

Workshopping the CII Permit

Topic 5: Initial Sample Requirements

On November 20th the Los Angeles Regional Water Quality Control Board (RWQCB) held a workshop to consider improvements to the draft CII Permit. After receiving a briefing from RWQCB staff and comments from stakeholders, the Board asked staff to engage with stakeholders to consider possible improvements to the Permit. Some of the provisions that the Board directed staff to focus on included:

- Who should be the permittee -- the facility owner or operator?
- What should be in the Option 1 contract between the permittee and the Watershed Management Groups?
- Permit implementation timing
- Exemptions for residential properties identified as mixed use
- Sampling requirements
- Definition of permeable

The draft Permit requires that storm water samples be collected by all dischargers prior to enrolling in the Permit and then analyzed for a broad scope of analytes. However, the draft Permit is silent on exactly what is to be sampled. For the reasons described below, the author suggests that this requirement be revised to identify a specific sample collection protocol, a limited number of analytes and more feasible timing requirement.

Provision 2.1 of the draft Permit provides: “prior to selecting a Compliance Option, the Discharger shall conduct an initial sampling and analysis of discharge to evaluate reasonable potential for exceedance of water quality objectives as described in Attachment E”. The draft Permit then goes on in Provision 2.1 to require that: Prior to selecting a Compliance Option, the Discharger shall conduct an initial sampling and analysis of a stormwater discharge and any NSWD to evaluate reasonable potential to cause or contribute to an exceedance of water quality objectives. As required in the section 3.2 of the Attachment D Standard Provisions, the Discharger shall collect representative samples and conduct analyses in accordance with approved methods under 40 CFR Part 136. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or otherwise required under 40 CFR Chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. The following parameters shall be included in the sampling and analysis for comparison with water quality objectives:

Water Quality Parameters	Ammonia, Biochemical Oxygen Demand, Indicator Bacteria, Methylene Blue Activated Substances (MBAS), Nitrogen/Biostimulatory Substances, Oil and Grease, PAHs, Pesticides, pH, Temperature, Total Residual Chlorine, Total Suspended or Settleable Solids, toxicity, zinc and copper.
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Next, the draft Permit requires at Provision 2.2 that: “The Permit Registration Documents shall include an NOI, a site-specific SWPPP, laboratory analytical results obtained from the initial sampling requirements specified in section 2.1, and all applicable Compliance Option Documentation corresponding to the selected Compliance Option. These documents shall be submitted as part of the permit registration process and shall demonstrate the Discharger’s understanding and intent to comply with the applicable requirements. While Provision 3.12.4.1.2 states: “The estimated cost for the one-time monitoring and analysis of Water Quality Objectives is approximately \$2,741”.

As an initial matter Provisions 2.1 and 2.2 appear to conflict with one another. Provision 2.1 requires that the initial sampling occur prior to selecting a Compliance Option while Provision 2.2 requires that initial sampling occur prior to submitting Permit Registration Documents. Draft Permit provision 3.4.1. then goes on to state: “Existing Dischargers applying for coverage under this Order must submit an NOI and SWPPP within one (1) year and Compliance Option Documents within three (3) years of the effective date of this Order”.¹ Thus, it remains unclear as to whether initial sampling is required within the first year or whether this requirement triggered after three years of the effective date.

Assuming that what is meant by this requirement is that sampling occur prior to submitting the NOI and SWPPP, (As discussed in Memo 3 Permit Implementation Timing), then draft Permit requires that prior to filing of PRDs, that there will be a Qualifying Storm Event (QSE) AND that the Discharger will have had an opportunity to identify and train a Stormwater Pollution Prevention Team (SWPPT) capable of collecting the required samples as well as contracting with an ELAP certified laboratory to analyze the samples within the required holding times. In the vernacular, this is putting the cart before the horse. As described below, the initial sampling should be conducted after the PRDs are submitted and the SWPPT has been trained to collect the samples and deliver them to the contracted ELAP certified lab.

¹ The term “Existing Discharger” is not defined in the permit. For the purposes of this memo an Existing Discharger is an owner or operator that owned the parcel or operated the facility at the time the Permit becomes effective.

Provision 3.12.4.1.2 states: “The estimated cost for the one-time monitoring and analysis of Water Quality Objectives is approximately \$2,741. This appears to contradict evidence collected from various sources that laboratory costs for each sample bill exceed \$7,000 based on the suite of analytes required to be analyzed in Provision 2.1. Provision 9 of the draft Permit asserts that this suite of analytes is necessary to evaluate reasonable potential for exceedance of water quality objectives as described in Attachment E. This appears to go well beyond the scope of the EPA’s Final Designation of Stormwater Discharges from Certain Commercial, Industrial, and Institutional Sites in the Alamitos Bay/Los Cerritos Channel Watershed and the Dominguez Channel and Los Angeles/Long Beach Inner Harbor Watershed in Los Angeles County which states: “This Final Designation considers zinc and copper because they are the two main constituents of concern in the Petitions and are also the subject of impairment listings and subsequent TMDLs”. Thus, it would appear that for the purposes of evaluating the reasonable potential for exceedance of water quality objectives, which appears to be the sole purpose for initial sampling should be limited to zinc and copper.

Finally, the draft Permit fails to provide any adequate guidance regarding what exactly is required to be sampled. The only possible guidance comes from Attachment E Provision 3.2.2. However, this guidance only appears to apply to Dischargers selecting Compliance Option 3. Assuming, arguendo that the draft Permit intended these requirements to apply to all dischargers regardless of their selected Compliance Option, the costs will sky rocket. For a five-acre site with three discharge points the laboratory costs would exceed \$20,000.

Based on the above, the author suggests that the goals of the initial sampling requirement can be best met by making the following adjustments to the draft Permit.

1. Initial samples would be taken after the discharger submits its NOI and SWPPP. Given that the draft Permit requires the NOI and SWPPP during year 1 of the permit. Initial samples would then be required to be taken during the first rainy season after submission or likely during year 2.
2. Given that the purpose of the initial sample is to evaluate for reasonable potential of exceedance and the reasonable potential model set out by EPA is its designation is limited to copper and zinc; the suite of analytes for the initial sample should also be limited to copper and zinc. This would generate the adequate information to assess reasonable potential at a reasonable cost, likely in the range of \$250 per sample.
3. Assuming that the suite of analytes is limited to copper and zinc, the initial sampling plan should be developed in accordance with Attachment E provision 3.2.2