



June 1, 2020

Water Docket  
U.S. Environmental Protection Agency  
Docket ID No. EPA-HQ-OW-2019-0372

**SUBMITTAL VIA ELECTRONIC PORTAL**

RE: WEF Comments related to the 2020 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity  
EPA Docket ID No. EPA-HQ-OW-2019-0372

The Water Environment Federation (WEF) thanks the U.S. Environmental Protection Agency (EPA) for the opportunity to provide comments on the 2020 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity. WEF also invites EPA to further dialogue and to discuss any of the matters raised below.

The Water Environment Federation (WEF) is a not-for-profit technical and educational organization of 35,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. Since 1928, WEF and its members have protected public health and the environment. As a global water sector leader, our mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation.

These comments were prepared by WEF's Stormwater Committee and its Policy Subcommittee and Industrial Stormwater Workgroup, the Stormwater Institute Advisory Committee and its Policy Work Team, and the WEF Government Affairs Committee. This group represents a cross-section of WEF Technical Committees with technical expertise on industrial stormwater and regulatory matters.

**I. General Comments:**

WEF recognizes that management of industrial stormwater benefits our municipal stormwater MS4 members as well. WEF would like to state at the outset that EPA should not lose sight of the pollution prevention benefits of this MSGP for stormwater discharges associated with industrial activity. Many small and medium facilities that embraced the pollution prevention approach had a less difficult time to comply with the complexities of the regulations, and although not painless, it was a more acceptable approach and a better outcome for the water quality.

Larger and more sophisticated facilities that looked at their operations and processes

from the perspective of prevention first, adapted and invested in changes, including product substitution (as for example potential approaches in coal tar aspect of this proposed permit), making compliance more aligned for the desired outcome, protection of water quality without major disruption to the business activities.

Finally, EPA should remain attentive to the fact that imposing new or added responsibilities on industrial permittees under this general permit might lead to added burden on MS4 permits for Phase I communities, those who manage industrial stormwater programs as well as states who already have resource constraints in managing their stormwater and permitting programs.

## **II. Specific WEF Comments:**

These comments are intended to address the specific areas EPA has requested feedback as well areas WEF members found to be important to provide input.

WEF subject matter experts (SMEs) worked within six major areas through Workgroups: 1) Frequency and Monitoring Requirements; 2) Coal tar sealants; 3) Additional Implementation Measures (AIM); 4: Stormwater Control Measures; 5) TMDLs, Eligibility and Other Issues; and 6) Major Storms Control Measures.

### **1) Frequency and Monitoring Requirement Comments**

#### **1. Specific Comments:**

*Request for Comment 9: EPA requests comment on viable alternative approaches to benchmark monitoring for characterizing industrial sites' stormwater discharges, quantifying pollutant concentrations, and assessing stormwater control measure effectiveness. See discussion in the Fact Sheet for Part 4.2.1*

WEF has no specific comment on viable alternative approaches to benchmark monitoring. However, WEF suggests that sector-specific benchmark monitoring is both appropriate and feasible.

*Request for Comment 10: EPA requests comment the above proposed universal benchmark monitoring for pH, TSS, and COD applicable to all sectors. EPA requests comment on whether universal benchmark monitoring is appropriate and what parameters should be required.*

WEF questions the appropriateness of universal benchmark monitoring. The Fact Sheet clarifies that universal benchmark monitoring is proposed because these parameters can indicate the absence, neglect, or failure of a stormwater control measure and can be indicators of broader water quality problems and the presence of other pollutants. There was discussion of the contribution of natural elements (such as tree pollen) which can cause a spike in COD and TSS measurements. TSS could also reflect organic and non-organic matter collected within the catch basins and not a result of the storm-related discharge. WEF requests that EPA clarify which categories of pollutants COD

measurements are expected to capture. WEF disagrees that COD is a universal benchmark.

WEF notes that the industrial stormwater permitting program is a mature program nearly 30 years old, and facilities should have an inspection program to correct any lapses - all within the SWPPP. WEF notes that for many facilities, universal benchmark monitoring will reflect parking lot runoff and little else. Would the results be the same from a 2-acre Walmart parking lot vs. a 2-acre automotive maintenance facility? Request for Comment 10 directly follows Section 4.2.1.1(a), which states "Samples must be analyzed consistent with 40 CFR Part 136 analytical methods...". WEF also notes that pH measurements consistent with 40 CFR Part 136 requirements can be problematic considering the short holding time of 15 minutes, especially where facilities rely on outside contractors for sampling. Therefore, the 2020 MSGP needs to include a provision for field measurement of pH. Other similarly problematic parameters, such as DO, should have similar provisions.

*Request for Comment 11: EPA requests comment on whether the permit should include an inspection-only option for "low-risk" facilities in lieu of conducting benchmark monitoring, as recommended in the NRC study. EPA requests comment on ways to identify facilities that would be eligible for an inspection-only option, what frequency would be appropriate for such an inspection, what the inspection should entail, and what qualifications or certifications an inspector should have. See discussion in the Fact Sheet for Part 4.2.1.1.*

WEF questions the value of the universal benchmark monitoring as compared to the inspection-only option since the industrial stormwater permitting program, dating to the early 1990s, has led to many facilities to have eliminated rainfall contact with industrial activities and have eliminated rainfall contact with industrial activities and have maintained a Stormwater Pollution Prevention Plan (SWPPP). WEF notes that "Industrial stormwater sampling generally requires outside contractors; most industrial facilities will not have proper sample equipment or staff to collect samples. Sampling to capture the correct storm quarterly will necessarily include more than 4 mobilizations per year. Analytical costs will be small, the sampling costs will be significant." For this reason, WEF considers an inspection-only option to be appropriate and necessary for this permit.

WEF also looked at the value of this data. One exceedance in a quarter does not show a trend or identify a problem that needs to be fixed. In addition, there is a time delay of waiting on sample results or another storm event to confirm the data. If the objective is to communicate to the discharger when to act, then this is not an efficient method.

WEF concurs with the discussion in the Fact Sheet Request for Comment addressing the identification of "low-risk" facilities; Categorizing and defining such facilities is somewhat challenging and has not yet been adequately addressed. WEF concurs with the discussion in the Fact Sheet Request for Comment that size alone may not fully represent the risk profile. WEF recommends that EPA establish a definition of "low risk" in the 2020 MSGP and agreed that the definition needs to be distinct from that of "no-exposure."

Finally, WEF recommends that EPA clarify what “low risk” is, before it proposes any substitution for benchmarks. Providing no quantitative decision on what “low risk” is will cause a lot of confusion.

*Request for Comment 12: EPA requests comment on whether chemical-specific benchmark monitoring proposed in Part 8 for Sectors I, R, and P is appropriate for these sectors. EPA requests comment on whether the proposed monitoring parameters are appropriate for these sectors and any data or information related to the sources and activities related to these sectors. See discussion in Fact Sheet for Part 4.2.1.1 Applicability of Benchmark Monitoring under sub-heading Monitoring Requirements for Sectors I, P, and R.*

WEF generally agreed that chemical specific benchmark monitoring for Sectors I, R, and P were appropriate. WEF recommends the use of oil and grease as a parameter to be measured only in those cases where appropriate (see attached Appendix A). There was also a suggestion to remove lead if it was demonstrated to not be associated with the operations.

2. Other specific comments on the Frequency and Monitoring Requirements per section:

#### 3.2.2.2

WEF recommends that EPA needs to clarify that the sample is to be *collected* within 30 minutes of a stormwater discharge, not “assessed.”

#### 3.2.2.4

WEF recommends that EPA needs to specify the time to wait after sample collection before visual observations are to be logged. This will affect the amount of settled solids and still floating solids, which makes data more comparable. EPA should specify what quantitative measurements are to be logged. For example, log the depth of settled solids after allowing to rest for 1 hour. Log the diameter and other dimensions of the container. Log the thickness of floating solids after allowing to rest for 1 hour. Log the thickness of any oil and grease observed. Log the thickness and color of any foam observed. Without such quantitative metrics, comparison between samples to determine effectiveness of BMPs or sources of pollutants is not feasible.

#### 3.2.2.5

WEF recommends that EPA define what quantitative measure of the visual assessment sample constitutes “stormwater pollution.” In the case of oil and grease, it is likely binary – any sheen or more. In the case of settled solids, it may be less binary and more dependent on the size of the catchment the sample is collected from. In the case of clarity, there is no stormwater runoff, lake water, river water, ocean water, or any natural water source with the clarity of bottled water. EPA should define a quantitative measure of clarity to be used to define “stormwater pollution.”

#### 3.2.4.4

WEF recommends that inactive facilities with areas of known surface soil contamination should be periodically monitored.

#### 4.2.1

WEF recommends that EPA clarify this statement: “At your discretion, you may take more than four samples during separate discharge events to determine the average benchmark parameter value for facility discharges”. Each facility is required to sample each discharge point 4 times per year. That would suggest that each sampling event is a “discharge event.” Some facilities may have 1 discharge point. Some may have a dozen. WEF recommends that EPA clarify these statements.

#### 4.2.2.1

Inspection only for “low-risk” facilities runs into a number of issues for collection system managers in that there is then no information that can be effectively used to find sources of pollutants they are detected either in their collection system monitoring or their receiving water monitoring programs. If an inspection only option is to be included, WEF recommends that it be done after a minimum of 3 years of benchmark monitoring is completed for the “low-risk” facilities and that “low risk” be defined as all activities conducted indoors, in actuality, not “typically.” Note that we are finding in California that air discharges from a manufacturing process can sometimes result in sufficient concentrations of some constituents in stormwater to exceed benchmarks. The clean air act does not permit to protect water quality, so operations can continue to cause or contribute to an exceedance of a water quality criteria, which is ultimately imposed on local collection system operators as TMDL waste load allocations. If there are no industrial permit monitoring requirements, we would not know that, so an inspection-only option is not likely to adequately address ongoing impairments in receiving waters overall.

## 2) Coal Tar Sealants

WEF suggests that EPA needs to further elaborate on this part of the proposed permit, for example, what is the maximum allowable percentage of coal-derived polycyclic aromatic hydrocarbons (PAHs) that can be in a sealant or admixture to not be defined as “coal-tar” for the purpose of this provision?

Generally, WEF supports the permit language with respect to coal-tar sealants. This may relate mostly to parking lots for industrial facilities. The data tying PAHs found in sediment that adversely affect aquatic life and are carcinogenic to coal tar sealants are compelling, not just from USGS studies but others as well. And there are equally effective sealants without the PAH content for equal cost.

### 1. Specific Comments:

Request for Comment 2: EPA requests comment on the following:

*Whether the permit should include an eligibility criterion related to the application of coal-tar sealcoat to paved areas where industrial activities are located.*

WEF supports requiring specific permitting for use of coal tar sealants that contribute PAHs to the water environment. Numerous studies summarized by USGS<sup>1</sup> have documented the potential impacts to human health and the environment. We request that EPA provide a specific definition for coal tar sealants – perhaps using PAH content. Industrial stormwater permits typically exclude employee/office parking since they are not an industrial activity. These are the portions of an industrial facility that typically require periodic pavement maintenance. Based on this precedent will EPA be then extending this requirement to other stormwater permits such as MS4 permits? WEF’s understanding is that most pavements that may use coal tar sealants are associated with commercial land use/facilities and residential driveways.

*Any studies that provide data on the level of PAHs from coal-tar sealed pavements, the sources of measured PAHs in the aquatic environment, the levels of PAHs in fish and seafood, and associated chemical and biological impacts that may occur via stormwater discharges.*

Studies referenced by USGS noted above and others:

1. Correlated PAHs in sediments and aquatic organisms with coal tar sealants used in the watershed. A study conducted in by University of Wisconsin Milwaukee also found this correlation.
2. Note that the air pathway is also an identified risk for human health. As a result, several communities in southeastern Wisconsin and in other locations in the United States have banned use of coal tar sealants.

*Whether or to what extent requiring facilities to implement specific stormwater control measures under the MSGP to control and treat PAH-laden discharges from surfaces paved with coal-tar sealcoat is an appropriate alternative to the proposed eligibility criterion, and if so, what those control measures should be. Proposed 2020 MSGP Fact Sheet*

If a separate operator permit is required for application of coal tar sealants, the operator should be required to include a control measure to prevent migration of PAHs from the site.

### **3) Additional Implementation Measures (AIM) (Benchmarks)**

#### 1. Specific Comments:

##### 1. Implementation Schedule (for benchmarking and AIM)

The MGSP implies that a facility is kicked into tier 1 or 2 immediately with the first sample 4X or 8X. WEF recommends that California’s standards present an option or direction, where the State provides a compliance year where you can collect your data and then trigger implementation to tier 1 measures. Ex. 1 year of data collection + 6

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<sup>1</sup> [https://www.usgs.gov/centers/tx-water/science/usgs-research-pahs-and-coal-tar-based-pavement-sealcoat?qt-science\\_center\\_objects=1#qt-science\\_center\\_objects](https://www.usgs.gov/centers/tx-water/science/usgs-research-pahs-and-coal-tar-based-pavement-sealcoat?qt-science_center_objects=1#qt-science_center_objects) and <https://pubs.usgs.gov/fs/2016/3017/fs20163017.pdf>

months of implementation for tier 1. Wisconsin has 2 tiers based on facility SIC code not monitoring plus no exposure exemptions, another option.

## 2. Triggers

WEF requests clarification on: if a facility meets its commitment – is it back to baseline and does it stop sampling? WEF requests that EPA clarify how the AIM tier affects the facility’s monitoring and sampling frequency/schedule.

## 3. Request for Comment 21

*Request for Comment 21: EPA requests comment on requiring an AIM Tier 1 trigger based on facility changes, i.e., if construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged. A similar trigger was included in Part 4.2 of the 2015 MSGP as a condition requiring SWPP review to determine if modifications were necessary.*

WEF recommends no, and that “tiers” and “structural changes” are two different things. Tiers means “there is an issue with benchmark compliance” whereas structural changes are different. And may or may not affect compliance with benchmarks. Modification of the SWMM due to construction may affect the tier. WEF asks that EPA clarify what it means by designating the type of construction and if the industrial process is exposed to stormwater compared to other construction changes on site (ex: office space).

## 4. Start of compliance year

WEF recommends that EPA clarify what a compliance year is. EPA should clarify when a compliance year starts after a trigger sample.

## 5. Deadlines

Comments on all Tiers 1, 2, 3, very short deadlines particularly for structural changes for Tier 3 up to 90 days.

## 6. Request for Comment 22 - Exceptions

*Request for Comment 22: EPA requests comment on whether it is appropriate to make the above exception for an “aberrant event” in proposed Part 5.2.2.1.c.i available to other AIM Tier levels and/or AIM triggering events. EPA requests comment on any additional action(s), analysis, or documentation that should be required as part of this exception and any appropriate or alternative timeframes for complying with the exception. For example, immediate mitigation so that there is no further discharge or chance of discharge of the pollutants of concern; documentation (including photographs) in an incident report that explains how this lone event was an aberration and how any permanent measures you implement will prevent a reoccurrence; and whether any incident report should be submitted to the EPA Region.*

California gives their discharges “a pass” in case of those events by not having a trigger to the next Tier until two samples are over. Include in annual reporting of “this is what happened, and this is what we did”. No reason for immediate reporting.

7. Request for Comment 24 - Natural Background

*EPA requests comment on changing the threshold for the natural background exception throughout the permit from the 2015 MSGP, which required no net facility contributions, to the proposed 2020 MSGP method of subtracting natural background concentrations from the total benchmark exceedance to determine if natural background levels are solely responsible for the exceedance. EPA requests comment on implications of this change and other factors the Agency should consider in proposing this change to the exception. WEF supports EPA subtracting natural background concentrations.*

8. Request for Comment 25

*EPA requests comment on other appropriate methods to characterize natural background pollutant concentrations. EPA is aware that the National Stormwater Quality Database (NSQD) is a collection of urban stormwater runoff data from municipal separate storm sewer systems (MS4s) and contains concentration data from urban open spaces, among other land use categories. EPA is concerned this dataset does not accurately represent pollutant concentrations that are attributable only to natural background sources and whether utilizing NSQD data to calculate an exception for industrial stormwater dischargers would be appropriate. EPA requests comment on the advantages and limitations of the NSQD dataset, whether it can be adjusted for use in the MSGP for calculating natural background concentrations, and how that could be accomplished.*

EPA should clarify what is background and how a site should go about doing a background pollutant concentration analysis. WEF recommends that EPA provide guidance on how to do it accurately and consistently. Statistical approaches that EPA has provided can apply to any dataset but may be difficult for most operators to be able to use them.

9. Run on

If approval is required from EPA, WEF is not clear this is going to happen in the 14 day deadline (or even 45 day) for Tier 1 or 2. WEF recommends that site should be able to subtract Run-on source from discharge to measure against benchmarks similar to natural background.

10. Request for Comment 26 - Tracking Tier Status

*EPA requests comment on methods for tracking AIM Tiers that may have been triggered by an operator. One approach could be to require the operator to self-select any AIM Tiers that have been triggered in the past quarter when submitting quarterly monitoring results per proposed Part 7.4.*

In other states, many track and self-report. EPA does notify facilities on what tier they are depending on their data. In California operators can go online and search what level tier their facility is included. States should have their own database's that allow facilities to log-in and receive their own tier/tracking information. This may not be applicable for every state since some states do not do their own regulation. It is up to facilities to keep track of their own tier information. WEF agrees that operators can self-



select if EPA reviews those and agrees.

11. Final General Comments:

This entire section is written as if a facility only has 1 outfall. The more outfalls a site has the more likely it is to trigger. There is no way to acknowledge that many facilities have more than 1 outfall to monitor. EPA should provide clarification on outfall/parameter specific requirement. What happens if your outfalls are in different tiers, parameters, etc? WEF recommends that EPA clarify if site-wide averaging is applicable. WEF also suggests that without a design storm it will be difficult to determine a structural treatment control.

**4) Stormwater Control Measures (Appendix Q)**

Below, WEF provides some general comments regarding Appendix Q. WEF expects each sector to provide EPA their specific comments:

1. Index Checklist

a. Checklist should be indexed and there should be one master list with uniform and consistent language and the sections that are specific to that industry.

2. Incoherent and Inaccurate Statements

a. Checklist contains statements that are misleading or confusing (need to provide examples)

b. There are technical inconsistencies; refer to California Stormwater Quality Association Manual for information on BMPs and checklists

3. Potential SCM Options or menu of SCM options rather than Checklist

a. This appendix is part of the permit and permits cannot be too prescriptive on the type of BMPs or SCMs that can be used at a site. Therefore, this appendix should be a general list of options to be considered for the site rather than a specific checklist.

4. Reference National Academy Report – Additional Monitoring Needed

a. Many of the SCMs referenced in Appendix Q were based on comments made in the National Academies Study that was conducted to support this. One of the recommendations from the academy (see page 4 of report) is that additional monitoring is needed to understand capacity and performance of SCMs, by being too prescriptive the permit will not allow for that to happen at the industry level.

5. Appendix Q is Oversimplified

a. Checklist is not comprehensive enough, may be missing BMPs that are applicable to the sector and the use of this checklist may lead practitioners to simply go through the list without identifying a clear solution to problems that could arise at a site. Appendix Q should describe process for developing good solutions and then provide the checklist as examples of what needs to be developed.

6. Other

a. Refer EPA to states that have robust stormwater practices and systems.

b. Inquire if this listing is useful for an MS4 permittees as they are looking at responsibilities such as illicit discharges or sources of pollutants that they might be finding at the end of the system.

7. Section Specific Comments:

2.1.2.5

Coagulants can be beneficial for a range of pollutant removal processes. Defining them as “Cationic” can be limiting in that there are a range of potential coagulants that can be employed depending on the nature of pollutant being removed. Concerns have been raised in California and Washington from stakeholder groups regarding the safety of the coagulants themselves. In the California case, provisions were developed to require toxicity testing prior to the use of coagulants in a stormwater treatment process. This had the result of limiting the use of coagulants for construction stormwater runoff. In a national permit, similar water quality concerns are anticipated. Washington state elected to pre-approve specific treatment systems with specific coagulant allowances using laboratory and field testing of their systems. This allows broader use of coagulation where it is effective but limits the options to existing pre-approved systems or requires testing of proposed systems. The administration of the approval program requires funding, some of which comes from applicant fees.

If EPA is to allow the use of coagulants in stormwater BMPs to meet effluent limitations, such administration of a program showing that the coagulants will not cause or contribute to an impairment of water quality is suggested by WEF. Additionally, if the use of coagulants would become BPT/BAT/BCT, then a program approving systems and coagulant mixes would need to be fair to all technology developers and providers. Cost-effectiveness of operating a coagulant system would need to be completed as well as its evaluation as BPT/BAT/BCT per existing regulatory guidelines.

2.1.2.6

Infiltration of runoff, particularly from an industrial facility, requires evaluation of impacts on groundwater, to avoid causing or contributing to an impairment of that potential water supply. This provision can be inconsistent with several state and local groundwater protection regulations, water rights laws, and/or local standards for managing drinking water supplies to meet Safe Drinking Water Act requirements. Specific requirements for protection of groundwater from infiltration of industrial stormwater runoff need to be included if evaluation of the feasibility of infiltration is to be a requirement of this permit.

3.1.3

There are provisions to control erosion, but no inspection requirement to look for erosion. WEF recommends that it should be included. Additionally, known areas of contaminated surface soil inspections should be included explicitly.

3.1.4

In arid locations, timing an inspection during regular operating hours during a precipitation event may be infeasible some years. A provision to not be in violation should, under such circumstances, an inspection during a rain event does not occur.

### 3.1.5

To what extent does this apply to facilities with known areas of contaminated surface soils? A provision requiring ongoing inspections of BMPs applied to known areas of contaminated surface soils is recommended.

Is EPA implying the use of Catch basins to collect contaminated stormwater? This section is not well stated. How about requiring operators to maintain sumps and catch basins regularly. It is important to ensure hooded catch basin and catch basin inserts are maintained and installed correctly. If an area is uncovered, connect sump outlet to sanitary sewer (if possible) or to appropriate treatment such as an American Petroleum Institute (API) or Coalescing Plate (CP) oil/water separator, catch basin filter, or other appropriate system. These are very different technologies and have different levels of performance and the ability to handle loads.

EPA should include statements about periodic inspection of the entire drainage system including infiltrations systems, detention systems manholes, catch basins, pipes and outfalls. For example, in page 110, EPA includes the Use sand filters or other end-of-pipe treatment as back-up measures for outfalls receiving drainage from areas where oil is potentially present.

WEF SMEs have done a review of these recommendations from EPA and suggests that EPA spend additional time in clarifying these recommendations. WEF SMEs would be available to discuss several them and provide additional input.

## **5) TMDLs, Eligibility and Other Issues**

### Section Specific Comments:

#### 1.1.7

If a permittee is above a groundwater CERCLA site is EPA SWPPP review required? If a permittee above a groundwater CECRLA site is retaining and/or infiltrating stormwater as a BMP, is EPA SWPPP review required? WEF recommends that EPA clarify.

#### 1.3.3

When a facility is transferred to a new operator, the new operator may not have adequate access to the facility or control over the facility to feasibly prepare and submit an NOI with SWPPP 30 days prior to transfer.

#### 1.3.3

Citizen suits may be unsuccessful due to there being insufficient evidence to support the claims of the plaintiff(s). Applying the filing of a citizen suit prior to a judgment as a standard for determining if a facility has unpermitted stormwater discharges, does not make use of EPA expertise to determine if a facility requires coverage.

#### 1.3.6

In the font designation, specify the maximum velocity at which the viewer must be able

to read the sign, and what part of the sign must be read at that velocity. Note that local community signage, visual impact, and/or architectural standards may impede on some facilities ability to comply with this provision. Allowances for such provisions are recommended. Signage in a public place may require easement leasing or some form of licensing with a public entity or a private entity visible from the public right of way. Such costs may be prohibitive for some small businesses.

2

“EPA notes that it does not “intend” for any permit requirement to conflict with state water rights law.” Does the word “intend” mean that in the case that any permit provision that conflicts with a state water rights law, that the state water rights law supersedes the permit provision and the permit provision, in that circumstance, is null and void?

2.1

“good engineering practices” should be replaced with “the standard of care for Design Professionals.” “Good Engineering Practices” is not as well defined in terms of liability for a system not achieving performance or other requirements.

4.2.4.1a

Making the standard “non-detect” to establish that a facility is not causing or contributing to an impairment goes beyond the waste load allocations established in a TMDL, should one exist for that impairment. If a TMDL exists, the standard should be the waste load allocation established for industrial discharges to that impaired waterbody. If a TMDL does not exist, using the water quality criteria with a factor of safety may be more feasible than using a non-detect requirement. For example, in nitrate-N impaired waterbodies, achieving non-detect in stormwater runoff even if all a facility’s BMPs are operating perfectly, may be impossible simply through atmospheric deposition of nitrates. Even using a water quality criteria for nitrate-N minus a factor of safety may not be sufficient to prevent atmospheric deposition from exceeding that benchmark. Some local agencies may not accept the proposition that atmospheric deposition constitutes “natural background.” Nevertheless, using non-detect is, to some extent, requiring industrial dischargers to compensate for other lesser controlled sources. WEF recommends not using non-detect as the standard for cessation of monitoring, but establishing appropriate benchmarks based on established TMDL waste load allocations or what a TMDL waste load allocation would be given the water quality criteria for the specific pollutant.

4.2.4.1b

Where at TMDL exists, requiring a separate EPA action to require monitoring for that pollutant is not recommended. Since collection system operators will have waste load allocations for that TMDL, having data associated with industrial contributions to those collection systems is very useful information in terms of programs to implement to meet waste load allocations. We recommend that all industrial facilities within a TMDL watershed do the TMDL based monitoring for matching pollutants per 4.2.4.1a.

### 1.1.3.3

WEF recommends that there be an exception for changes to the facility operations that might warrant coverage under a general permit rather than an individual permit. For example, storage outside that is exposed to rainfall might have a permit with numeric limits. The facility expands and encloses all storage. An individual permit should not be required, and GP coverage should be considered.

### 1.1.6.2.d i.

i. This section says if no TMDL but impaired water, discharge must meet WQS at the point of discharge – end of pipe requirements typically only apply to metals, or toxic substances.

ii. This section requires assimilative capacity and available wasteload to be allocated to the industrial stormwater discharge. Typically, TMDLs do not make wasteload allocations for industrial stormwater – This could be state/region specific.

### 2.2.2.3

New Discharger or New Source to an Impaired Water. If a facility has authorization to discharge under this permit relied on Part 1.1.6.2 for a new discharger or a new source to an impaired water, it must implement and maintain any measures that enabled it to become eligible under Part 1.1.6.2, and modify such measures as necessary pursuant to any Part 5 corrective actions. It must also comply with Part 2.2.1 and the monitoring requirements of Parts 4.2.4.1. WEF recommends that EPA clarify and place all requirements in one place to avoid subjectivity and confusion.

## 6) Major Storms Control Measures

### 1. Specific Comments:

*Request for Comment 8: EPA requests comment on whether it is appropriate for the permit to include language similar to the proposed language above that facilities should consider implementing enhanced controls to minimize impacts from stormwater discharges from major storms that cause extreme flooding conditions. EPA requests information on structural improvements, enhanced pollution prevention measures, and other mitigation measures that the permit could require facilities to consider. EPA also requests comment on how the permit might identify facilities that are at the highest risk for stormwater impacts from major storms that cause extreme flooding conditions.*

One approach could be to use the Federal Emergency Management Agency's (FEMA) Flood Map Service Center (found at <https://msc.fema.gov/portal/search>) to determine if the facility is in a "Special Flood Hazard Area" or Other Area of Flood Hazard. SFHAs are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. "Other flood hazard areas" (or moderate flood hazard areas) are labeled Zone B or Zone X (shaded) are also shown on the Flood Map and are the areas between the limits of the base flood and the

0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded)<sup>2</sup>.

WEF also recommends that EPA specifically include language that facilities may also refer or make use of available appropriate information from the local stormwater agency and floodplain administrator to get specific information on local flooding that is not covered in FEMA maps.

WEF is of the position that facilities subject to these additional requirements for major storm impact mitigation should be restricted to facilities that would cause an extreme impact by virtue of the nature of the facility. For example, facilities prone to flooding and with fuel tanks that could float, break open and pollute waterways during major storms should be included. SARA Title III Tier 2 reporting would also identify vulnerable material storage facilities.

WEF agrees that FEMA floodplain mapping is a good first screening step to identify potential facilities. As a first phase, facilities in 100-year flood plain could be included. Then, as discussed above, the facilities would be further screened to include only those facilities that would have an extreme impact on water pollution during major storm events. Depending on the results of this first phase, a second phase including facilities within the 500-year flood plain could be implemented, and similarly, the facilities could be further screened to include only those with extreme pollution impacts during major storm events. We are concerned about the potentially high financial impact of requiring structural improvements such as flood walls. Another concern is the potential overlap of these regulations with other flood protection regulations. We do not think the solutions listed above the Request for Comment 8 in the Fact Sheet are appropriate for facilities that would have extreme impacts to pollution during major storms.

One way to help smaller facilities would be to partner with USACE Silver Jackets to bring together state, federal and local resources to learn from one another in reducing flood risk and other natural disasters. EPA could implement the Community Rating System (CRS), a voluntary program that recognizes, encourages and rewards a community for floodplain management activities that exceed the National Flood Insurance Program's minimum standards. The community is rewarded through reduced flood insurance premiums. The CRS program is flexible and allows communities to choose from a list of activities to earn points. Incentive levels are based on the flood risk reduction from floodplain management activities, such as outreach, mitigation, higher regulatory standards, and increased mapping.

## 2. General Comments:

WEF recommends that EPA focus on specific facilities that pose a high hazard risk during major flood events (100- 500 Year) if they fail. Given some of the technical issues noted above, it may not be feasible to implement "major storm controls" as written in the draft

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<sup>2</sup> More information on FEMA flood zones can be found at <https://www.fema.gov/flood-zones>

permit. Primarily please note:

1. Weather forecasts rarely predict the return period of a pending storm event. They may predict the total depth of rain anticipated, but not the duration over which that will occur, which is required to estimate the flood level anticipated from a storm event. Stopping deliveries, diverting staff from production to flood risk mitigation, and other actions required in this provision, during every forecasted rain event with a total depth above the storm event level that would cause “extreme” flooding at the facility, or contact of flood waters with pollutants, can potentially be a significant financial burden on an operation that is in an area of the country with frequent rainfall. Also, the weather forecasts of total rainfall depth tend to be of low accuracy, making it possible that actions may not be taken prior to an “extreme” flood event, which can put an operator at risk of being in violation when the information available to them did not inform them that an action was needed.
2. In areas prone to flash flooding, forecasts do not provide quantitative information of the severity of the potential flood or the flood risk. Warnings are typically issued whenever rain is predicted. Disrupting operations every time rain is predicted may be a financial burden on an operation that can make their ability to stay in business impossible at that location.
3. Under the current NFIP, facilities can purchase flood insurance. Their insurance rates will vary depending on what physical protections they invest in to prevent damage during the flood that reaches the BFE, among other resiliency measures. The decision to invest in physical protections is currently based on financial criteria. The provisions in the permit make such investments a compliance requirement. This differs from the current NFIP. They should be consistent.
4. In some areas, at sometimes, to prevent downstream flooding, the U.S. Army Corps of Engineers (USACE) has elected to breach levees and flood areas they consider of low impact. Should a facility be in such an area where FEMA maps designate them as protected, but a discretionary action by USACE removes that protection, they should explicitly not be in violation of this permit.
5. The same is true of public flood control agency maintenance lapses that result in failure to existing protections. Should such protections fail through no fault of the facility operator, they should not be in violation of this permit. That needs to be made clear if this provision is to remain in the permit.
6. Some areas flood when no precipitation occurs over the facility. This is the case along the Red, Missouri, and Mississippi river basins, among others. While not classified as flash flooding, upstream winter snowmelt along with upstream precipitation can increase river levels to the point where they overtop banks and flood along floodways and floodplains. This is not due to any one storm event. This provision states that structural improvements to prevent impacts from such floods up to the BFE are required. Regarding the actions the permit requires, it is not clear if such actions are required when such flooding conditions are pending. That needs to be clarified if this permit provision is to remain. The specific flood risk required before actions are required should also be included. For example, as a river level increases (or decreases), USACE models of the river system add updated temperature and precipitation data throughout the river basin and update their forecasts of flood risk. Such risks go up and down each modeling run depending on changes in weather patterns throughout the river basin.

Finally, generally, as it relates to major storm events, we think there to be an interesting underlying question on whether EPA is advocating compliance with water quality standards in case of floods? As in” stormwater discharges from major storm events that cause extreme flooding conditions”. WEF thinks resilience to be an important issue within this area, but are those facilities subject to sampling requirements during those events to demonstrate compliance? WEF invites EPA to further dialogue in this area.

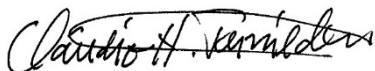
### III. Conclusion

WEF, therefore, requests that EPA consider the following key messages:

1. WEF recognizes that management of industrial stormwater benefits our municipal stormwater MS4 members as well. WEF recommends that EPA not lose sight of the pollution prevention benefits of this MSGP for stormwater discharges associated with industrial activity.
2. EPA should remain attentive to the fact that imposing new or added responsibilities on industrial permittees under this general permit might lead to added burden on MS4 permits for Phase I communities, those who manage industrial stormwater programs as well as states who already have resource constraints in managing their stormwater and permitting programs.
3. WEF recommends that EPA provide clarity on several items identified above and that EPA reach out to SMEs for more detail technical information including reaching out to WEF.

We again thank EPA for this opportunity and welcome a continuous dialogue on this matter. We may be reached at (703) 684-2416 or at [cternieden@wef.org](mailto:cternieden@wef.org) should you have any questions.

Sincerely,



Claudio H. Ternieden  
Senior Director  
Government Affairs  
Water Environment Federation



## APPENDIX A

### WEF SPECIFIC COMMENT ON OIL & GREASE ANALYSES IN THE 2020 MSGP

Requiring MSGP permittees to analyze effluent samples for “oil and grease” (“O&G”) should not be added without additional consideration. It is far simpler, and more cost-effective, to require a visual check in stormwater samples and discharges. If a visible oil sheen is reported, the agency reviewing the report can require the specific permittee to undertake testing using more detailed methods. Also, the regulatory agency can inspect the specific facility to identify the sources of oil pollution. If a visible oil sheen is not present, potential for environmental harm is very low.

40 CFR 110 addresses discharges of oil regulated under the Clean Water Act (CWA). The criteria used to determine if oil is discharged in quantities that “may be harmful” to water quality are: (1) the discharge causes a violation to water quality standards (many state or territorial WQSs consider a visible oil sheen as a violation); or (2) discharge causes a visible oil sheen on the surface of the water (40 CFR 110.3). Note that specific sampling for “oil and grease” is not required to determine if a discharge contains oil in quantities that may be harmful to water quality. A blanket requirement for “O&G” analyses in stormwater discharges covered by the 2020 MSGP would be more stringent than the requirements set by 40 CFR 110.

EPA method 1664 is presently listed as the only method for “O&G” accepted by 40 CFR 136. The method is like Standard Method 5520. However, significance of results obtained by this method must be noted. The 2017 edition of Standard Methods states that: “In the determination of oil and grease, an absolute quantity of a specific substance is not measured. Rather, groups of substances with similar physical characteristics are determined quantitatively based on their common solubility in an organic extracting solvent. Thus “Oil and Grease” is defined as any material recovered as a substance soluble in the solvent. It includes other material extracted by the solvent from an acidified sample (such as sulfur compounds, certain organic dyes, and chlorophyll) and not volatilized during the test.” (Standard Method 5520).

WEF’s members’ experience show that “O&G” measured with the solvent method is often subject to interferences by materials such as vegetative matter, humus, and other substances that may occur in nature.

The various issues with the standard “O&G” test have prompted users and some regulatory agencies to use other methods for determining if harmful amounts of oil are being discharged. Often this is done by using tests for total petroleum hydrocarbons (TPH) that are not listed in 40 CFR 136. Tests adapted from EPA SW-846 have been used for this purpose. These tests are complex, expensive, and require laboratories that can perform chromatographic or spectrophotometric analyses.

Further, collection of samples to be analyzed for “O&G” requires special skills. EPA method 1664 states that only grab samples can be used for “O&G” analyses, because extractable material may adhere to sampling equipment and result in measurements that are biased low. This condition precludes collection of a composite sample in the field, as

well as the use of automatic sampling equipment. A grab sample is only representative of the instant when it was collected. To obtain a real picture of the amount of "O&G" present in a discharge, analysis of a few samples collected at prescribed time intervals would be required, with subsequent averaging of the results. In the context of stormwater, these conditions would be more complex.

In summary, WEF recommends that a blanket requirement for "O&G" analyses in stormwater discharges covered by this proposed MSGP is not needed or effective, imposing an undue burden on dischargers. Use of the visible oil sheen criterion of 40 CFR 110 can be an effective alternative.