote on-site retention or infiltration. For a facility such as the Port, with a significant number of outfalls

designated for sampling, this provision creates a significant disincentive for implementing BMPs to promote onsite retention of runoff, and could potentially require multiple expensive mobilizations, resulting in no additional samples collected.

#### H. Visual Observations Requirements

##### Location in IGP: Section XI.B.4 (page 38)

The Port has significant concerns regarding the new draft IGP provision requiring visual observations from outfalls not discharging during the initial QSE of the month. The Port has more than 160 outfalls that are visually observed during a QSE and it is unreasonable to re-mobilize contract staff to perform visual observations for those few outfalls that infrequently discharge. The Port currently spends more than \$20,000/year to perform visual observations and estimates this new requirement could more than double mobilization costs in an effort to “chase” discharge from a small subset of discharge points.<sup>19</sup> The Port requests the SWRCB only require documentation of those discharge locations that did not discharge, and not require additional mobilizations to attempt to observe the few discharge points that have a lower likelihood of discharge. We recommend the following edit to that section of the draft IGP:

- e. In the event that the first QSE in a month does not produce a discharge that can be visually observed at one or more discharge locations, dischargers shall record which discharge locations were observed that did not discharge, and visually observe discharges from those locations from the next QSE(s) that produces a discharge in that month. Dischargers shall provide an explanation in the Annual Report for uncompleted monthly visual observations only for those months that at least one QSE occurs. Dischargers are not required to perform additional visual observations in subsequent months for any uncompleted monthly visual observations.

Alternative<sup>20</sup>, the Port requests the SWRCB build additional flexibility into the Permit for sites with an uncharacteristically high number of outfalls (e.g., more than 10 outfalls).

#### I. QISP Exemption for CPSWQ

##### Location in IGP: Section IX.A.1 (page 23)

- <sup>21</sup> The Port recommends the SWRCB include a QISP training exemption for Certified Professionals in Stormwater Quality (CPSWQ). Unlike training and testing associated with licensed professionals (PE, PG, CEG) currently exempted from the QISP training requirements in section IX.A.1, the CPSWQ includes many components with direct bearing on the IGP and the core concepts needed to develop and implement a stormwater program (e.g., CWA and the NPDES regulations, industrial permitting requirements and applicability, SWPPP preparation and implementation at industrial sites, monitoring and reporting requirements, water quality sampling methods, analytical methods, pollutant source identification, spatial and temporal characteristics of urban runoff, pollutant loading, BMP applicability for various industrial activities, hydrologic calculations, and treatment control technologies).

Additional information on the CPSWQ review program and testing requirements can be found at:

<http://www.cpswq.org/cq-products/wkbk-toc.asp>

<http://www.cpswq.org/cq-products/cpswq-review-outline.asp>

**J. Non-Industrial Source Pollutant Demonstration Technical Report**  
**Location in IGP: Section XII.E.4.f (page 50)**

**22** To avoid confusion and better represent SWRCB staff clarifications at the public workshops related to this section, the Port recommends the SWRCB revise the term “solely” attributable as it relates to the contribution from non-industrial sources.

f. An evaluation of all on-site/off-site analytical monitoring data demonstrating that the NAL exceedances are solely attributable to pollutants in stormwater run-on to the facility from adjacent properties or non-industrial portions of the Discharger’s property or from aerial deposition.

**K. Low Impact Development/Green Infrastructure Incentives**

**23** Consistent with the SWRCB clearly stated goal to build incentives into this IGP, the Port strongly recommends the SWRCB evaluate opportunities to add incentives to promote low impact development (LID) and green infrastructure approaches into the next draft IGP. Specifically, the Port requests the SWRCB consider LID approaches in the “BAT/BCT Compliance Demonstration Report” where BMPs are implemented to reduce the volume and intensity of runoff from industrial sites. Because these LID measures also reduce pollutant mass emissions, they should be considered in assessing a discharger’s corrective action approach and BAT/BCT demonstration.

**L. Annual Report**  
**Location in IGP: Section XV. (page 57)**

**24** The reporting and evaluation year for the IGP is July 1 through June 30. It is unreasonable to submit an annual report by July 15. At minimum 60 days following the end of the reporting period should be allowed to complete and submit the report. However, we recognize that the SMARTS system would be over-burdened if both industrial and construction dischargers have the same submission deadline. Therefore, we recommend that the IGP Annual Report be completed and submitted by September 15 each year.

It is critical that compliance with the re-issued IGP be technically, logistically, and economically feasible, and permit requirements should correlate directly to receiving water quality benefits. At this time the Inner and Outer Harbors at the Port of Long Beach are free of water column impairments, and accordingly the Port feels that expenditures of this magnitude to comply with this Draft IGP as currently written would be excessive and unwarranted. In addition, the many economic impacts associated with this Draft IGP should be thoroughly analyzed and carefully considered given the fragile economic status of the region and the State.

Again, the Port appreciates the opportunity to provide comments on the Draft IGP and we look forward to your response to these comments, as well as those submitted by other stakeholders.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard D. Cameron". The signature is written in a cursive, flowing style.

Richard D. Cameron  
Director of Environmental Planning

JBV:s

Enclosures: (1) Estimate of initial capital costs  
(2) Treatment system cost estimates

cc: Sam Unger, LARWQCB

**Port of Long Beach Estimated Costs to Install and Maintain Stormwater Treatment**

Design Storm	Inches of Rainfall <sup>1</sup>	Storm Water Storage On-Site (Gallons) <sup>2</sup>	Aquip/Clara/Purus Treatment System Cost <sup>3</sup>	Storage Tank Cost <sup>4</sup>	Pump Station Cost <sup>5</sup>	Engineering Cost <sup>6</sup>	Installation Cost <sup>7</sup>
85th Percentile	0.75	48,000	\$51,000,000	\$10,500,000	\$6,800,000	\$1,800,000	\$2,400,000

Notes:

1. The 2006 Los Angeles Hydrology Manual Isohyet Maps were used to determine the inches of rainfall for the specific Design Storm.
2. The volume of storm water storage required on-site with the treatment system. The volumes were determined using data generated by the 2006 Los Angeles Hydrology Manual Visual Basic application in Microsoft Excel.
3. One Aquip Media Filter, one Clara O/W Separator, and one Purus Ion Exchange were used to cost the 85th Percentile Design Storm.
4. Storage tank cost is based on \$1.30 per gallon for steel constructed tanks installed and built on-site by the manufacturer.
5. Pump station is a 6 ft. x 12 ft. concrete vault with 2 Duplex Control Panels, 2-500 GPM 5 Horsepower pumps.
6. Includes civil engineering and topographic survey costs.
7. Installation cost includes PVC piping, electrical, forklift and labor, concrete foundation, and pit excavation for Clara O/W Separator.
8. Cost are applied to 169 outfalls for the POLB with an average tributary area of 14 acres.
9. Land use costs are based on an estimated rental value of \$173,300 per acre per year.

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**ent Systems**

Capital Cost <sup>8</sup>	Capital Cost Per Acre	Annual Land Use Cost <sup>9</sup>	Annual Operation and Maintenance Cost	Annual Operation and Maintenance Cost Per Acre
\$73,000,000	\$31,000	\$586,000	\$1,000,000	\$2,400

**TABLE 13**

**SUMMARY OF TREATMENT-CONVEYANCE ALTERNATIVE COST ESTIMATIONS<sup>1</sup>**

Port of Seattle Terminal 46  
Seattle, Washington

Collection/Conveyance	Figure Reference	Treatment Alternatives					
		StormwaterRx "Aquip" <sup>2</sup>			Water Tectonics "Wave Ionics" <sup>2</sup>		
		Implementation Estimate	Annual Average O&M Estimate	10-year Total Estimate	Implementation Estimate	Annual Average O&M Estimate	10-year Total Estimate
All Trunklines	Figure 5G	\$2,260,000	\$330,000	\$5,520,000	\$4,120,000	\$170,000	\$5,850,000

Notes

1. Construction costs assumptions and calculations attached in Appendix F.

The conceptual phase cost estimates presented in this report were prepared for comparing alternative treatment technologies only. They represent rough estimates and are not intended to reflect actual implementation costs or budgets. The estimates for the different alternatives were made with a similar level of detail and similar assumptions. Estimated costs do not reflect site-specific information regarding site conditions such as soil contamination, contaminated water, geotechnical conditions, utility conflicts, buried obstructions, or other circumstances that are typically addressed during detailed design and construction. A thorough site investigation including but not limited to a geotechnical survey, site survey, and utility location mapping are required to more accurately identify site conditions and the impact of site conditions on cost. Estimated operations and maintenance costs are based on information from equipment manufacturers and engineering judgment and do not take into account the variability in material or energy costs.

2. Proprietary technology names are in quotes.

Abbreviation

O&M = operation and maintenance