



CertainTeed Gypsum Manufacturing Inc.
593 East Marginal Way South
Seattle, WA 98134
Ph: (206) 763-1550
Fax: (206) 763-4655

January 9, 2008

Lionel Klikoff
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Submitted via email to: lkli461@ecy.wa.gov

Re: Comments on Draft Industrial Stormwater General Permit dated 21 November 2007

Dear Mr. Klikoff:

CertainTeed Gypsum, Inc. (CertainTeed) has committed significant financial resources to the development and implementation of our stormwater program in accordance with the current Industrial Stormwater General Permit (Current Permit). Pursuant to our review of the Department of Ecology's 21 November 2007 Public Notice of the Draft Industrial Stormwater General Permit (Draft Permit) and associated fact sheet, it appears that our capital costs to comply with our stormwater permit will increase dramatically if this general permit is adopted. This is in addition to the requirements in the Draft Permit that will cause an increase in labor. Our primary issues with the Draft Permit are the rationale for benchmark selection and the corrective action requirements when a median sample value exceeds a benchmark.

Benchmark Selection

Benchmarks in the Draft Permit (Section S5) are based on a November 2006 report entitled *Evaluation of Washington's Industrial Stormwater General Permit (Report)*. The Report states (page 24) that:

"A number of methods for setting these goals were evaluated using examples from other States and from other permits within Washington. **Based upon this evaluation**, a Simple Percentile Method based on individual facility median pollutant values was selected as the recommended protocol for establishing permit targets. To apply this method, the median and 75th percentiles of facility median values were calculated from the existing ISWGP data to represent the benchmark and action level values for specific pollutants (*emphasis added*)".

The Report then provides the following recommendation (pg 34):

"Use the Simple Percentile Method to establish benchmarks and action levels for those parameters that have an adequate database. (A detailed discussion of the rationales for adopting the Simple Percentile Method is provided in Section 4.)"

As stated in Table 46 (page 74) of the Draft Permit fact sheet, Ecology based the copper and zinc benchmarks on the median value for each metal from discharge data submitted to Ecology for the period from January 1, 2005 to August 7, 2007.

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Our issues with how the benchmark values were selected in the Draft Permit are as follows. First, the evaluation of alternative methods for selecting permit targets (i.e., benchmarks, action levels, and thresholds) is not provided. Second, there is no discussion of the rationale for selecting the Simple Percentile Method (Method). Finally, there is no link of the permit targets selected using the Method to impairment of designated uses. The Method simply describes the statistical distributional qualities of the compiled monitoring data. The selected benchmarks do not act as a surrogate for assessment of designated use impairment and were selected such that half of the data collected at the permitted facilities would be exceed the criteria.

The analysis to select the permit targets assumed that there were a sufficient number of values available for constituents of concern. Available constituent data sample sizes ranged from 1 to 4479. The Report also stated that the data for many of the constituents exhibit a "very high" degree of variability. Given the high variability of the data, a large number of observations are required in any hypothesis testing in order to detect any statistically significant patterns. No statistical evaluation was made on the adequacy of the data to represent the true distributional qualities of stormwater runoff. Certainly, targets established for many of the constituents with low sample sizes are likely in error.

The analysis also evaluated effects of different dilutions on the stormwater discharge. The Report made conclusions based on the results meeting standards at the end-of-pipe (i.e., zero dilution). However, the discussion is contradictory to the conclusions. The Report concluded (page 18):

"....discharges of industrial stormwater *may be contributing* to exceedances of the water quality criteria when little or no dilution is available in the receiving water. However, the number of exceedances drops substantially when relatively moderate levels of dilution are available (*emphasis added*)".

This statement indicates that for large water bodies such as the Duwamish Waterway, potential impacts from benchmark exceedances would not contribute to exceedances of the water quality criteria.

The Report also states that the new targets are "realistic, technology-based benchmarks". No analysis was conducted of which technologies (i.e., BMPs) are required to meet the targets. Without a feasibility analysis of BMPs in treating stormwater runoff from specific sectors, one cannot present the value judgment that the proposed permit targets are "realistic".

Recommendations for Benchmark Selection

These benchmarks are not scientifically justifiable because they were selected such that half of the data collected at the permitted facilities would be exceed the criteria. This approach assumes that the operations of the permitted facilities only vary by the level effort expended on BMPs. Due to the wide variety of operations that are under this permit, incorporation of site-specific conditions needs to be an option. Without this flexibility, many permittees will need to incur the cost of switching to an individual permit. Site specific factors that should be an option include:

- A correction for hardness - Allowing values to be corrected for hardness would assess the metals concentration that is available to receptors.
- Use of dissolved concentrations for benchmark comparison - Because dissolved metals concentrations are typically used when evaluating potential impacts to the environment,



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permittees should have the option of comparing the dissolved concentrations to the benchmarks.

- Use of a dilution factor - A moderate dilution factor (i.e., 5) would be justified for large water bodies because the amount of stormwater discharge is minimal by comparison.

Corrective Actions

As compared to the Current Permit, CertainTeed feels that the corrective action requirements (Section S8) are too stringent when a median sample value exceeds a benchmark. As part of Step A in the Draft Permit, implementation of treatment BMPs is required when a median sample value exceeds a benchmark. This is a significant difference from the Current Permit which, as part of Level Three, only requires implementation of treatment BMPs in the event four quarterly samples are above an action level. This is a substantial change because benchmarks in the Draft Permit are two to seven times lower than Action Levels in the Current Permit.

Recommendations for Corrective Action

The Draft Permit requires implementation of costly treatment BMPs when a benchmark is exceeded; therefore these benchmarks are treated as action levels in the Current Permit. The decrease in concentration that requires treatment BMPs to be constructed is too drastic when the new benchmarks are not based on beneficial use impairment. CertainTeed recommends that the approach in the Current Permit be continued such that the implementation of treatment BMPs is only required when an action level is exceeded. This action level should be based on impairment of beneficial use and account for moderate dilution.

Economic Impacts

The impact to industry needs to be considered prior to implementing the Draft Permit. It does not appear that the cost to Washington businesses was evaluated. Implementation of the Draft Permit will require numerous facilities to significantly increase their costs for permit compliance. This increase in cost could cause some facilities to cease operation or relocate out of state.

CertainTeed estimates the potential costs to meet the requirements in the Draft Permit could exceed \$2 million in capital improvements and \$100,000 per year for implementation at our Seattle facility. This cost is too much of a burden on industry when you consider that the proposed benchmarks are not based on water quality standards. Moreover, such an increase has the potential to cripple our facility which has already been severely impacted by the downturn in the housing market.

Sincerely,

Lorne Balaski
Plant Manager
CertainTeed Gypsum
206-768-3711