Public Comment
Draft IGP
Deadline: 4/29/11 by 12 noon

Department of Water and Power the City of Los Angeles

ANTONIO R. VILLARAIGOSA
Mayor

Commission
THOMAS S. SAYLES, *President*
ERIC HOLOMAN, *Vice President*
RICHARD F. MOSS
CHRISTINA E. NOONAN
JONATHAN PARFREY
BARBARA E. MOSCHOS, *Secretary*

RONALD O. NICHOLS
General Manager

RECEIVED
APR 29 2011
SWRCB EXECUTIVE

April 29, 2011

Ms. Jeanine Townsend
Clerk to the board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear Ms. Townsend:

Re: Comment Letter – Draft Industrial General Permit

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the Draft Industrial General Permit (Draft Permit). We acknowledge the work of the State Water Resources Control Board (Board) staff in developing this draft. It is particularly appreciated that the Board convened a Blue Ribbon panel to be able to better assess the impacts to storm water runoff from industrial facilities.

Many elements of the Draft Permit are commendable. As an environmental steward, LADWP believes in the protection of stormwater for many reasons, including capture and re-use. LADWP supports the requirement for a minimum set of BMPs for all dischargers, as discussed in *Section II. Rationale E. SWPPP Requirements* on Page 15 of the Fact Sheet. The Phased approach for the development of Industrial Storm Water Pollution Prevention Plans (SWPPPs), as described in the same section, is appreciated. This supports standardization of SWPPPs, will ensure that they are more rigorous, and, most importantly, will result in the development of SWPPPs that are specific to each facility. The requirement for quarterly facility (SWPPP compliance) inspections, described on Page 19 in the above-named section, will assist in the early detection of inadequate or failing BMPs, or other conditions that might result in the exposure of pollutants to storm water.

And the concept behind the Permit Levels is sound: repeated failure to comply with the Permit does warrant a set of tiered measures and responses.

However, LADWP believes that it necessary to reevaluate the premise of the draft permit, as follows:

Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs) are Not Appropriate For All Storm Water Discharges

Storm water is highly variable due to several factors - flow rates, volumes and constituent concentrations – unique to each flow and industrial facility. The quality of the water is affected by equally variable inputs, including watershed size, slope, soils, vegetation types, rainfall (storm size and intensity) and antecedent conditions (a function of time since last rainfall), land use and climate. Because of this variability, LADWP does not agree that standard methods of developing effluent limitations can be utilized. Due to the inherent variability, new methodologies must be developed, predicated upon sufficient data to characterize storm flows, constituent concentrations, and, critically, the capabilities of BMPs and treatment technologies. Further, any effluent limitations must be able to account for extreme events (large storm events and/or high rainfall intensities) and background sources. To date, there has not been a comprehensive, controlled program of data collection that would allow comparison of water quality concentrations between facility types, regions, or in response to hydrologic influences, or in consideration of storm size and intensity, site conditions, and BMPs currently in place. LADWP recommends that the State Board continue with a BMP approach, and, in concert with the already-established Blue Ribbon Panel, undertake enhanced data monitoring to establish a database that can be used to evaluate the applicability of NALs and NELs.

Benchmarks and Consideration of Natural Background

The draft permit's benchmarks, unlike the US EPA's Multi-Sector General Permit (MSGP), do not recognize natural background conditions - the presence of pollutants in storm water that were not introduced by the discharger. For example, atmospheric deposition of metals has been well-documented in this region and many point sources of these metals are logically located in industrial areas. A second example: ocean spray produces a fine mist and salt deposits over power-generating facilities located on California harbors and the Pacific Ocean, resulting in elevated specific conductance in storm water runoff from these facilities. Treatment measures such as reverse osmosis (RO) would be required to reduce salinity in storm water discharges. The expensive treatment would induce additional environmental impacts, including the need for brine disposal, high energy use, greenhouse gas emissions, etc. These two examples demonstrate that if NALs were exceeded due to non-industrial – and uncontrollable – sources, these facilities would be forced to conduct corrective actions, with no relief offered by the Draft Permit as written.

A "natural background" exclusion is allowed only when Corrective Action Level 3 is reached, and only after implementation of BMP/SWPPP revisions and structural and/or treatment controls.

In addition to the general comments above, LADWP offers the following detailed comments.

<u>2. Feasibility of Numeric Effluent Limitations</u>
The Board's intent in establishing NALs and NELs is clear, as cited in <u>Section I. C. Legal Challenges and Court Decisions (Page 4 of the Permit Fact Sheet):</u> ".... this General Permit ensures that the dischargers do not 'write their own permits:'" However, as referenced in *<u>Section I. Background A. History</u>*<u>, on page 1 of the Draft Permit Fact Sheet</u>: "The State Water Board is mindful that, for storm water permits, US EPA has recommended the use of BMPs (Best Management Practices) in lieu of numeric effluent limitations, and the limited use of sampling and analysis in storm water permits, because it is generally difficult to calculate numeric effluent limitations for the widely variable flows associated with storm water and to monitor such intermittent discharges." Further, the Board's actions contradict the 2006 findings of its Blue Ribbon Panel (Panel). Most significantly, as cited on <u>page 3 of the Fact Sheet in</u> *<u>Section I. Background B. Blue Ribbon Panel of Experts and Feasibility of Numeric Effluent Limitations</u>*, the Panel characterized current monitoring data sets as "inadequate" and recommended "improved monitoring to collect data useful *for establishing* (emphasis added) Numeric Limits and Action Levels," the use of California data, and utilization of methods other than SIC categories to characterize industrial activities.

<u>Recommendation:</u>
LADWP concurs with the US EPA and the Panel that NALs and NELs are not appropriate at this juncture, and therefore recommends 1) the continued use of BMPs in lieu of NALs and NELs, and 2) creation of an enhanced data collection system that could support development of an appropriate methodology for establishing NALs and NELs.

<u>3. Stringency of BMs and Natural Background Conditions</u>
The NALs/NELs are more stringent than the numeric benchmarks (BMs) in the US EPA's 2008 Multi-Sector General Permit (MSGP), and the metrics are different. The BMs rely upon the average of *four quarterly samples* while the NALs are compared to a *daily average* of multiple samples or even single samples. And the BMs considered natural background conditions (see Page 37 of the MSGP 2008, found at http://www.epa.gov/npdes/pubs/msgp2008_finalpermit.pdf), while this permit does not. Many industrial facilities, particularly those in California, will likely not have multiple samples due to minimal rainfall and may be unfairly "penalized" with higher average pollutant concentrations. The Board itself acknowledges the associated limitations: "This presumption recognizes the highly variable nature of storm water discharge and the limited value of a single quarterly grab sample to characterize a facility's storm water discharge for an entire storm event and all other non-sampled storm events." (<u>Page 30</u> <u>of the Fact Sheet</u> *<u>Section II. Rationale K. Corrective Actions.).</u>*

<u>Recommendation:</u>
LADWP therefore recommends that the Board adopt the US EPA's approach to natural background exclusion.

4. Treatment Technologies May Not Achieve NALs and NELs
Despite the imposition of NALs and NELs, it is uncertain – in fact, unlikely – that available treatment technologies can consistently meet these limits. Field testing performed by the Washington Department of Ecology (Taylor Associates Inc., 2008: Boatyard stormwater treatment technology study – Final Report, prepared for the Northwest Marine Trade Association, Puget Soundkeeper Alliance, Washington State Department of Ecology) resulted in the upward adjustment of the originally-proposed copper benchmark value of 14 ug/L to a *seasonal* (emphasis added) average benchmark of 50 ug/L and a daily average benchmark of 147 ug/L.

Seasonal variations can be extreme in many parts of California, and dramatically affect atmospheric deposition rates. The original limit in the Boatyard study was consistent with the NAL/NEL proposed in *this* Draft Permit, and was set without consideration of technological capabilities. From this study, one could conclude that best available technologies (BATs) were not capable of achieving a benchmark value of 14 ug/L for copper in storm water discharges.

Recommendation:
Therefore, given the uncertainty that BATs can achieve NALs or NELs, LADWP recommends that the Permit utilize BMPs rather than NALs and NELs.

5. Hardness of Water and Effluent Limitations
Hardness is another variable associated with storm water, yet the NALs/NELs for cadmium, copper, lead, nickel, silver, and zinc are *hardness-dependent*. Hardness can vary significantly even in the receiving water of natural and undeveloped watersheds, according the natural loadings study conducted in Southern California (Stein and Yoon 2007), and can change by more than two-fold during a single storm event. Because metals and receiving water hardness will rarely be measured at the same time and place, compliance with NALs/NELs would be especially difficult.

Recommendation:
Due to the variability associated with hardness and effluent limitations, LADWP recommends that the Permit utilize BMPs rather than NALs or NELs.

6. Corrective Action Triggers
The 2.5 adjustment factor that would trigger corrective actions is predicated upon very limited data, as acknowledged by Board staff during the March 15, 2011, workshop. At that workshop, staff explained that storm water data from industrial facilities within multiple different industrial sectors were combined, and that about 10 percent of the combined storm water data exceeded 2.5 times the NAL. The constituent (exceedance) was not identified, nor were the number of facilities or the sectors. This factor seems to be a "best guess" versus a methodology. As cited on Page 30 of the Fact Sheet – *Section II. Rationale K. Corrective Actions*: "Trigger 3 (above): "Based upon an analysis of the storm water data available to State Water Board staff, twice the NAL value is equivalent to between the 85th

and 95th percentile of all values dependant upon the parameter. Although it is unknown how the revised DA (daily average) will effect [sic] future analytical results, **values at these high percentiles are not as easily attributed to the highly variable nature of storm water discharge and limited value as a single quarterly grab sample."** Total hardness of water can vary from 7 to 600 mg/L in wet weather conditions, and from 44 to 409 mg/L for dry weather conditions, in receiving water of *natural and undeveloped watersheds* (per the natural loadings study conducted in Southern California by Stein and Yoon 2007). And flow rates, volumes and constituent concentrations can vary, as can vegetation types (seasonally), rainfall (storm size and intensity) and antecedent conditions (a function of time since last rainfall). Against this background, the portion of the statement shown in bold-face is would seem to be a supposition, not the result of data analysis.

<u>Recommendation:</u>
LADWP therefore recommends that the Permit utilize BMPs rather than NALs or NELs and the corrective action triggers included in the NAL/NEL approach.

<u>7. Monitoring and Reporting Requirements (Section II. Rationale, F – Monitoring Program, Page 22 of the Permit)</u>
The monitoring and sampling requirements of the Draft Permit are not operationally practical; LADWP believes this monitoring would yield little useful data, given the inherent variability of storm water. The solution as provided by the Draft Permit– a requirement to appoint *both* a QSD (Qualified Storm Water Pollution Prevention Plan (SWPPP) Developers) and QSP (Qualified SWPPP Practitioners) to help 'bridge the gap' between the previous and new permit <u>(Page 27 of Section II. Rationale H. Sampling Procedures and Test Methods)</u> would be enormously expensive and likely infeasible. The QSD/QSP costs for the general permit for storm water associated with construction activities (construction permit) alone are estimated at $500,000. Small businesses may not be able to "afford" this – whether measured financially or in time. Larger entities may have multiple facilities, which may be scattered across a wide area; the operational realities associated with this might require the appointment of *several* QSDs and/or QSPs. There is nothing simple about this requirement, given the associated financial, regulatory, and union considerations.

<u>Recommendation:</u>
QSPs and QSDs qualifications under the construction permit should be applicable to the Industrial Storm Water Permit.

<u>8. Section VIII. Storm Water Pollution Prevention Plan Requirements, G. Description of Potential Pollutant Sources, 7. Assessment of Potential Pollutant Sources, (see Permit Page 21).</u> Per this Section, dischargers are required to conduct pollutant source assessments as a part of the minimum BMPs. However, it is not clear whether a discharger is required to assess all materials that may be found in stormwater from a facility or only materials that are related to the industrial activities at a given facility. For example, iron and aluminum are primary components of soils at any facility with exposed soils, and their presence may be unrelated to any industrial activity; metals such as copper, lead, and zinc

may be present at a facility from regional atmospheric deposition, and again, their presence may be wholly unrelated to the industrial activity.

Recommendation:
LADWP recommends that the Draft Permit be revised to clarify that the pollutant source assessment is intended to identify only those materials that are present as a result of the industrial activity itself and that may be exposed to storm water or rainfall. To that end, LADWP concurs with the Panel's recommendation (Page 3 of the Permit Fact Sheet): "Increasingly, a number of industries have moved industrial activities indoors, preventing storm water pollution. The Panel recognizes that these facilities should be granted some sort of regulatory relief from industrial Numeric Limits of action levels, but should still be required to comply with MS4 permit requirements."

9. TRAINING QUALIFICATIONS AND CERTIFICATION The QSD/QSP requirements (See Page 15 of the Permit, *Section VII.* will be costly, may conflict with union labor requirements and agreements, and seem excessive. In contrast, the QSD/QSP mandates for construction sites are supported due to the increased risk posed by disturbed soil and sediment.

Recommendation:
As per item 7 above, LADWP recommends that all QSPs and QSDs qualified under the construction permit should be able to conduct all industrial monitoring as well.

10. ELAP-Certification Requirement
Both the Construction General Permit and this Draft Permit require that field measurements (pH and specific conductance in storm water) be taken by ELAP-certified personnel (Attachment D, Storm Water Sample Collection and Handling Instructions, item 15, Page 2). This is not necessary, given that many field personnel are very experienced with these measurements. In addition, there is a shortage of ELAP-certified personnel, and hiring freezes and union labor issues will impact compliance.

Recommendation:
LADWP recommends that the requirement that field measurements (pH and specific conductance in storm water) be taken by ELAP-certified personnel be dropped, and that the permit specify that field personnel can take such measurements.

11. TMDLs (Total Maximum Daily Loads)
Attachment G TMDLs (Total Maximum Daily Loads) are still under development. Therefore, the implications – and requirements – for dischargers are not fully explained. It could be construed that the TMDL allocation is to be divided among industrial storm water dischargers in that watershed, or among industrial and other dischargers as well. It is not stipulated whether allocations will be established for individual dischargers, or categories of dischargers. The permit proposes an NAL for total suspended solids (TSS), but the nexus between the TSS NAL and TMDL for sediment is unclear, and the applicability of the TMDL

versus the BM or NAL is not clear. All discharges will be comingled in the receiving water, so there will not be a direct correlation one discharge and the pollutant load of any given portion of the receiving water. It will not be possible to assign responsibility for any exceedances, given this comingling. The volume of the receiving water may vary significantly based upon rainfall and other inputs, so waste load allocations may need to be adjusted. Yet the methodology for establishing a corresponding reduction of any one pollutant in an industrial discharge has not yet been developed.

Recommendation
Until this Attachment is completed and the purpose of TMDLs as pertains to the Permit is fully explained, LADWP cannot offer comments beyond those above. LADWP recommends that there be another comment period for this permit with regards to Attachment G, to allow time for review upon issuance of the completed Attachment.

Conclusion
LADWP recommends that the Board reconsider the approach of this Permit. LADWP agrees with the Phased approach for the development of Industrial Storm Water Pollution Prevention Plans (SWPPPs); and the requirement for quarterly facility (SWPPP compliance) inspections. However, should the Board believe that more systemic changes are required, LADWP recommends that the Board follow the recommendations of its Blue Ribbon Panel. Development of a comprehensive database is the single most critical action that should be taken at this juncture.

Thank you for this opportunity to provide comments. Should you have any questions regarding this letter, please contact Ms. Jennifer Pinkerton of the Wastewater Quality and Compliance Group at (213) 367-4230.

Sincerely,

Katherine Rubin
Manager of Wastewater Quality and Compliance

JP:lr
c: Jennifer Pinkerton