**Memorandum**

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| **To:** | Washington State Department of Ecology |
| **From:** | Aaron Edgington, Abby Hawley, EIT, and Kathy Godtfredson Windward Environmental LLC |
| **Subject:** | Comments on the draft Industrial Stormwater General Permit |
| **Date:** | June 28, 2019 |
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Thank you for offering the opportunity to comment on the Washington State Department of Ecology’s (Ecology’s) draft National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (ISGP). This memorandum provides Windward Environmental LLC’s (Windward’s) comments.

The most substantial proposed changes to this permit from the 2015 version of the ISGP include:

* The addition of two new industry groups to those groups requiring ISGP coverage:
  + Marine construction.
  + Construction, transportation, and mining equipment rental and leasing.
* The change in timing of the required first flush sampling event.
* Revisions to the requirements for consistent attainment.

We have comments on timing of the required first flush sampling event.

## First Flush Sampling Event

Changes to first flush timing, as outlined in section S4.B.1, would present an undue burden on some permittees in the state of Washington based on their geographical location.. The change would require first flush sampling “on or after September 1” rather than “on or after October 1.” Table 1 presents September precipitation data from the National Weather Service for select metropolitan areas throughout the state of Washington from 2015 to 2018. These metropolitan areas cover regions west of the Cascade Mountains (Seattle-Tacoma and Olympia), east of the Cascade Mountains in central Washington (Wenatchee, Mosses Lake, and Pasco), and east of the Cascade Mountains near the Washington – Idaho boarder (Spokane).

Table 1. Precipitation Amounts for the Month of September in Major Metropolitan Areas of Washington State for Years 2018-2015

| Location | Region | Year | Monthly Total | Daily Min | Daily Max |
| --- | --- | --- | --- | --- | --- |
| Seattle-Tacoma | Western | 2018 | 1.04 | 0.01 | 0.42 |
| 2017 | 0.59 | 0.01 | 0.16 |
| 2016 | 1.05 | 0.01 | 0.42 |
| 2015 | 0.83 | 0.01 | 0.23 |
| Olympia | Western | 2018 | 2.06 | 0.01 | 0.59 |
| 2017 | 1.24 | 0.01 | 0.45 |
| 2016 | 1.73 | 0.01 | 0.53 |
| 2015 | 0.90 | 0.01 | 0.25 |
| Spokane | Eastern | 2018 | 0.02 | 0.01 | 0.01 |
| 2017 | 1.21 | 0.01 | 0.62 |
| 2016 | 0.21 | 0.01 | 0.11 |
| 2015 | 0.52 | 0.02 | 0.43 |
| Wenatchee | Central | 2018 | 0.01 | 0.01 | 0.01 |
| 2017 | 0.02 | 0.02 | 0.02 |
| 2016 | 0.05 | 0.01 | 0.04 |
| 2015 | 0.40 | 0.02 | 0.38 |
| Moses Lake | Central | 2018 | 0.0 | 0.0 | 0.0 |
| 2017 | 0.12 | 0.03 | 0.06 |
| 2016 | 0.13 | 0.01 | 0.04 |
| 2015 | 0.16 | 0.01 | 0.07 |
| Pasco | Central | 2018 | 0.0 | 0.0 | 0.0 |
| 2017 | 0.13 | 0.01 | 0.09 |
| 2016 | 0.24 | 0.01 | 0.23 |
| 2015 | 0.12 | 0.01 | 0.07 |

Source: [www.noaa.gov](http://www.noaa.gov)

The precipitation data in Table 1 demonstrate that there are regional differences in the amount of precipitation for the month of September. The western part of the state (Seattle-Tacoma and Olympia) receives the most precipitation, while the eastern-most part of the state (Spokane) receives less, and the central part of the state (Wenatchee, Mosses Lake, and Pasco) receives the least. This pattern suggests a higher likelihood of a first flush storm event occurring in the month of September for permittees in the western portion of the state.

The proposed change to move the first flush sampling event to September will likely pose a larger burden on those permittees in the western portion of the state. While the amount of rain that would trigger a first flush varies between permittees, it is our experience that storm events that produce approximately 0.1 inches of rain, or greater, in ≤ 24 hrs would trigger a first flush sampling event. From the recorded precipitation data presented in table 1, permittees with facilities located in the western portion of the state are more likely to experience a qualifying storm event, and would therefore be required to sample in September. Furthermore, once that sampling event occurs in September a second sampleable storm event is not likely to occur during the month. This means permittees who are required to sample in September will not likely be able to “average down” their first flush results before the end of the 3rd quarter (i.e. the end of September). When one considers the time required to analyze the first flush samples and/or implement additional BMPs in response to unfavorable results, the likelihood of sampling a second storm event in September (i.e., before the end of the third quarter) is even less. Therefore, it is likely that permittees that would be required to sample a first flush event in September (most likely for permittees located in the western portion of the state), and that receive results exceeding or out of range of the permit benchmarks (or effluent limits), would be unable to sample a second storm event within the third quarter and would need to respond with a corrective action (or will be out of compliance with their permit) as outlined in the ISGP.

In contrast, the precipitation data in Table 1 suggest those permittees in the central region of the state will likely not experience first flush events during the month of September, and thus, will not be required to sample until October (i.e., the 4th quarter). This would allow those permittees to sample throughout the remainder of the 4th quarter to average down any results exceeding or out of range of the ISGP benchmarks (or effluent limits), thereby decreasing their likelihood of needing to implement a corrective action (or be out of compliance with the ISGP).