

CONTECH Stormwater Solutions, Inc.
Comments on the Industrial Stormwater General Permit (11/21/07 Public Notice Draft).

Analytical Methods

1) Update Analytical Methods

Many of the methods prescribed by Ecology (Tables 2 – 6) are no longer federally endorsed per the Federal Register (03/12/07) 40 CFR Part 122, 136, et al. “Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, National Primary Drinking Water Regulations, and National Secondary Drinking Water Regulations; Analysis and Sampling Procedures; Final Rule.”

Suggest correcting to the appropriate methods and the associated quantitation levels. Some of the methods that should be changed include BOD, COD, Aldrin, TSS, phenol.

2) Solids

Recommend to include method ASTM D3977, Suspended Sediment Concentration, as this method does not involve using a sub-sample (i.e. uses a whole-volume) to assess stormwater solids. SM 2540 and EPA Method 160.2 both involve sub-sampling techniques that decrease the accuracy of the results associated with solids transport in stormwater.

References

- a) Gray J. et. al. (2000) Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data, USGS Water-Resources Investigations Report 00-491
- b) CONTECH Stormwater Solutions, Inc. (2004). Comparison of TSS and SSC Methods of Analyzing Suspended Solids Concentrations (Document PE-E022). Portland, Oregon: Author.

It is unclear why Ecology has only required solids characterization for waterbodies impaired by sediment. Considering that this inexpensive parameter (\$20/sample) is the single most important parameter for characterizing transportation of solids (& associated particulates) in stormwater, it seems odd that Ecology does not recommend this analysis for all sites.

3) Laboratory Quantitation Levels

There are several prescribed quantitation levels listed by Ecology (Tables 2- 6) that do not appear to be accurate or consistent with benchmark values. For example, Table 6 (pg 34) contains aldrin with a 1.9 ug/L quantitation level (QL) with a freshwater benchmark value of 2.5 ug/L. Mercury contains a QL of 5.7 ug/L with a freshwater benchmark of 2.1 ug/L, marine 1.8 ug/L. The precision of these analytes conflicts directly with the attainability of the benchmark.

In addition to ensuring that the quantitation levels and benchmark values are accurate and attainable, additional guidance and clarity are needed in the permit on interpretation by Ecology of sample collection results. Due to the lack of precision associated with the prescribed sample collection methods by Ecology (e.g. grab sample), it should be transparent in the permit how Ecology plans on interpreting the benchmark or threshold values in conjunction with the quantitation levels and general sample error.

Currently the permit implies (S5.A.4) that an individual datum exceeding the benchmark or threshold for a parameter requires the permit holder to perform corrective actions. Requiring facilities to significantly alter treatment associated with a single datum is inappropriate use of science and bad policy.

Vague or Confusing Permit Language

1) S2.A.4. Facilities with Significant Process Change. (pg 9)

Comment – It is unclear what constitutes a significant process change. Is this related to handling and refining of raw materials or related to using different stormwater treatment processes to achieve benchmarks. Please define or provide examples for the permit holder.

2) S2.B.1 Authority and Control (pg 9)

“The Permittee shall have day-to-day operational control over activities at the facility to assure compliance with the terms and conditions of the permit and have legal authority to manage the facility under the terms and conditions of this permit, including the authority to make capital improvements as necessary.”

Comment – If a permit holder desires to make a significant process change to enhance stormwater treatment, S2.A.4 indicates that Ecology requires an application 60 days and public notification before implementing.

Is a 60 day notification to Ecology and public notification required or does the permittee have the authority to make immediate capital improvements (e.g. significant process change) to enhance a BMP as necessary per the SWPPP. Please clarify.

3) S2.G.1.b. Transfer of Coverage (pg 12)

“The type of industrial activities and practices remain substantially unchanged.”

Comment – Define a substantial change or substantially unchanged.

Suggest – Removing substantially from the sentence.

4) S3.A.6.c. Implementation of Enhanced/Additional BMPs (pg 14)

“The Permittee shall implement and maintain BMPs identified in the plan with due diligence.”

Comment – Define due diligence or remove. It appears that the intent was to imply reasonable diligence, however can be construed as a failure of conduct determined by Ecology, third party, etc.

Suggest – The Permittee shall implement and maintain BMPs as needed and/or in accordance with the SWPPP.

5) S3.B.3.c.iv Treatment BMPs (pg 19)

“All treatment BMPs that include the addition of chemicals to provide treatment must be approved by Ecology before the Permittee begins construction/installation.”

Comment – Define chemicals or change to the implied meaning of chemical flocculants. It appears that the sentence is implying the addition of flocculants to a treatment facility requires Ecology’s review prior to application. If a facility desires to add minerals (i.e. zeolite, dolomite, etc.), change media, or use inert materials (glass) to enhance treatment (amended sand filter), does the permit holder require approval from Ecology prior to such actions? Does Ecology have the capacity to respond in a timely manner?

6) S4.B.1.c. Sampling Requirements (pg 21)

“The Permittee shall sample each designated discharge point as soon as possible after the discharge begins.”

Comment – Define as soon as possible after discharge begins or change to reflect an aforementioned sampling scheme such as in the SWPPP. We understand the Ecology is trying to make it easier for permit holders to take samples. However considering the relative importance of these samples in determining next actions related to compliance, and the lack of precision associated with utilizing grab samples, is it really in the best interest to omit all storm event criteria. Sampling should be itemized in the SWPPP with an attempt to attain samples as the BMP is operating under relatively similar operating conditions.

7) S4.C.3 Exception to Sampling Requirements (pg 23)

“A Permittee that implements a significant process change shall continue sampling and may not use previous sampling results to demonstrate consistent attainment.”

Comment – Define significant process change or change to define the boundary, such as not listed in the SWPPP. A SWPPP is intended to provide the plan necessary to meet the benchmarks or thresholds to the maximum extent practical. If the end result is attainment of benchmarks or thresholds, is it really necessary to discard previous results if it is associated with implementing actions itemized in the SWPPP.

8) S4.E.2 Laboratory Accreditation (pg 24)

“pH and turbidity are exempt from this requirement, unless the laboratory is registered or accredited for any other parameter.”

Comment – Confusing sentence, does Ecology desire pH and turbidity or not. Since the laboratory has to be registered per S4.E.1, the sentence implies that pH and turbidity are not exempt. Suggest removing “unless the laboratory is registered or accredited for any other parameter,” or clarify meaning.

9) Demonstrative Approach (pg 59)

“means stormwater BMPs that must be individually reviewed and approved by Ecology before they can be used by the Permittee. The demonstrative approach requires the Permittee to provide documentation (e.g. an engineering report) that the resulting discharges will be protective of receiving water quality.”

Comment – Additional clarity is needed regarding the “demonstrative approach” in the Industrial General Permit (e.g. using an engineering report). Is this statement implying that a Technical Engineering Evaluation Report (TEER) is required (i.e. monitoring per the TAPE) or is supportive technical documentation sufficient?

Stormwater Management Manual for Western Washington (SWMWW)

1.6.3 Presumptive versus Demonstrative Approaches to Protecting Water Quality

“Project proponents always have the option of not following the stormwater management practices in this Manual. However, if a project proponent chooses not to follow the practices in the Manual then the project proponent may be required to individually *demonstrate* that the project will not adversely impact water quality by collecting and providing appropriate supporting data to show that the alternative approach is protective of water quality and satisfies State and federal water quality laws.” (pg 1-8)

“Under the demonstration approach, the timeline and expectations for providing technical justification of stormwater management practices will depend on the complexity of the individual project and the nature of the receiving environment.” (pg 1-10)

12.4 Acceptable Evaluation Protocols

“To properly evaluate new technologies, performance data must be obtained using the Ecology approved Technology Assessment Protocol – Ecology...” (pg 12-3)

Comment – Please clarify Ecology’s intent in the industrial general permit regarding the difference between evaluating emerging technologies and using a BMP that requires an engineering report and supportive technical documentation.

10) Representative [sample] (pg 62)

“means a sample of the discharge that accurately characterize stormwater runoff generated in the designated drainage area of the facility.”

Comment – Please provide clarity on what is implied by sample (i.e. grab, flow-weighted composite, time composite, etc.). Is Ecology implying that an individual grab sample is representative and can characterize stormwater runoff for all parameters?

General Comments

1) Beginning on page 8 the header indicating the section number in the permit is not consistent with the actual section number (S2, S3, S4).

2) S3.B.3.a (i.-iv.) Operational Source Control BMPs (pg 17)

“The SWPPP shall include a BMP that identifies (i.); defines (ii.); to inspect (iii.); and the BMP shall specify (iv.)”

The permit language in this section personifies a BMP to be responsible, suggest rewording to emphasize “The Permittee shall identify, define, inspect, specify in the SWPPP...”

3) S4.A.1. Sampling - General Requirements (pg 21)

“Any Permittee who discharges to surface water shall conduct sampling of stormwater in accordance with this permit and the SWPPP, unless the Permittee submits an alternative plan as a modification of coverage and the alternative plan is approved by Ecology in writing.”

Comment – Is a permit holder to infer that Ecology suggests that infiltrated industrial-related stormwater is completely exempt from any type of monitoring/sampling? Is this adequate protection for underground waters as defined by “Waters of the State.” (pg 65)

Suggest including SWPPP provisions in the Industrial General Permit for using infiltration facilities that include periodic monitoring of soils for porosity, surface loading, and contamination. In addition, groundwater monitoring regarding the seasonal high water table depth (every few years), and provisions for groundwater sampling that are in conjunction with Washington Administrative Codes Chapter 173-200, and Chapter 173-218 should be included in the permit.

4) S5.A.4 Benchmarks, Thresholds, and Sampling Requirements (pg 25)

“If the Permittee’s discharge exceeds a benchmark or threshold for a parameter, the Permittee shall perform the Corrective Actions in accordance with S8.”

Comment – Is it Ecology’s intent to have action levels in each individual SWPPP or a widescale, uniform standard (and action levels) for addressing levels above the benchmarks. If a facility is

slightly higher than the benchmark (2 times) and lower than the threshold, if outlined in the SWPPP that this is maximum extent practical, will this be acceptable to Ecology.

5) S8.B.1 Requirements for Exceedance of a Threshold (pg 39)

“Within 24 hours of receiving the results, notify Ecology using Form 1 (provided in Appendix 6);”

Comment – This is insufficient time to resolve any challenges associated with laboratory analytical error or sampling error associated with an individual sample (especially on a Friday).

Suggest - A minimum of 72 to 96 hours to allow for results received on Friday and enough time to resolve any potential error.

6) G14. UPSET (pg 52)

Comment – This is the only time a definition appears in the body of the permit, instead of in Appendix 2. The condition would be better served if labeled “Unintentional Non-Compliance” rather than “Upset.”

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