Comments of the Conservation Law Foundation, Waterkeeper Alliance, Natural Resources Defense Council, Our Children's Earth Foundation, and Ecological Rights Foundation on U.S. EPA's Proposed Reissuance of the NPDES Multi-Sector General Permit for Industrial Activities ("MSGP"), 78 FR 59672 (September 27, 2013)

December 24, 2013

Water Docket, U.S. Environmental Protection Agency, EPA Docket Center, Attention: Docket ID No. EPA-HQ-OW-2012-0803, Mail Code: 28221T, 1200 Pennsylvania Avenue NW. Washington, DC 20460

Via Online Submission to: http://www.regulations.gov/#!submitComment;D=EPA-HQ-OW-2012-0803-0001

Re: Docket ID No. EPA-HQ-OW-2012-0803

Dear Office of Wastewater Management,

The undersigned organizations ("the Commenters"), on behalf of their members, submit these comments on EPA's Proposed Reissuance of the NPDES Multi-Sector General Permit for Industrial Activities, as noticed in the Federal Register on September 27, 2013 (78 FR 59672).

Founded in 1966, Conservation Law Foundation ("CLF") is a non-profit, membersupported organization with offices located in Massachusetts, Rhode Island, Maine, New Hampshire, and Vermont. CLF advocates use law, economics and science to design and implement strategies that conserve natural resources, protect public health and promote vital communities in our region. Water quality issues are central to that mission, and CLF is engaged in numerous efforts to address storm water pollution throughout the New England region.

Waterkeeper Alliance is an international environmental organization that connects and supports local Waterkeeper programs to provide a voice for waterways and communities worldwide. Each of these programs, in turn, is an independent, locally based advocacy group working to protect and restore watersheds in their home communities. Waterkeeper Alliance supports these members by administering the trademarks covering the above names, by providing a centralized access point for sharing scientific, legal and administrative resources with Waterkeeper programs across the nation, by expanding on local Waterkeeper abilities to affect environmental compliance and policy on a national level, by sponsoring educational and capacity building programs for member organizations, and by providing legal support to member programs.

The Natural Resources Defense Council ("NRDC") is an international nonprofit environmental organization with more than 1.4 million members and online activists. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Bozeman, MT, and Beijing. NRDC is dedicated to the preservation, protection, and defense of the environment and natural resources and advocates for effective implementation and enforcement of the CWA on behalf of its members. Since the 1970s NRDC has been actively engaged in advocating for development of strong technology-based standards to control and reduce the discharge of pollutants into our waters.

Our Children's Earth Foundation ("OCE") is a non-profit public benefit corporation organized under the laws of the State of California, dedicated to protecting its members and the public, especially children, from the health impacts of pollution and other environmental hazards and to improving water quality for the public benefit. Another aspect of OCE's mission is to participate in environmental decision-making, enforce environmental laws, both federal and state, to reduce pollution, and to educate the public concerning those laws and their enforcement.

The Ecological Rights Foundation ("ERF") is a non-profit environmental organization organized under the laws of the State of California. To further its environmental advocacy goals, ERF actively seeks, on behalf of its members, federal and state agency implementation of state and federal water quality related laws.

These comments address the following aspects of the Proposed NPDES Multi-Sector General Permit for Industrial Activities ("MSGP") (hereinafter referred to as the "proposed permit" or "proposed MSGP"): (I) Technology Based Effluent Limits; (II) Water Quality Based Effluent Limits; (III) Monitoring and Reporting Requirements; (IV) Permit Coverage Exclusions; (V) Public Involvement and Public Access to Information; (VI) PAHs Discharged From Coal Tar Sealed Surfaces At Industrial Facilities; and (VII) Other Concerns. A summary of the specific requests made by Commenters is provided at Section VIII.

I. Technology Based Effluent Limits

Although EPA has been issuing general multi-sector industrial stormwater permits since 1992, EPA still has not promulgated national effluent limitation guidelines for stormwater discharged from the industries covered by this permit, as required by Section 301 of the Clean Water Act.¹ In the absence of national effluent limitation guidelines, EPA has once again set effluent limitations in the permit on the basis of its best professional judgment. But the non-numeric effluent limitations that EPA has selected for the draft MSGP are essentially the same inadequate requirements that have failed to control the discharge of pollution from industrial facilities under previous iterations of the MSGP.

EPA's record demonstrates that the non-numeric effluent limitations in the MSGP are ineffective –the MSGP does not adequately control the discharge of pollution from many

¹ Except that EPA has established numeric effluent limitations in national effluent limitation guidelines for the nine categories of discharges listed in Table 6-1 of the MSGP, which together cover a vanishingly small fraction of the stormwater discharges authorized under this permit.

industrial facilities. Permittees routinely exceed benchmarks, do not comply with the effluent limitations, and many either take no corrective action, or take inadequate corrective actions. Meanwhile, neither EPA nor the state regulators – who model their own MSGPs on EPA's – have the time and resources to monitor compliance and enforce the non-numeric requirements adopted under this permitting approach. EPA cannot issue another permit so dependent on technology-based, non-numeric effluent limitations. EPA has tried and failed with this approach for twenty years.

Instead, EPA must finally use the hundreds of thousands of data points of pollution concentrations in industrial stormwater that are available to the agency from its own databases and from state regulators to establish numeric effluent limitations for different industrial stormwater discharges. Ultimately, those numeric effluent limitations must be set by national regulation. In the first instance, however, EPA must include numeric effluent limitations in this MSGP. Inclusion of numeric effluent limitations is both feasible and essential to carrying out EPA's duties under the Clean Water Act.

A. The Draft MSGP Relies Almost Entirely On Non-Numeric Effluent Limits And Self-Evaluation By Permittees. EPA Has Considerable Evidence That This Permitting Approach Is Ineffective And Deeply Flawed, And Fails To Comply With the Clean Water Act.

The technology based effluent limitations that EPA has included in this permit, as in previous iterations of the MSGP, are almost entirely non-numeric (narrative) and rely heavily on the permittee to select control measures for itself: "EPA generally does not mandate specific stormwater control measures operators must select, design, install and implement. It is left to the operator to determine what must be done to meet the applicable effluent limits." Fact Sheet at 20.

Further, EPA has once again left it to permittees not only to select their own control measures, but also to determine for themselves whether those control measures are in fact meeting the permit's effluent limits. Without numeric effluent limits, this is a task that is challenging even for a neutral observer. EPA provides numeric "benchmarks" and other indicators that a permittee might use to determine whether it is meeting the BAT standard, but permittees are free to disregard these indicators.

The MSGP requires only that permittees "review" their performance if their discharges exceed benchmarks or another indicator manifests. MSGP at 22-23 (§4.1). But the MSGP leaves permittees free to decide for themselves that, notwithstanding their failure to meet benchmarks or other indicators, that they are nonetheless in compliance with the BAT/BCT standard (as applicable) and need not take any further action. Permittees are in fact invited to "make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits. ..." MSGP at 35 (§ 6.2.1.2).

EPA has substantial evidence that this permitting approach—self-evaluation by polluters using non-numeric effluent limitations as the metric of performance—is ineffective. Throughout

the Fact Sheet, EPA implicitly or explicitly states its concern that the MSGP is not adequately controlling the discharge of pollutants to waters of the United States. EPA notes on page 13 that the current MSGP does not adequately prevent toxic pollutants in stormwater discharges from NPDES-permitted facilities from causing sediment contamination throughout the country, including recontamination of Superfund sites. *See* Fact Sheet at 13. EPA also notes that it is aware of a number of concerns about the adequacy of the permit's primary monitoring requirements and methodology – the benchmark monitoring program – and of evidence that many permittees do not comply with those requirements or take effective corrective actions:

EPA also requested a copy of the facility's SWPPP and discharge monitoring reports (DMRs) from 35 facilities and received SWPPPs and DMRs from 20 facilities. Based on a review of this very limited sample, EPA found that most facilities (89%) are developing complete SWPPPs, but there is significant noncompliance with monitoring requirements. Only 35% of facilities submitted complete monitoring data and all facilities that submitted benchmark monitoring data had at least one benchmark exceedance. Of the facilities that completed benchmark monitoring, 84% identified corrective actions. None of the facilities reviewed had documented a clear reduction in benchmark exceedances after implementing corrective actions; most facilities continued to have benchmark exceedances after the corrective actions.

In a similar vein, commenters have reviewed Annual Certification Reports and Discharge Monitoring Reports submitted by a number of industrial facilities in New York and Connecticut that, although not directly regulated by EPA, are regulated under MSGPs modeled very closely on EPA's, with very similar benchmark monitoring and corrective action provisions. Commenters have found examples of facilities that routinely exceed benchmarks for many years in a row, yet every year submit a report stating that they have reviewed their SWPPP and concluded that no modifications are required. Other facilities state in their reports that they are taking unspecified corrective action, yet continue to exceed benchmarks year after year. In the commenters experience, with some exceptions for larger corporations with sophisticated environmental management practices, it is relatively rare to find a permittee that has reported past exceedances but corrected them on its own. Typically, improvements only occur with the involvement of the regulator (or citizen enforcement).

EPA also received an extremely critical review of the industrial stormwater general permit from the National Research Council. Before issuing the last iteration of this MSGP, in 2008, EPA turned to the National Research Council and "requested that the National Research Council (NRC) review its current permitting program for stormwater discharge under the Clean Water Act and provide suggestions for improvement." ² The results of that request were published in 2009, as the National Research Council Report "Urban Stormwater Management in the United States."

²² National Research Council, Urban Stormwater Management in the United States, at vii, National Academies Press (2009) ("USM").

With respect to industrial stormwater, the National Research Council's report can be summarized briefly: industrial facilities are highly concentrated sources of pollution, especially toxic metals and organic toxics, and EPA's permitting program is not currently able to adequately monitor pollution in stormwater associated with industrial activity, let alone able to ensure that this source of pollution is adequately controlled.³ Among the many problems identified by the National Research Council with the industrial stormwater permit, the following are the most glaring:

- Industrial facilities are significant sources of toxicants: heavy metals and organic toxics. For example, in sampling drawn from EPA's MS4 monitoring and input into the National Stormwater Quality Database, the absolute highest metal concentrations in discharges were observed in industrial areas, and the median metal concentrations in industrial areas "were about three times the median concentrations observed in open-space and residential areas."⁴
- General permits need clear and enforceable terms because EPA does not have adequate resources for sophisticated site-specific oversight. "Federal and state NPDES permitting authorities do not presently have, and can never reasonably expect to have, sufficient personnel to inspect and enforce stormwater regulations on more than 100,000 discrete point source facilities discharging stormwater."⁵ Therefore, "stormwater discharges would ideally be regulated through . . . strict limits on both the quantity and quality of stormwater runoff into surface waters, and rigorous monitoring of adjacent waterbodies to ensure that they are not degraded by stormwater discharges."⁶
- The NRC concluded that the industrial stormwater monitoring program suffers "from (1) a paucity of data, (2) inconsistent sampling techniques, (3) a lack of analyses of available data and guidance on how permittees should be using the data to improve stormwater management decisions, and (4) requirements that are difficult to relate to the compliance of individual dischargers."⁷
- The effluent limits in the MSGP "have not been updated to reflect the best available technology relevant to pollutants of most concern."⁸
- "There is limited information available on the effectiveness and longevity of many SCMs [structural control measures], thereby contributing to uncertainty in their performance."⁹ Thus, EPA's heavy reliance on structural control measures (SCMs) without the backstop of numeric effluent limits is questionable.

³ USM at 329-332.

⁴ USM at 183.

⁵ USM at 11.

 $^{^{6}}$ USM at 3.

⁷ USM at 329.

⁸ USM at 282.

⁹ USM at 1-2.

• "The lack of rigorous end-of-pipe monitoring, coupled with EPA's failure to use flow or alternative measures for regulating stormwater, make it difficult for EPA to develop enforceable requirements for stormwater dischargers. Radical changes to the current regulatory program[] appear necessary to provide meaningful regulation of stormwater dischargers in the future."¹⁰

B. EPA Must Finally Set National Effluent Limitations Guidelines For Discharges Of Stormwater Associated With Industrial Activity.

The BAT effluent limitations for toxic pollutants "are to be adopted by the Administrator, [] they are to be based primarily on classes and categories, and [] they are to take the form of regulations."¹¹ Thus, EPA must set effluent limitations through a nationally applicable regulation, not in general permits that cover only a limited number of sites within a larger class or category of dischargers.

Effluent limitations must be set by regulation – not by permit – because Congress intended the § 301 effluent limitations to be nationally uniform standards of pollution control.¹² "[E]ffluent limitations were intended to create floors that had to be respected by state permit programs."¹³

EPA consistently has agreed with the federal courts that it must set nationally uniform effluent limitations by regulation, not through NPDES permits. Since 1972, EPA has argued that "Congress intended that EPA promulgate § 301 'effluent limitations' by regulation before the permit-granting procedure is initiated" to provide a nationally uniform minimum level of pollution control.¹⁴ And EPA believes that the Clean Water Act "calls for the setting of across-the-board effluent limitations pursuant to § 301(b), based on guidelines prescribed pursuant to § 304(b)."¹⁵ Section 301 obliges EPA to set nationally binding effluent limitations, NPDES permits are a tool to enforce these uniform standards and deviate from them when warranted.

The effluent *limits* in EPA's general permit are not a lawful substitute for nationally binding and uniform effluent *limitations* under Section 301. And although EPA intends that its own permits act as models for state permits, the states are not obliged to follow EPA's lead and

¹⁰ USM at 3-4.

¹¹ *DuPont v. Train*, 430 U.S. 112, 129 (1977), *see also id.* at 126 ("[t]he statutory language concerning [BAT effluent limitations], in particular, leaves no doubt that these limitations are to be set by regulation."). ¹² See Chem Mfrs. Ass'n v. NPDC 470 U.S. 116, 120 (1005) ("C

¹² See Chem Mfrs. Ass 'n v. NRDC, 470 U.S. 116, 130 (1985) ("Congress did intend uniformity among sources in the same category, demanding that 'similar point sources with similar characteristics . . . meet similar effluent limitations."); accord id. at 134-35 (Justice Marshall, dissenting) (stating that "EPA conducts rulemaking proceedings and promulgates nationwide, categorical limitations, that is, limitations applicable to categories of dischargers effluent limitations," and describing effluent limitations as "national standards that limit the discharge of toxic water pollutants.").

¹³ NRDC v. Costle, 568 F.2d 1369, 1378 (D.C. Cir. 1977)

¹⁴ Hooker Chemicals & Plastics Corp. v. Train, 537 F.2d 620, 625 (2d Cir. 1976) (emphasis added).

¹⁵ American Meat Institute v. EPA, 526 F.2d 442, 449 (7th Cir. 1975); see also NRDC v. Costle, 568 F.2d 1369, 1377 (D.C. Cir. 1977) ("EPA argues that the regulatory scheme intended under Titles III and IV of the FWPCA requires, first, that the Administrator establish national effluent limitations and, second, that these limitations be incorporated in the individual permits of dischargers.").

adopt its effluent limits. Thus, the current system meets neither the letter nor the intent of the Clean Water Act, which is that EPA should promulgate uniform national standards to control water pollution.

EPA should initiate the long overdue process of setting national effluent limitations for discharges of stormwater associated with industrial activity. EPA should use this MSGP as a vehicle for accomplishing most of the work that it will need to do in order to promulgate national effluent limitation guidelines.

C. EPA Must Include Numeric Effluent Limitations In This MSGP.

Numeric limits are required in a NPDES permit where practical. EPA has always understood that the Clean Water Act expressed a Congressional preference for clear, uniform, national and *numeric* effluent limitations where feasible. In fact, in the early Clean Water Act case of *NRDC v. Costle*, EPA took the position that if it could not set numeric effluent limits in NPDES permits, then it could not set effluent limits at all.¹⁶

The Clean Water Act's preference for numeric effluent limitations is expressed both in the statutory text and in EPA's regulation. The definition of an effluent limitation emphasizes the restriction of "quantities, rates, and concentrations"¹⁷ of pollutants – i.e. restrictions on quantifiable attributes of the discharge. Such restrictions are obviously best expressed in quantitative (numeric) terms themselves.

Similarly, Section 304(b) of the Act requires that EPA set effluent limitations that "identify, *in terms of amounts* of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable." And Section 304(e) makes clear that, at least in the case of toxic pollutants, numeric effluent limitations are the preferred control strategy while best management practices and other control measures are intended only as supplementary limits on pollution.

Following from the text of the Act, EPA's regulations state that control measures (such as best management practices) are to be included in NPDES permits when "numeric effluent limitations are infeasible; or the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes of the CWA." 40 C.F.R. § 122.44(k)(3)-(4). If it is feasible to develop numeric effluent limitations then EPA must do so and must include these numeric limits in the MSGP.

In past iterations of the MSGP, EPA has claimed that development of numeric effluent limitations was infeasible. This is stated most extensively in the fact sheet developed for the 2008 MSGP:

¹⁶ "EPA's implicit premise is that . . . it is still necessary to articulate any limitation in terms of a numerical effluent standard." *NRDC v. Costle*, 568 F.2d 1369, 1380 (D.C. Cir. 1977). The D.C. Circuit also noted that Congress expected EPA to "develop[] guidelines and corresponding uniform *numeric* effluent limitations" by certain dates. *Id.* at 1379 (emphasis added).

¹⁷ 33 U.S.C. § 1362(11).

"Numeric effluent limitations are not always feasible for industrial stormwater discharges as such discharges pose challenges not presented by the vast majority of NPDES-regulated discharges. Stormwater discharges can be highly intermittent, are usually characterized by very high flows occurring over relatively short time intervals, and carry a variety of pollutants whose source, nature and extent varies.... While EPA continues to study the efficacy of various types of pollution prevention measures and BMPs, EPA at this time does not have a record basis for developing numeric limits that would reasonably represent a well-run application of BMPs. Because the flow and content is so variable, if EPA were to try to base numeric limits on a few sites, it is likely that any number it would develop would not to be technologically available and economically achievable by all well-run facilities. These factors create a situation where, at this time, it is generally not feasible for EPA to calculate numeric effluent limitations. . . Therefore, EPA has determined that it is not feasible for the Agency to calculate numeric, technology-based limits for many of the discharges covered under this permit and, based on the authority of 40 CFR 122.44(k), has chosen to adopt non-numeric effluent limits."

2008 Fact Sheet at 38-39.

This excuse has worn thin. EPA has allegedly been gathering representative stormwater samples and considering how to deal with the inherent variability of stormwater discharges in setting numeric effluent limits since at least 1985, when it noted that "29 trade associations and individual industries submitted commitment letters to EPA indicating their willingness to conduct representative quantitative sampling and analysis in order to assist the Agency in developing a sound data base on storm water discharges."¹⁸ Three decades later, it is time for EPA to take the data it has amassed and use this wealth of information to establish numeric effluent limits in this MSGP.

EPA has access to all of the data that it needs to set numeric effluent limits. States that require stormwater sampling as a condition of their MSGPs maintain this data in electronic form and provide sampling results to EPA for inclusion in its national databases. Since the National Research Council issued its report in 2008, EPA has spent the last few years integrating enforcement and water pollution monitoring databases, including the ICIS and PCS systems, into a single framework. At this point, EPA has made the investment needed to bring together data from hundreds of thousands of observations of stormwater pollutant concentrations from industrial sites. For example, Commenters note that looking only at New York State, and only at reporting years 2009-2011, EPA's ECHO database provides access to more than 38,000 individual parameter measurements from more than 1,000 permittees operating under New York's MSGP, which is very closely modeled on EPA's. If EPA wishes to, it can draw on tens of thousands of samples, taken around the country, from scrap metal recyclers, cement plants, marinas, asphalt pavement plants, and every other industrial sector covered under the MSGP.

¹⁸ EPA, National Pollutant Discharge Elimination System Permit Regulations; Storm Water Point Sources; Additional Information and Request for Comments, 50 Fed. Reg. 32548 (Aug. 12, 1985). *See also* USM at 67 (describing lengthy history of EPA's studies).

Since state permits tend to refer almost exclusively to EPA sampling protocols and methodologies, nearly all stormwater samples are taken under conditions that are close or identical to those at facilities regulated under the MSGP.

In short, "big data" has come to the world of stormwater permitting. But EPA has inexplicably failed to do the work needed to translate this data into the basis for numeric effluent limitations. In the study of benchmark monitoring that forms the basis for this draft permit,¹⁹ EPA relies solely on benchmark monitoring data from current MSGP permittees and, within that group, only on the 485 facilities using the eNOI system. Similarly, EPA supplemented this by looking at a random but not statistically representative or adequate sample of 35 permittees, of whom only 20 returned SWPPPs and discharge monitoring reports.

This is a small fraction of the tens of thousands of industrial stormwater facilities subject to benchmark monitoring requirements, mostly under state-issued MSGPs modeled very closely on EPA's with similar or identical benchmark monitoring requirements. In addition, a number of states require permittees to provide SWPPPs to the public on demand. Using federal and state freedom of information laws, and without EPA's authority to demand information from permittees pursuant to Section 308 of the Act, any person in the United States could have gathered a larger sample of relevant information to inform EPA's rulemaking with just a few hours work.

As a consequence of EPA's inadequate efforts at data collection and analysis, the situation remains as the National Research Council described it in 2008: "Many of the benchmark monitoring requirements and effluent guidelines for certain industrial subsectors are based on inaccurate and old information. Furthermore, there has been no nationwide compilation and analysis of industrial benchmark data, as has occurred for MS4 monitoring data, to better understand typical stormwater concentrations of pollutants from various industries."²⁰ Currently, "there is no separate compilation of quantitative mass emissions from specific industrial stormwater sources that may have been collected under industrial permit monitoring efforts."²¹

EPA is ignoring the vast majority of available stormwater sampling data – hundreds of thousands, if not millions, of observations – a record that goes back at least to the industry offers that EPA received in 1985, discussed above, and includes all of the data currently available in EPA's ECHO system and underlying databases. In its report, the National Research Council informed EPA that

too few samples are collected to sufficiently characterize the variability of pollutant concentrations associated with industrial facilities within a sector. . . . EPA has not requested a nationwide effort to compile these data, as was done for the MS4 program, *although this could potentially lead to average effluent concentrations by*

¹⁹ 2008 MSGP Benchmark Discharge Monitoring Report Analysis and SWPPP Compliance Review, EPA-HQ-OW-2012-0803-0002

²⁰ USM at 7.

²¹ USM at 183.

*industrial sector that could be used for a variety of purposes, including more considerate regulations.*²²

Since the NRC wrote its report in 2009, EPA has completed the "nationwide effort to compile these data" by integrating its existing databases of state-authorized stormwater sampling. EPA is now in a position to finalize this MSGP by completing the analysis, deriving "average effluent concentrations," and establishing the "more considerate regulations" that the NRC called for - i.e., numeric effluent limits. EPA's failure to consider all of the stormwater sampling data it can access before issuing the draft MSGP, and EPA's failure to use this larger pool of information to generate robust and numeric effluent limitations, are both arbitrary, capricious, an abuse of discretion, and not in accordance with EPA's duty under the Act to set numeric effluent limitations unless infeasible.

Further, EPA's concerns about how variability in stormwater samples affects numeric effluent limits can be addressed and resolved. Four years ago, the National Research Council explained to EPA four years ago precisely what EPA must do to better monitor individual industries, control variability, and determine effluent limits for industrial categories.²³ This includes more frequent sampling at high risk industrial sites and better sample collection methods, including the use of flow-weighted composites or other composite samples.²⁴

The reservations that EPA has expressed about some facilities finding it difficult to meet numeric effluent limitations are not warranted. As discussed below, BAT standards are designed to require the level of performance achieved by the *best performers* in an industry, not to be met by all of the facilities in an industry (or even by all "well run" facilities). In addition, EPA can use statistical cutoffs (i.e. removal of outliers) to set numeric limits, EPA has the ability to subdivide the more than 100,000 industrial facilities covered by this permit and state permits modeled closely upon it²⁵ into sub-groups to facilitate establishment of numeric limits, and EPA also has authority to issue "fundamentally different factors" variances to facilities who can establish that their circumstances are so unique that they legitimately cannot meet a numeric effluent limit.²⁶ Or EPA could always allow such dischargers to seek coverage under individual permits. At the very least, EPA could convert its existing benchmarks to effluent limitations.

D. EPA Must Carry Out a BAT Analysis And Establish Technology-Based Effluent Limits Based on the Results.

Whether or not EPA adopts national effluent limitations and guidelines, industrial stormwater discharges must be subject to effluent limitations, expressed in NPDES permits, that require a reduction in pollution based on the degree of control achievable through use of the Best

²² USM at 282 (emphasis added).

²³ USM at 257.

²⁴ USM at 280-300, 329-333.

²⁵ See EPA, Final National Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit for Industrial Activities, 60 Fed. Reg. 50804, 50807 (Sept. 29, 1995) ("EPA estimates that about 100,000 facilities nationwide discharge storm water associated with industrial activity...").

²⁶ See 33 U.S.C. § 1311(n), 40 C.F.R. § 125.30-32 (establishing procedures for "fundamentally different factors" variances from otherwise applicable effluent limitations).

Available Technology Economically Achievable (BAT), including, where feasible, the complete elimination of pollutant discharge.²⁷ In the absence of national guidelines, EPA must set effluent limitations in the permit on the basis of its best professional judgment.²⁸ These BAT effluent limitations must be expressed clearly in the NPDES permit itself.²⁹ And the agency must consider the same statutory factors for developing BAT effluent limits in this single permit that it would apply in setting national effluent limitations and guidelines.³⁰

In seeking out the best available technology that is economically achievable, EPA must consider the best state of the art practices in the industry and beyond. "Congress intended these [BAT] limitations to be based on the performance of the single best-performing plant in an industrial field."³¹ The average performer within a category of dischargers, even a "well-run" facility, is not representative of BAT. "[R]ather than establishing the range of levels in reference to the average of the best performers in an industrial category, the range should, *at a minimum*, be established with reference to the *best performer* in any industrial category."³²

A technology is considered "available" where there is, has been, or could feasibly be use within an industry. Courts have explained that even where "no plant in a given industry has adopted a pollution control device which could be installed does not mean that the device is not 'available," thus ensuring that industry cannot game the system by all agreeing to not adopt the latest, best pollution control technology.³³ A discharger of pollutants may also be required to transfer a particular technology that has been used in another context where the transfer is practicable.

Likewise, a technology is "economically achievable" under the BAT standard if it is affordable for the best-run facility within an industry.³⁴ "BAT should represent a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges."³⁵ "[T]he reasonableness of what is 'economically

²⁷ See 33 U.S.C. §§ 1311(b)(2)(A) ("such effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds . . . that such elimination is technologically and economically achievable for category or class of point sources"). Since the record shows that nearly all industrial stormwater discharges contain at least some toxic or non-conventional pollutants, and since the BAT standard is more stringent than the BCT standard, this discussion is framed exclusively in terms of BAT.

²⁸ See 33 U.S.C. § 1342(a)(1)(B); 40 C.F.R. § 125.3.

 ²⁹ See Fact Sheet at p. 20 ("Both technology-based and water quality-based effluent limitations are implemented through NPDES permits."); see also Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 502 (2d Cir. 2002), Am. Paper Inst., Inc. v. EPA, 996 F.2d 346, 349 (D.C. Cir. 1993) (TBELs must be included in a NPDES permit).
³⁰ See Natural Res. Def. Council, 863 F.2d at 1425; Texas Oil & Gas Ass'n v. EPA, 161 F.3d 923, 928-29 (5th Cir. 1998); see also 40 C.F.R. §§ 125.3(c)-(d).

³¹ Chem. Mfrs. Ass 'n v. EPA, 870 F.2d 177, 226 (5th Cir. 1989).

³² American Paper Institute, 543 F.2d at 346 (emphasis added). See also American Meat Institute v. EPA, 526 F.2d 442, 462-463 (7th Cir. 1975); American Frozen Food Institute, 539 F.2d at 120-21.

³³ Hooker Chems. & Plastics Corp. v. Train, 537 F.2d 620, 636 (2d Cir. 1976).

³⁴ See, e.g., Reynolds Metals Co. v. EPA, 760 F.2d 549, 562 (4th Cir. 1985); Tanner's Council of Am. v. Train, 540 F.2d 1188, 1191-92 (4th Cir. 1976).

³⁵ *Natural Res. Def. Council v. EPA*, 863 F.2d 1420, 1426 (9th Cir. 1988) (quotations omitted); *see also EPA v. Nat'l Crushed Stone Ass'n*, 449 U.S. 64, 74-75 (1980) (if a discharger of pollutants can afford the best available technology, then it must meet, and should not be allowed a variance from, stringent BAT limits).

achievable' should reflect an evaluation of what needs to be done to move toward the elimination of the discharge of pollutants and what is achievable through the application of available technology - without regard to cost."³⁶

There are three major steps that EPA must take to develop technology based effluent limits in the MSGP. The first step is to identify candidate (potential) BAT technologies.³⁷ The second step is to consider statutory and regulatory mandated factors in order to evaluate the technological feasibility and economic achievability of the candidate technologies.^{38, 39} The third step is to derive effluent limits that represent that degree of reduction – expressed in terms of amounts – achievable through the application of the BAT technology(ies).⁴⁰ The limits must be expressed numerically, unless numeric limitations are infeasible, in which case they may be expressed narratively.⁴¹

EPA has not engaged in the required analysis to establish TBELs. Nowhere in the Draft Permit or the Fact Sheet does EPA identify candidate technologies, explain its consideration of the required factors, or derive numeric or narrative limits. Instead, EPA clearly attempts to push this duty down onto permittees. EPA states in the Fact Sheet that:

To determine technological availability and economic achievability, operators need to consider what control measures are considered "best" for their industry, and then select and design control measures for their site that are viable in terms of cost and technology. Fact Sheet at 19.

This attempt to push the responsibility for BAT analysis down onto permittees is blatantly illegal. It is also logically impossible. How is a permittee expected to meet the rigorous BAT analysis standard set by Congress – to review candidate technologies, to identify the level of performance achieved by the very best of their peers?

Technology based effluent limitations must be established by the permitting authority, not the permittee, and must be contained in the NPDES permit issued to the permittee.⁴² Once EPA establishes a clear BAT effluent limit, the agency may leave the selection of control measures to achieve the limit up to the permittee. But the duty to consider what control measures are "best" for the industry rests squarely with EPA.

³⁶ American Frozen Food, 539 F.2d at 120-21.

³⁷ Best Conventional Pollutant Control Technology; Effluent Limitations Guidelines, 51 Fed. Reg. 24974, 24976 (July 9, 1986).

³⁸ 33 U.S.C. § 1311(b)(2)(E).

³⁹ 33 U.S.C. § 1311(b)(2)(B).

⁴⁰ See 40 C.F.R. § 122.44(k)(3).

⁴¹ 40 C.F.R. § 122.44(k)(3).

⁴² See 33 U.S.C. §§ 1311, 1342 (requiring, respectively, the development of BAT limits and their inclusion in NPDES permits, and requiring that NPDES permits be issued by EPA or state permitting authorities in accordance with the requirements of Section 301), *see also* 40 C.F.R. §§ 122.44(a)(1) (NPDES permits "shall include . . . technology-based effluent limitations and standards"); 125.1 (technology based treatment requirements are imposed "in permits" under Section 301 of the Act); and 125.3 ("Permits shall contain" technology based limits).

As a practical matter, to allow for the development of BAT effluent limits, Commenters suggest that EPA consider replacing the multi-sector general permit with sector-specific general permits.

At the very least, however, Commenters suggest that EPA break the very large class/category of "discharges of stormwater associated with industrial activities" into smaller groups within the MSGP and begin setting BAT effluent limits in this manner. This could take the form of sector-specific classes or categories of industrial discharges, for example, the industrial sectors identified in the MSGP. EPA might also consider identifying separate and somewhat overlapping classes of discharge defined by structure or function, for example: "discharges of industrial stormwater from galvanized metal roofs and other galvanized surfaces, including HVAC systems," "discharges of industrial stormwater from areas associated with vehicle maintenance." EPA has singled out and studied pollution concerns related to many such structural/functional categories of industrial stormwater in guidance documents over the years.

E. EPA Should Clarify That Permittees Must Minimize Pollutant Discharges.

EPA should modify the first sentence in section 2.1 of the proposed MSGP by adding the following underlined wording:

You must select, design, install, and implement control measures (including best management practices) to <u>minimize pollutant discharges</u>, address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in Part 2.1.2, meet limits contained in applicable effluent limitations guidelines in Part 2.1.3, and meet the water quality-based effluent limitations in Part 2.2.

This change is consistent with language appearing further in the same section, requiring modification of control measures if they are not achieving their "intended effect of minimizing pollutant discharges." The change is necessary to clarify that the *initial* selection of control measures should be calculated to minimize pollutant discharges.

F. The MSGP Should Incorporate EPA-Approved BMPs For Particular Industrial Sectors by Reference To Existing Guidance Documents and EPA Should Clarify That These BMPs Are All Economically Available And Technologically Achievable For Particular Sectors.

Until EPA conducts the mandatory BAT/BCT analysis in Section D above, EPA should ensure that permittees are in fact applying BAT before permittees claim that they cannot further minimize discharge. To that end, EPA should clarify in the permit that the various guidance documents and "menus" of BMPs that the agency has worked so hard to develop over the years for different industrial sectors are lists of economically available and technologically achievable technologies for that sector. This means that the EPA-recommended structural and nonstructural measures are by definition "available" for the particular industrial sector at issue and, as such, must be applied by permittees in those sectors whose previous efforts have fallen short of meeting the benchmarks. Thus, if a permittee finds that housekeeping BMPs or other cheap, non-structural BMPS fail to bring a discharge into line with benchmarks, the permittee should be required to turn to more expensive structural BMPs that EPA has already determined are available for their industry, rather than seeking a waiver.

For example, EPA has produced a series of "Industrial Stormwater Fact Sheets" tailored to different industrial sectors covered under the MSGP. To choose one at random, the Fact Sheet for Sector E (Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities), like the other fact sheets in this series, lists a wide range of BMPs that a concrete plant or gypsum factory might use to control pollution in discharges associated with storage, handling, and mixing of materials, and vehicles on site.43 These BMPs range from "cover material storage pile with a tarp or awning" to "[i]nstall sediment basins, silt fence, vegetated filter strips, or other sediment removal measures downstream/downslope." Installing sediment basins can cost tens of thousands of dollars; a tarp or awning can be purchased for \$19.99 at most hardware stores. The temptation for a permittee to buy a tarp and call it a day is obvious.

In the sector-specific requirements in Part 8 of the MSGP, EPA calls on permittees to "consider" the use of various additional BMPs. In addition, EPA should make clear in the permit that both tarps and sediment basins – and all of the recommended BMPs in between – are technologically available and economically achievable for the industry. Therefore, if a tarp proves insufficient to reduce the concentration of pollutants in the facility's discharge to benchmark levels, the permittee must progress through increasingly more complex available technologies, including installation of sediment basins, until benchmarks are met; no waiver is available to a permittee who has not exhausted all of the BMPs that EPA has already identified for their industry.

To implement this suggestion, commenters request that EPA:

- include in Part 4 of the MSGP a requirement for any covered facility that is required to conduct a review pursuant to Section 4.1 to continue its corrective action process until it has either met benchmarks or has exhausted all of the BMPs that EPA identifies as available for the industrial sector.
- To ensure that permittees progress through their available options in a timely manner and select sufficiently aggressive BMPs, EPA should specify in Part 4 of the permit that exceeding benchmarks a second time, i.e. after corrective action is taken, is a violation of the permit.
- In Section 6.2.1.2 of the Permit, which covers required benchmark monitoring, EPA should specify that it is a violation of the permit for any permittee to conclude its corrective action process with a determination "that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice" without having first exhausted all of the BMPs that EPA has identified as available for the industrial sector.

⁴³ See EPA Office of Water, Industrial Stormwater Fact Sheet Series; Sector E: Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities, EPA-833-F-06-020, available at www.epa.gov.

• In Section 6.2.1.2 of the Permit, which covers required benchmark monitoring, EPA should specify that it is a violation of the permit for any permittee to conclude its corrective action process with a determination "that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice" without having first exhausted all of the BMPs that EPA has identified as available for the industrial sector.

G. EPA's proposal to ignore the MSGP's flawed effluent limitations and monitoring requirements until 2018 is unacceptable.

EPA's plan to ignore the known inadequacies of the MSGP's monitoring requirements and effluent limitations for another five years is a clear violation of the Clean Water Act. Every NPDES permit must include both effluent limitations and adequate monitoring requirements to ensure that those limitations are met. *See* 33 U.S.C. §§ 1311, 1342. This permit does neither. EPA must remedy the situation in the coming months before it finalizes this permit, not in another five years.

EPA evidently lacks any sense of urgency. Instead of setting numeric effluent limitations and reforming the MSGP's monitoring requirements to reduce variability and increase accuracy, EPA is re-promulgating a permit containing monitoring requirements that EPA admits are broadly not complied with. Further, the permit contains effluent limitations that, by all accounts (including EPA's⁴⁴), do not adequately reduce the discharge of pollution in industrial stormwater. To make it worse, EPA makes plain that it has no intention of moving quickly to improve this situation. EPA has not set forth a plan for developing numeric effluent limits. As noted above, EPA has not conducted the kind of national integrated analysis of stormwater samples that it is already set up to complete. And in the Fact Sheet's discussion of a risk-based monitoring program, the agency states that "EPA plans to evaluate this concept and to consider information submitted in response to this request as it considers its proposal for benchmark monitoring requirements for the 2018 permit."

Four years ago, the National Research Council explained to EPA precisely what it must do to better monitor individual industries, control variability, and determine effluent limits for industrial categories.⁴⁶ Four years later, EPA has done nothing with these recommendations. Instead, EPA has submitted a perfunctory and shallow benchmark and SWPPP analysis as the factual basis for this rulemaking. Even worse, the problems reported to EPA by the National Research Council in 2009 were not truly news even then. EPA had claimed in all previous iterations of the permit, stretching back to the first general permits issued in 1992, that it lacked

⁴⁴ See, e.g., Fact Sheet at 13 ("EPA is concerned that current 2008 and proposed 2013 Multi-Sector General Permit requirements may not adequately prevent toxic pollutants in stormwater discharges from causing sediment contamination and recontamination of Superfund cleanup sites and/or presenting an imminent and substantial endangerment to human health or welfare or the environment.").

⁴⁵ Fact Sheet at 52.

⁴⁶ USM at 257.

the data to set numeric effluent limits and needed to address the variability in discharges between different kinds of sites.⁴⁷

What exactly has EPA been doing to improve monitoring, reduce variability, address the gaps in its knowledge and develop numeric effluent limits in the last four years, let alone for the past 21 years?

The situation has reached an inflection point. Not only are numeric effluent limitations feasible, but like BMPs, their use has become "reasonably necessary to carry out the purposes of the Act" in light of the 21 year history of failed narrative control measures. EPA must immediately make use of the information it already has at hand to establish numeric effluent limits in this MSGP.

Further, EPA knows what it must do to improve data gathering. With each permit cycle, EPA insists that it needs better monitoring data before it can set numeric effluent limits, yet time and again EPA does not improve monitoring requirements in the MSGP, pushing back its compliance with the Act's requirement to develop numeric effluent limits yet another permit cycle. At this rate, EPA will continue to claim that it is "infeasible" to set numeric effluent limits forever. For the reasons explained above, numeric limitations are feasible now and, therefore, required under the Act. EPA must complete the process of establishing improved monitoring requirements and numeric effluent limits in this iteration of the MSGP, not in another five years.

II. Water Quality Based Effluent Limits

A. Statutory Background on Water Quality Based Effluent Limits

The Clean Water Act requires each state to adopt Water Quality Standards ("WQSs") for all waters within its boundaries and submit them to the U.S. Environmental Protection Agency ("EPA") for approval. (33 U.S.C. §§ 1311(b)(1)(C), 1313.) WQSs include maximum permissible pollutant levels that must be sufficiently stringent to protect public health and enhance water quality, consistent with the uses for which the water bodies have been designated. (33 U.S.C. § 1313(c)(2)(A).) WQSs provide the reference point "to prevent water quality from falling below acceptable levels." (*PUD No. 1 of Jefferson County v. Washington Dep't of Ecology* (1994) 511 U.S. 700, 704 [quotation omitted].) States also must identify as impaired any water bodies that fail to meet water quality standards. (33 U.S.C. § 1313(d).)

For impaired waters, states must establish TMDLs, which set a daily limit on the discharge of each pollutant necessary to achieve water quality standards. (*Id.* § 1313(d)(1).) The TMDL "assigns a *waste load allocation (WLA*) to each point source, which is that portion of the TMDL's total pollutant load, which is allocated to a point source for which a NPDES permit is required." (*Communities for a Better Env't v. State Water Res. Control Bd.* (2005) 132

⁴⁷ See EPA, *Final NPDES General Permits for Storm Water Discharges Associated With Industrial Activity*, 57 Fed. Reg. 41236 (Sept. 9, 1992) ("the Agency currently does not have sufficient data to develop appropriate numeric effluent limitations for all of the varied sources of storm water discharges associated with industrial activity covered by these permits. The Agency also notes that facilities covered by today's permits have varied potential for having many different pollutants in their storm water discharges.").

Cal.App.4th 1313, 1321 (emphasis in original).) Critically, federal law requires that "once a TMDL is developed, effluent limitations in NPDES permits must be consistent with the WLA's in the TMDL." (*Id.*, at 1322 (citing 40 C.F.R. § 122.44(d)(1)(vii)(B).) According to EPA, which overseas implementation of the CWA, "[w]here the TMDL includes WLAs for stormwater sources that provide numeric pollutant load . . . the WLA should, where feasible, be translated into numeric [water quality-based effluent limitations] in the applicable stormwater permits." ⁴⁸

NPDES permits must ensure that discharges of stormwater associated with industrial activity do not cause or contribute to a violation of water quality standards. See 33 U.S.C. § 1311(a); 1313; 1341(a); 1342(p). Renewal permits—like the proposed MSGP, at issue—may not contain weaker standards than those contained in the previous permit, except under limited circumstances. See 33 U.S.C. § 1342(o); 40 C.F.R. § 122.44(1). Federal and state law additionally require implementation of an antidegradation policy, that mandates that existing water quality in navigable waters be maintained unless degradation is justified by specific findings. (See, 40 C.F.R. § 131.12(a)(1).) Every NPDES permit must require the discharger to conduct monitoring sufficient to assure compliance with its permit limits. Id. § 122.44(i)(1) (every permit "shall include" monitoring "[t]o assure compliance with permit limitations"); see also 33 U.S.C. § 1342(a)(2) ("The Administrator shall prescribe conditions for such permits to assure compliance with the requirements" of the statute). This monitoring must be "representative" of the discharges being regulated: "All permits shall specify . . . [r]equired monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity." 40 C.F.R. § 122.48(b). "Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity." Id. § 122.41(j)(1), see also § 122.44(i)(5).

Finally, the CWA requires that NPDES Permits, Permit Applications, Notices of Intent ("NOI") to discharge pursuant to an NPDES Permit, or other documents that contain the substantive information about how a permittee will comply with effluent limitations of the Permit must be publically available, 33 USC §1342(j); and subject to public hearing and comment, before the Permit can be approved.⁴⁹

B. EPA Has Not Completed the Reasonable Potential Analysis Needed to Establish Water Quality Based Effluent Limits.

⁴⁸ Memorandum from James A. Hanlon and Denise Keehner, U.S. EPA, to Water Management Division Directors, Regions 1 – 10, re: Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs, November 12, 2010, ("EPA Hanlon Memo") at 3.

⁴⁹ 33 USC §1342(a)(l); *See also Environmental Defence Center v. EPA*, 344 F.3d 832; 854-856 (9th Cir. 2003) (programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program reduces the discharge of pollutants to the level required by the Clean Water Act); *see also Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 498-504 (2d Cir. 2005) (failing to provide for permitting authority review and public participation of effluent limitations developed by permitted dischargers is a violation of the Clean Water Act).

As noted above, NPDES permits must ensure that discharges of stormwater associated with industrial activity do not cause or contribute to a violation of water quality standards. *See* 33 U.S.C. § 1311(a); 1313; 1341(a); 1342(p). EPA regulations require EPA to ensure that every NPDES permit includes effluent limitations to control the discharge of all pollutants that have the "reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i).

To discharge this duty, EPA must decide whether the pollution generated at a facility has the "reasonable potential" to cause environmental harm by using "procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water." 40 C.F.R. § 122.44(d)(1)(ii). A permit writer's determination based on these federally mandated procedures is commonly called a "reasonable potential analysis." Reasonable Potential Analysis ("RPA") is required in all NPDES Permits. *See* 40 CFR § 122.44(d)(1)(i). The RPA is a defined, detailed process, and is required to be included in the Fact Sheet of the NPDES Permit. *Id; See Also NPDES Permit Writers Manual*, pp 6-12 to 6-23 (US EPA, Sept 2010).

The process of conducting a Reasonable Potential Analysis forces a permit writer to determine which pollutants likely are present in the discharge. But EPA did not conduct a reasonable potential analysis in developing this permit. As a consequence, the MSGP relies on an illogical set of parameters to gauge the performance of MSGP permittees. As the National Research Council explained,

EPA selected the benchmark analytical parameters for industry subsectors to monitor using data submitted by industrial groups in 1993 as part of their group applications. The industrial groups were required to sample a minimum of 10 percent of facilities within an industry group for pH, TSS, BOD5, oil and grease, COD, TKN, nitrate plus nitrite nitrogen, and total phosphorous. Each sampling facility within a group collected a minimum of one grab sample within the first 30 minutes of discharge and one flow-weighted composite sample. Other nonconventional pollutants such as fecal coliform bacteria, iron, and cobalt were analyzed only if the industry group expected it to be present. Similarly, toxic pollutants such as lead, copper, and zinc were not sampled but rather self-identified only if expected to be present in the stormwater discharge. As a result of the self-directed nature of these exercises, the data submitted with the group applications were often incomplete, inconsistent, and not representative of the potential risk posed by the stormwater discharge to human health and aquatic life. EPA has not conducted or funded independent investigations and has relied solely on the data submitted by industry groups to determine which pollutant parameters are appropriate for the analytical monitoring of an industry subsector. Thus, there are glaring deficiencies; for example, the only benchmark parameter for asphalt paving and roofing materials is TSS, even though current science shows that the most harmful pollutants in stormwater discharges from the

asphalt manufacturing industry are polycyclic aromatic hydrocarbons (compare Table 2-5 with Mahler et al., 2005).⁵⁰

To correct the "glaring deficiencies" criticized by the National Research Council, EPA should conduct a Reasonable Potential Analysis before issuing a final permit. EPA should begin with a complete review on a sector by sector basis of the different pollutants likely to be present in discharges of stormwater associated with industrial activity.

EPA must then revise the MSGP's monitoring requirements to require monitoring in each sector for all pollutants likely to be present and with reasonable potential to be discharged at high concentrations. Commenters request that EPA add at least the following parameters to the MSGP's monitoring requirements:

- **PAHs**: Monitoring for PAHs at all industrial facilities that have applied pavement sealant (see below)
- **Zinc**: Monitoring at all industrial facilities, because of the prevalence of zinc in discharges from uncoated galvanized metal surfaces, including roofs;
- **Iron:** Monitoring at all industrial facilities because its widespread occurrence and high oxidation rate make it a very useful indicator of broader pollution concerns.
- **BOD, COD, and Total Nitrogen**: monitoring at all facilities in order to flag the possible release of a wide variety of pollutants that contribute to low dissolved oxygen, which is perhaps the most common impairment in the country. Additionally, these parameters are helpful in identifying illicit discharges to stormwater outfalls and discharges from improperly maintained septic systems.
- Mercury: monitoring at auto salvage yards because of the presence of mercury switches
- **PCBs:** monitoring at scrap metal facilities because of the presence of scrapped equipment with a higher likelihood of PCB contamination
- Volatile and Semi-Volatile Organic Compounds: Monitoring at all industrial facilities, because of the prevalent use of VOC's and Semi-VOCs including but not limited to acetone and toluene.

C. The Proposed MSGP Fails to Include Sufficient Monitoring to Assure Compliance with Water Quality Standards.

Section 6.2.4.2 of the proposed MSGP sets out the monitoring requirements for discharges to waters listed as impaired pursuant to Section 303(d) of the Act. EPA proposes to require a single sample annually for the impairing pollutant, unless the discharger demonstrates

⁵⁰ USM at 281-282.

the pollutant is "natural background," or "not related to activities or materials at your facility." EPA provides no information as how a single sample at each outfall, with substantial exceptions, is of "frequency sufficient to be representative of the monitored activity." For impaired waters with TMDLs, EPA requires *no* sampling, unless EPA itself determines that such sampling is required by the TMDL. This extremely limited sampling is not sufficient to assure that a facility is not causing or contributing to water quality exceedances, or to evaluate whether a facility is complying with the WLA assigned to it.

More fundamentally, the proposed MSGP provides no method for using even this very limited data for determining whether a site is in fact causing or contributing to exceedances of WQS, or complying with a WLA. How will the discharger, EPA, or the public use this single end of pipe sample event to evaluate whether a site is contributing to WQS exceedances, potentially many miles away, in a municipal storm sewer system conveying dozens, or perhaps hundreds, of industrial discharges the ultimate receiving water? How will the discharger, EPA, or the public evaluate the mass of impairing pollutant discharged by a facility, and whether that is consistent with the WLA? Given that the monitoring plan in the proposed MSGP provides no means for utilizing the limited sampling required for determining compliance or non-compliance with permit limits, the monitoring is inadequate "to assure compliance with permit limitations."

D. EPA's Deferral of Reasonable Potential Analysis and Development of Water Quality Based Effluent Limitations Until After Issuance of the Permit Violates the Public Participation Requirements of the Act.

Section 2.2 of the proposed MSGP sets out the Water Quality Based Effluent Limitations for industrial storm water discharges. Section 2.2.2.1 provides that where a permittee discharges to an impaired water with a TMDL in place, EPA will determine at some time in the future whether additional effluent limitations are required to be consistent with the Waste Load Allocation or the TMDL. Section 2.2.2.2 requires compliance with existing Water Quality Standards for discharges to impaired waters without TMDLs.

The proposed MSGP Fact Sheet explains that upon submission of an NOI, EPA will evaluate the facility and the receiving water(s), and determine whether additional WQBELs will be required to be consistent with a WLA, where it exists, or to comply with applicable WQS. Neither the proposed MSGP, nor the Fact Sheet, describe: 1) the data that would be considered (would it consist of past sampling results, future annual grab samples, MS4 sampling, receiving water samples, upstream sampling, or something else?); 2) what the analysis would consist of (simple comparison of end of pipe sampling to WQSs, modeling, or something else?); 3) the timing of the analysis and any resulting additional WQBELs; or 4) how a determination of the effectiveness of the additional measures would be conducted.

The analysis which EPA proposes to potentially conduct some time in the future, on a site by site basis, is in fact the Reasonable Potential Analysis required in all NPDES Permits. *See* 40 CFR § 122.44(d)(1)(i). The RPA is a defined, detailed process, and is required to be included in the Fact Sheet of the NPDES Permit. *Id; See Also NPDES Permit Writers Manual*, p 6-23 (US EPA, Sept 2010). The additional measures to ensure compliance with TMDL WLA and/or WQSs which EPA may (or may not) impose would represent the actual meat of the permit requirements for dischargers to impaired waters—and yet those measures, or even how those measures might be developed, are nowhere articulated in the proposed MSGP. Further, any additional monitoring to evaluate compliance via these measures is also left to the indeterminate future.

These proposed provisions therefore leave the RPA analysis, the WQBELs, and the monitoring program, for at a minimum all industrial storm water dischargers to impaired waters, entirely to the discretion of EPA, with no deadline for completion, no public input, and no hearing process. This deferral of required elements of this NPDES permit, delegation to staff, and elimination of public process, are clearly inconsistent with the requirements of the Act. *See* 33 USC §1342(a)(l); *Environmental Defense Center v. EPA*, 344 F.3d at 856. Specifically, the Commenters note that the following provisions of the proposed MSGP grant an impermissible degree of discretion to EPA:

- 1. **6.2.4.1 Permittees Required to Monitor Discharges to Impaired Waters.** *Permittees should consult the appropriate EPA Regional Office for any available guidance regarding required monitoring parameters under this part. If the Discharge Mapping Tool does not provide the information you need, you may consult the appropriate EPA Regional Office for guidance regarding required monitoring parameters under this part.*
- 2. **6.2.4.2 Impaired Waters Monitoring and Schedule.** *Discharges to impaired waters with an EPA-approved or established TMDL WLA:* For stormwater discharges to waters for which there is an EPA approved or established TMDL waste load allocation, you are not required to monitor for the pollutant for which the TMDL was written unless EPA informs you, upon examination of the applicable TMDL and/or WLA, that you are subject to such a requirement consistent with the assumptions of the applicable TMDL and/or WLA. EPA's notice will include specifications on which pollutant to monitor and the required monitoring frequency. Permittees must consult the appropriate EPA Regional Office for guidance regarding required monitoring under this part.
- 3. **6.2.5 Additional Monitoring Required by EPA.** *EPA may notify you of additional discharge monitoring requirements.*
- 4. **2.2.2.1 Existing Discharge to an Impaired Water with an EPA-Approved or Established TMDL.** If you discharge to an impaired water with an EPA approved or established TMDL, EPA will inform you if any additional limits or controls are necessary for your discharge to be consistent with the assumptions of any available wasteload allocation in the TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.5.1.

E. EPA should clarify that permitted discharges under the MSGP must be in attainment with ambient water quality standards

Because of long-standing confusion by permittees, EPA should clarify that Part 2.2 of the MSGP requires the concentrations and mass of pollutants in permitted discharges to be restricted

at or below the water quality criteria applicable to the receiving water body. On its face, the language of the MSGP seems to make this clear. The MSGP states that permittees must "control discharges as necessary to meet applicable water quality standards."⁵¹ This statement has only one subject—"discharges"—which should make it clear that it is the discharges themselves that must meet applicable water quality standards. And the Fact Sheet elaborates that "[i]f the permittee becomes aware, or EPA determines, that the discharge does not meet applicable water quality standards, corrective actions are required."⁵² Finally, the permit states that corrective action is required if "control measures are not stringent enough *for the discharge to meet* applicable water quality standards . …"⁵³ Nonetheless, both experience and the record developed for this permit show that permittees do not accept that their discharge stormwater that exceeds applicable water quality standards but fail to take corrective action.

The MSGP is also confusing in this respect because it states that benchmark exceedances are not violations of the permit and allows permittees who have exceeded benchmarks to conclude that "no further pollutant reductions . . . are necessary to meet the water-quality-based effluent limitations. . . ."⁵⁴ Yet in most cases, the benchmarks that permittees violate are equivalent to or many times higher than the applicable state water quality standards. For example, EPA's national recommended water quality criteria are the basis for most state numeric water quality criteria. The national recommended water quality criterion for iron is 1.0 milligram/Liter (mg/L) and the salt water criterion for zinc is 81 micrograms/Liter (ug/L), or 0.081 mg/L, for chronic exposure. In comparison, the iron benchmark applicable to most sectors of the MSGP is 1.0 mg/L and the saltwater benchmark for zinc is 0.09 mg/L.⁵⁵ In many jurisdictions, if a covered discharge exceeds the benchmarks in the MSGP then the discharge is also in excess of the applicable water quality standards and therefore, by definition, is not controlled "as necessary to meet applicable water quality standards."⁵⁶

Commenters request that EPA please clarify in Part 2.2 of the Permit that discharges permitted under the MSGP must be controlled such that the concentrations and mass of pollutants in the permitted discharge are at or below the water quality criteria applicable to the receiving water body.

III. Monitoring and Reporting Requirements

A. EPA must improve the permit's monitoring requirements, increase the frequency of sampling, and remove the monitoring exemption for data not exceeding benchmarks.

⁵¹ MSGP at 17 (Part 2.2.1).

⁵² Fact Sheet at 30.

⁵³ MSGP at 23 (Part 4.1) (emphasis added).

⁵⁴ MSGP at 35 (Part 6.2.1.2).

⁵⁵ See generally MSGP Part 8.

⁵⁶ MSGP at 17 (Part 2.2.1).

In order to adequately monitor compliance with the permit's effluent limits, as required by Section 402 of the Clean Water Act,⁵⁷ EPA must increase the frequency of sampling and stop relying solely on grab sampling. The National Research Council suggested that EPA could significantly improve its monitoring program through reliance on continuous sampling methods that are flow weighted and continue for the duration of a rain event.⁵⁸

For the same reasons, EPA must remove the monitoring exemption for "data not exceeding benchmarks" found in Part 6.2.1.2 of the MSGP. This exemption states that, "[a]fter collection of four quarterly samples, if the average of the four monitoring values for any parameter does not exceed the benchmark, you have fulfilled your monitoring requirements for that parameter for the permit term." This is problematic for two reasons: first, if EPA truly hopes to improve its sampling practices and build a higher quality data set, it is going to need all the samples it can get. Second, EPA is aware that stormwater runoff is highly variable and that most discharges cannot be adequately characterized with only four samples. To collect only four samples and conclude on that basis that the discharge complies with the benchmarks or water quality standards over time is arbitrary, capricious, unreasonable, unsupported by the record evidence and therefore an abuse of EPA's discretion. At most sites, four samples are not enough to prove that the discharge does not exceed benchmarks or standards.

The most authoritative discussion of industrial stormwater variability in the rulemaking record is the National Research Council Report commissioned by EPA. In its review of EPA's stormwater permitting, the NRC found that stormwater data, in particular data from industrial sites, are highly variable. "[V]ariability comes from various sources, including intrinsic variability given the episodic nature of storm events, analytical methods that are more variable when applied to stormwater, and sampling technique problems and error."⁵⁹ The NRC suggested improvements to sampling techniques that would reduce error and variability, but EPA has ignored those.

Still, even if EPA requires permittees to adopt improved sampling methods, the NRC concluded that the intrinsically higher variability of stormwater discharges means that a greater number of samples must be collected to support analysis and management decisions.⁶⁰ "Industrial sites should conduct monitoring so that a sufficient number of storms are measured over the life of the permit for comparison to regional benchmarks."⁶¹ Based on analysis of existing stormwater data, the NRC suggested that EPA should require around forty samples to adequately characterize discharges from medium risk industrial facilities over the course of a permit, or eight samples per year, in order to establish a statistically valid estimated median concentration for various pollutants. While the NRC suggested that this number could be reduced depending on the variability observed in the first 10-15 samples, this still requires far more sampling to get accurate measurements than the four samples that EPA asks permittees to

⁵⁷ See also 40 C.F.R. §§ 122.44(i)(1) (every permit "shall include" monitoring "[t]o assure compliance with permit limitations"), 122.48(b) ("All permits shall specify . . . [r]equired monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity.").

⁵⁸ USM at 7-8.

⁵⁹ USM at 283.

⁶⁰ See USM at 284.

⁶¹ USM at 330.

undertake.⁶² The current MSGP requirement to gather a maximum of four samples a year is not adequate to "yield data which are representative of the monitored activity" or to assure compliance with the permit's technology and water quality based limitations.⁶³ For EPA to readopt these sampling requirements in light of their known inadequacy would be unlawful, arbitrary, capricious, and an abuse of the agency's permit-writing discretion.

B. More frequent sampling is economically practicable

Commenters strongly support the adoption of the National Research Council's suggestion that any site identified as high or medium risk should be required to sample stormwater discharges with far greater frequency than the four samples per year called for in the MSGP. EPA has asked for comment on whether more frequent sampling is economically practicable.⁶⁴ EPA should improve the permit's monitoring requirements through the use of more frequent sampling. Commenters believe that it is economically practicable for permittees to engage in more frequent and improved monitoring, including the use of auto samplers to gather composite, flow-weighted samples.

In its report to EPA, the National Research Council included cost estimates, in 1993 dollars, for different kinds of automatic sampling equipment, all of which are superior to the current grab samples taken by permittees. The prices given include \$2,889 (about \$4,250 in 2013 dollars) for a time-based composite sheet flow sampler that could be installed in a driveway, for example, and \$16,052 (about \$24,000 in 2013 dollars) for a flow-weighted composite auto-sampler.⁶⁵ Based on commenter's experience, many accredited labs will run an EPA test method 8270 scan on a mailed stormwater sample for less than \$200, with discounts available for multiple samples.

Both the one-time and recurrent costs are quite affordable compared to the costs of other stormwater control measures implemented by permittees. For example, commenters have observed small to medium-sized industrial facilities spending tens or even hundreds of thousands of dollars to create permanent barriers, settling basins, and other structural control. Relative to the costs of other BMPs, the improved monitoring requirements are proportionate and reasonable.

C. EPA Should Not Weaken The MSGP By Adding Monitoring Waivers.

In the Fact Sheet, EPA states that "facilities that report exceedances of benchmark values have been unable to find cost-effective modifications to their management practices to eliminate these exceedances" and EPA now requests comment on a possible waiver from monitoring for facilities that have given it 'the old college try' but cannot seem to meet benchmarks.⁶⁶

⁶² *See* USM at 297.

⁶³ 40 C.F.R. § 122.48(b); *see also id.* § 122.44(i)(1) (every permit "shall include" monitoring "[t]o assure compliance with permit limitations").

⁶⁴ See Fact Sheet at 52.

⁶⁵ See USM at 295.

⁶⁶ See Fact Sheet at 52.

Commenters believe that EPA should not offer such a waiver, and cannot take the inability of permittees to find "cost-effective modifications" at face value. For decades, MSGP permittees have been instructed to evaluate their own compliance with the Clean Water Act and have been invited to determine for themselves which control measures are technologically available and economically achievable for their own industry. The decisions that permittees make are rarely reviewed and almost never challenged. In these conditions, EPA cannot be surprised that a large number of permittees seem to select and implement corrective actions that don't actually lead to compliance.⁶⁷

These compliance problems stem directly from EPA's failure to conduct BAT analysis and establish numeric effluent limits. As noted above, the purpose of the BAT analysis that EPA has pushed down onto individual permittees is to determine which pollution reduction measures are available to their industry as a whole. Asking an individual facility to conduct this analysis on its own is, at the very least, peculiar: how is a permittee to judge what is technologically available and economically achievable for the industry as a whole? For years EPA has implicitly invited permittees to conduct the wrong analysis: to decide that a control measure costs more than they wish to spend on pollution reduction, and conclude therefore that no further pollution reductions are "available" at their facility.

EPA has not included even a single case study in the record for this rulemaking that supports EPA's assumption that permittees who claim that they cannot find cost-effect modifications have actually exhausted the available technology options. While there are exceptions to every rule, in the commenters' experience, when government or citizens initiate an enforcement action against a facility that has chronically failed to comply with its permit obligations, permittees seem to find technology options that meet benchmarks.

It is unreasonable, arbitrary, capricious, and an abuse of discretion for EPA to assume that MSGP permittees have already implemented the best available technology on their own with little guidance from EPA, little oversight, a strong incentive to minimize their own costs, and no incentive to maximize pollution reductions. For decades, EPA has left self-interested, costminimizing permittees the freedom to determine for themselves whether or not benchmark exceedances warrant further action. How can EPA be surprised that many of those permittees exceed benchmarks but decide either not to implement corrective action at all or implemented inadequate corrective actions? Instead of weakening the MSGP further by creating a benchmark monitoring waiver, it is time for EPA to finally set numeric effluent limits in the MSGP, as required by the Clean Water Act.

IV. Permit Coverage Exclusions.

A. EPA Should Adopt the Proposed Toxics Exclusion and Require Permittees to Submit Initial Screening Sampling With an NOI.

⁶⁷ See Captain Renault, Casablanca (1942) ("I am shocked, shocked to find that gambling is going on in here.").

EPA specifically requests comments addressing "certain toxic pollutants in industrial stormwater discharges."⁶⁸ EPA is concerned that many MSGP-permitted discharges contain toxic pollutants that are not adequately controlled by the permit's conditions:

EPA is concerned that current 2008 and proposed 2013 Multi-Sector General Permit requirements may not adequately prevent toxic pollutants in stormwater discharges from causing sediment contamination and recontamination of Superfund cleanup sites and/or presenting an imminent and substantial endangerment to human health or welfare or the environment . . .the possibility of certain, particularly problematic toxic pollutants contaminating or recontaminating present or future Superfund sites, or presenting an imminent and substantial endangerment to human health or welfare or the environment, is still of great concern to EPA.⁶⁹

EPA goes on to explain that it is considering identifying "certain toxic pollutants of concern that are especially problematic" and would make any discharge of these pollutants above the detection limit ineligible under the MSGP. EPA explains that "the industrial operator would have to either eliminate such discharge or apply for an individual permit."⁷⁰ EPA suggests the following toxic substances for this list of excluded toxics: DDT/DDD/DDE, Dioxins/furans, PCBs, Aldrin/dieldrin, Hexachlorobenzene, Mirex, Octachlorostyrene, Toxaphene and Chlordane.⁷¹

Commenters strongly support this proposal for the reasons suggested by EPA. As a corollary, however, in the final permit EPA should also clarify that it is a violation of the permit for a permittee to discharge any detectable amount of an excluded pollutant.

In addition, commenters suggest that EPA require testing for these and other toxic pollutants as part of the NOI process because without such testing this proposed exclusion is meaningless. Currently, there is no testing requirement as part of the NOI coverage process and permittees do not test for the presence of any of these pollutants under the permit's monitoring requirements. EPA must establish conditions in the MSGP that ensure that all discharges from covered facilities are adequately controlled. EPA has correctly concluded that these pollutants cannot be adequately controlled under the MSGP. If EPA does not require facilities seeking coverage under this MSGP to test for the presence of these pollutants, EPA cannot enforce this exclusion or ensure that these pollutants are controlled as necessary to achieve water quality standards (and avoid recontamination of sediments or imminent and substantial endangerment to health and the environment).

B. EPA should clarify the CERCLA site exclusion

Commenters support the CERCLA site exclusion at Part 1.1.4.10 of the Permit, but believe it should be strengthened by expanding the exclusion to cover all CERCLA facilities in the United

⁶⁸ Fact Sheet at 12-13.

⁶⁹ Fact Sheet at 13.

⁷⁰ Fact Sheet at 13-14.

⁷¹ See Fact Sheet at 13-14.

States, clarifying that the exclusion applies to discharges to CERCLA sites conveyed via combined sewer overflows, and clarifying that discharges of reportable quantities of hazardous substances or oil from MSGP-covered facilities are not "federally permitted releases" under Section 103 of CERCLA and are not exempt from reporting and other CERCLA requirements.

The MSGP contains a conditional exclusion from eligibility to seek coverage under the permit for discharges to certain specified CERCLA (Superfund) sites.⁷² The exclusion is narrowly drafted however to only apply to twelve CERCLA sites, all located in EPA Region 10. The principle that EPA expresses behind this exclusion is sound:

Source sampling and sediment data from some NPDES outfalls indicate exceedances of sediment cleanup goals established for CERCLA Sites. NPDES permits, particularly general permits, may not control discharges sufficiently to avoid sediment recontamination because most effluent limits are written to protect the water column and not with particular regard to sediment impacts or contamination. Likewise, NPDES permits, particularly general permits, may not require monitoring sufficient to determine the effects of discharges on sediment quality and the aquatic organisms that live in or feed on the bottom of waterbodies. As a result, after extensive and costly clean-up of federal CERCLA Sites, these sites can be recontaminated by NPDES discharges.⁷³

This logic applies equally outside of Region 10. Throughout the United States, industrial facilities discharge high levels of pollutants that are likely to contaminate or recontaminate sediments in waters across the country, and to present an imminent and substantial endangerment to human health or welfare or the environment. Many of these pollutants, such as PAHs, are extremely common at CERCLA sites and are often the focus of much remediation work. Other pollutants frequently discharged from industrial facilities, such as PCBs, other organic toxicants and metals including lead and cadmium, tend to bioaccumulate in receiving aquatic ecosystems. Therefore, EPA should expand the exclusion in Section 1.1.4.10 to cover not just presently-listed CERCLA sites in Region 10, but all CERCLA sites throughout the United States, including any added to the National Priorities List during the term of this permit.

Further, EPA should clarify that the exclusion applies to discharges conveyed to CERCLA sites via combined sewer overflows. The exclusion states that, "for the purposes of this permit, a permittee discharges to a federal CERCLA Site if the discharge flows directly into the site through its own conveyance, or a through a conveyance owned by others, such as a municipal separate storm sewer system."⁷⁴ Although a combined sewer overflow is a conveyance owned by others, there is potential for confusion owing to the more traditional divide in Clean Water Act permitting between discharges to MS4s, which require SPDES permit coverage, and discharges to publicly owned treatment works, which do not require coverage. But many federal CERCLA sites are waters of the United States that receive overflows from antiquated combined sewers. A discharge into a combined sewer that overflows into a federal

 ⁷² See MSGP at 7 (Part 1.1.4.10).
⁷³ Fact Sheet at 12.

⁷⁴ MSGP at 8 (Part 1.1.4.10).

CERCLA site is not, in reality, a discharge to a POTW. And the risk that a discharge of stormwater associated with industrial activity will recontaminate a CERCLA site is not altered by the conveyance through which the discharge travels en route to the CERCLA site. Therefore, EPA should clarify that the language of the conditional exclusion in Part 1.1.4.10 of the MSGP applies to facilities located in watersheds serviced by combined sewers that overflow to a CERCLA site.

EPA also should reiterate in Section 1.1.4.10 that all releases of oil and hazardous substances by general permit covered facilities in reportable quantities must be reported. Although the spill prevention BMPs section of the general permit (2.1.2.4) requires that covered facilities notify the National Response Center of any "leak, spill, or other release" of a reportable quantity of a hazardous substance or oil, and this is further reiterated in Section 5.2.3.3 of the permit, the Superfund exemption in the permit clouds that requirement by suggesting implicitly that some discharges of hazardous substances – those that might recontaminate a Superfund site that is not in Appendix P – are allowed under this permit and therefore need not be reported.

Finally, and relatedly, EPA should clarify that discharges under this MSGP, and particularly any discharges to a CERCLA site that obtain coverage under this general permit (i.e. discharges to sites not listed in Appendix P), are not federally permitted releases within the meaning of Section 103 of CERCLA exempt from CERCLA and EPCRA reporting requirements. EPA notes in its accompanying fact sheet that "The Western District of the US District Court in Washington found the Washington Department of Transportation's discharges under its MS4 Phase 1 permit were federally permitted releases." Fact Sheet p. 13 of 76. EPA should avoid creating a similar situation under the MSGP where the federal courts are left to interpret the permit's terms and determine whether discharges of hazardous substances from MSGP covered facilities are or are not federally permitted releases within the meaning of Section 103 of CERCLA. As EPA makes plain in the fact sheet, the MSGP is not designed to address or control discharges of hazardous substances. The MSGP should not inadvertently become an obstacle to efforts to protect the public from releases of such substances.

Section 101(10) of CERCLA (42 USC 9601(10) defines a "federally permitted release" exempt from reporting requirements as:

"The term "federally permitted release" means (A) discharges in compliance with a permit under section 1342 of Title 33, (B) discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a permit issued or modified under section 1342 of Title 33 and subject to a condition of such permit, (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 1342 of Title 33, which are caused by events occurring within the scope of relevant operating or treatment systems,"

The definition of a "federally permitted release" in CERCLA § 101(10) clearly suggests that Congress contemplated that the discharges eligible from this exemption would be discharges of pollutants that were brought to the attention of and evaluated by a CWA regulatory authority. For example, Congress referred to "discharges resulting from circumstances *identified and*

reviewed and made part of the public record with respect to a permit . . . and subject to a condition of such Permit," as well as "continuous or anticipated intermittent discharges from a point source, *identified in a permit or permit application*. . . ." (emphasis added).⁷⁵ For EPA to immunize thousands of discharges as "federally permitted releases" from CERCLA liability in an instant, by issuing a broad general permit that relies heavily on self-reporting and self-assessment, that does not require monitoring for most hazardous substances, and that involves no initial analysis of the discharge at covered sites by EPA or any delegated NPDES permitting agency, defeats the intent and the purpose of the legal framework for pollution control developed by Congress in the Clean Water Act and CERCLA. It would mean that hundreds of hazardous waste generators, transporters, and disposers could immunize themselves from CERCLA liability by submitting a Notice of Intent. EPA would tear a gaping hole at in the fabric of environmental regulation right at the seam where CERCLA and the Clean Water Act overlap.

Congress crafted the federally permitted release exemption to CERCLA carefully, to cover discharges of pollutants that had been thoroughly evaluated by a regulator and subjected to reasonable water pollution controls embodied in the technology and water-quality based effluent limits of a NPDES permit, which in most cases are numeric. EPA is well aware that the MSGP for industrial stormwater does not involve that level of analysis and careful control. And as EPA notes in the accompanying fact sheet, it has observed rising levels of contamination in sediments driven by "toxic pollutants in stormwater discharges from NPDES-permitted municipalities and industrial sites . . . These toxic pollutants can bioaccumulate . . . [a]dditionally these pollutants may, after reaching certain concentrations, adversely impact the survival, growth or reproduction of aquatic species directly exposed to the contaminated sediment." Fact Sheet p. 13 of 76. The MSGP is a blunt instrument; EPA knows that the MSGP cannot assure protection against the kind of environmental contamination that CERCLA was designed to address. Thus, EPA explains in the fact sheet that:

EPA is concerned that current 2008 and proposed 2013 Multi-Sector General Permit requirements may not adequately prevent toxic pollutants in stormwater discharges from causing sediment contamination and recontamination of Superfund cleanup sites and/or presenting an imminent and substantial endangerment to human health or welfare or the environment.

Therefore, EPA should add a clarification to the permit that discharges of reportable quantities of hazardous substances and oil are not in compliance with or covered under the MSGP. Further, because the MSGP does not adequately control releases of hazardous substances at levels that can assure protection of public health and the environment from either imminent or long-term endangerment, EPA should clarify that a discharge covered by the general permit is not a "federally permitted release" within the meaning of CERCLA §§101 and 103.

V. Public Involvement and Public Access to Information.

⁷⁵ 42 USC 9601(10).

The proposed permit impermissibly limits meaningful public participation. Commenters applaud the move to required electronic filing of the NOI in the proposed MSGP. But by not requiring that the SWPPP also be made available electronically, the proposed MSGP impermissibly curtails the public's ability to inform itself of the risks of activities or enforce the Clean Water Act. Public access to information about discharges that may affect waters that citizens use for fishing, swimming and drinking is crucial to, and a fundamental tenant of, effective environmental protection. Citizen action is a "proven enforcement tool" that "Congress intended [to be used...] to both spur and supplement government enforcement actions."⁷⁶ In particular, the proposed MSGP's failure to provide an opportunity for public comment on each facility's Storm Water Pollution Prevention Plan ("SWPPP") along with the Notice of Intent ("NOI") contravenes the CWA's unambiguous requirements that "[a] copy of each permit application and each permit issued [under section 402] shall be available to the public," 33 U.SC. 1342(j). Further, all monitoring data, reports and plans required to be filed with EPA pursuant to the permit and/or SWPPP should be posted electronically for the public to access.

A. Stormwater Pollution Prevention Plans Should be Online and Publically Accessible

The proposed permit should require concurrent public availability and opportunity for comment on the NOI and the SWPPP, both of which should be posted electronically on EPA's website. Because the proposed permit fails to ensure an opportunity for the public to review and comment on SWPPPs, citizens may be precluded from legally challenging the sufficiency of SWPPPs. Instead, citizens will be limited to enforcing the procedural requirement of developing a SWPPP and having it on file.

Under Section 5 of the proposed MSGP ("Stormwater Pollution Prevention Plan (SWPPP)"), a facility owner or operator seeking coverage under the MSGP must prepare a SWPPP "<u>before</u> submitting [its] NOI." (Emphasis in original). The applicant's compliance with this prerequisite to the filing of its NOI should be clearly demonstrated by requiring the applicant to post online an electronic copy of the SWPPP that it has developed and implemented.

The inclusion of general information from the applicant's SWPPP in the NOI does not suffice to demonstrate that the applicant has in fact developed and implemented a SWPPP that complies with the requirements of Sect 5 of the proposed MSGP. The Commenters' agree with EPA's observation in Section IX.A of the proposed 2013 MSGP Fact Sheet that "SWPPPs [...] are often found to be generic / minimal[.]" Requiring the applicant to provide a link to an online copy of its SWPPP would allow both EPA and the public to examine the SWPPP and make a determination as to whether the SWPPP complies with the requirements of the proposed MSGP and the CWA.

Only those MSGP applicants who request and receive a waiver from the electronic reporting requirement under Section 7.1 of the proposed MSGP should be excused from a requirement that their SWPPPs be publically available online. As a minimum acceptable alternative, applicants who do not provide a URL linking to an electronic copy of their SWPPP

⁷⁶ CWA Amendments of 1985, Senate Environment and Public Works Comm., S.Rep. No. 50, 99th Cong., 1st Sess. 28 (1985).

must be required to produce to members of the public, upon request, a copy of the SWPPP and such applicants should be subject to a sixty-day waiting period before their discharges are covered under the MSGP in order to allow time for EPA and the public to obtain and review a copy of the SWPPP.

This comment regarding the need for the applicant's SWPPP to be online and readily available to EPA and the public relates to several sections of the proposed MSGP and the NOI Form, as follows:

- Proposed MSGP § **5.1** *Person(s) Responsible for SWPPP Preparation.* "[...] *If EPA concludes that the SWPPP is not in substantial compliance with Part 5.2 of this permit, EPA may require the SWPPP to be reviewed, amended as necessary, and certified by a Professional Engineer"*
 - Commenters note that neither EPA nor citizen enforcers can make this conclusion without having had an opportunity to review the SWPPP, which requires that the SWPPP be publically available online.
- Proposed MSGP § **5.4 SWPPP** Availability. "Regardless of the format, the SWPPP must be immediately available to facility employees, EPA, a state or tribe, the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection."
 - Commenters note that the public should be added to the list of people to whom the SWPPP must be made available. Moreover, immediate availability of the SWPPP will be ensured by requiring that the facility's SWPPP be publically available online.
- Proposed MSGP § 5.4.1 SWPPP Posting on the Internet.
 - Commenters note that this should be the only option for applicants, unless the applicant receives a waiver from the electronic reporting requirements pursuant to MSGP § 7.1.
- Proposed MSGP § 7.1 Electronic Reporting Requirement.
 - Commenters note that the SWPPP URL should be required on the electronically foiled NOI should be required unless the applicant receives a waiver from the electronic reporting requirements pursuant to MSGP § 7.1.
- Proposed MSGP § 7.3 Additional SWPPP Information Required in Your NOI "If you did not provide a SWPPP URL in your NOI per Part 5.4.1, your NOI must include the additional SWPPP information"

- Commenters note that it will both be more efficient and produce better outcomes if a SWPPP is publically available online at the outset. As a minimum acceptable alternative, EPA should require a 60-day waiting period before coverage under the permit becomes effective for those facilities that fail to provide a SWPPP URL in their NOIs (as in the 2008 MSGP), in order to allow EPA and citizens sufficient time to obtain and examine the facility's SWPPP.
- Commenters further note that the list of additional information required to be included in the NOI should include an electronic copy of the facility's engineered site plan, showing at a minimum all the information listed at § 5.2.2 of the proposed MSGP.
- Appendix G: Notice of Intent (NOI) Form
 - Commenters note that under Subsection F of the NOI, Option 2 allowing for the provision of selected or summarized information from the facility's SWPPP should only be available after receiving a waiver from the electronic reporting requirements pursuant to MSGP § 7.1.

B. All Monitoring Data, Reports and Plans Should be Online and Publically Accessible

The proposed permit's failure to ensure public availability of monitoring data further curtails public participation and citizen enforcement. All monitoring data, reports and plans required to be filed with EPA pursuant to the permit and/or SWPPP should be posted electronically for the public to access.

This comment regarding the need for the applicant's monitoring data, reports and plans to be online and readily available to EPA and the public relates to several sections of the proposed MSGP, as follows:

- **4.3 Corrective Action Documentation.** You must document the existence of any of the conditions listed in Part 4.1 within 24 hours of becoming aware of such condition. You are not required to submit your corrective action documentation to EPA, unless specifically requested to do so.
 - Commenters note that permittees should be required to post corrective action documentation online and such documentation should be readily available to EPA and the public in order demonstrate that corrective action has been taken and facilitate a review of the adequacy of the corrective action.

• 7.4 Reporting Monitoring Data to EPA.

• Commenters note that under the 2008 MSGP, monitoring data was not being processed, compiled, and stored "in-house" at EPA, but rather was processed, compiled, and stored by a third party private contractor that then sold the

monitoring data back to EPA upon request. Commenters note that this practice should cease, as it is both inefficient and a waste of public funds. EPA should itself maintain all records and monitoring data under the MSGP.

• 7.5 Annual Report.

• Commenters note that each facility's annual report should be publically available online.

• 7.6 Exceedance Report for Numeric Effluent Limits.

• Commenters note that exceedance reports should be electronically filed and publically available online.

• 7.7 Additional Reporting.

• Commenters note that all of the items required to be reported under § 7.7 should be electronically filed and publically available online.

VI. PAHs Discharged From Coal Tar Sealed Surfaces At Industrial Facilities

A. EPA should establish a non-numeric effluent limit that categorically prohibits the use of coal tar sealants on *all* paved surfaces at industrial facilities.

In the Fact Sheet, EPA states concern that, notwithstanding the proposed effluent limitations for this MSGP, the discharge of stormwater associated with industrial activity will continue to cause sediment contamination at levels that pose an imminent and substantial endangerment to health and the environment.⁷⁷ EPA is right to be concerned. Fortunately, there is at least one easy, cost-effective step EPA can make to significantly affect this risk: EPA can eliminate the significant volume of PAHs discharged in industrial stormwater that originates in coal tar pavement sealants.

Many of the outdoor surfaces at industrial facilities are paved. A large number of these paved surfaces are also "sealed" – covered with a thin coating called pavement sealant (or pavement sealcoat). Across the United States, many of the pavement sealants marketed for use at industrial facilities are made from refined coal tar – a toxic by-product of the coal coking process that is also referred to as coal tar pitch or RT-12. The Pavement Coating Technology Center, an industry trade group, estimates that 85 million gallons of coal tar pavement sealants are sold nationwide each year.⁷⁸ A significant fraction of this sealant is used on pavements at industrial facilities, ranging from airports to factories. Coal tar pavement sealants frequently

⁷⁷ See Fact Sheet at 13.

⁷⁸ See Cheryl Hogue, "Dustup Over Pavement Coatings; Texas city tracks stream pollution to sealant, then bans coal-tar-based coating" 85 *Chem. & Eng 'g News* 61 (2007), available at http://pubs.acs.org/cen/government/85/8507gov1.html.

contain hundreds or thousands of times more polycyclic aromatic hydrocarbons (PAHs) than competing sealant products made from asphalt or acrylic.⁷⁹

Coal tar sealants are a threat to public health and the environment because they release significant quantities of toxic and carcinogenic PAHs into the environment. EPA believes that at least seven of the PAHs found in coal tar pavement sealants are probable human carcinogens. And in 2013, EPA announced it was changing the characterization of one PAH in coal tar sealant, benzo(a)pyrene, from a "probable" to a "known" human carcinogen.

Once applied to pavement, coal tar based sealants begin to degrade under the heavy friction of vehicles. In recent years, the U.S. Geological Survey (USGS) has concluded that as these sealants degrade into microscopic dust particles they release millions of pounds of PAHs into stormwater discharges that then enter nearby urban and suburban environments. In 2010, the USGS concluded that coal tar pavement sealants are primarily responsible for an upward trend in the PAH concentrations of urban and suburban waterbodies across much of the United States.⁸⁰ In 2011, EPA released a study confirming that coal tar pavement sealants release hundreds of times more PAHs into the environment than other kinds of sealant.⁸¹ And in 2009, the National Research Council noted that:

Unsealed parking lots receive PAHs from the same urban sources as do [coal tar] sealed parking lots (e.g., tire particles, leaking motor oil, vehicle exhaust, and atmospheric fallout), and yet the average yield of PAHs from the sealed parking lots was found to be 50 times greater than that from the control lots.⁸²

In 2012, the USGS concluded that the toxic dust from coal tar pavement sealant is settling in homes and is the most important PAH exposure pathway for many infants and small children. "Children living adjacent to pavement with coal tar-based sealant likely are exposed to about 14-fold higher doses of PAHs through ingestion of contaminated house dust than are children living in residences adjacent to unsealed pavement, and that exposure from ingestion of PAH-contaminated house dust is estimated to be more than double that from diet, even under conservative assumptions."⁸³ Other studies show that aquatic ecosystems contaminated with PAH-laden sealants are less biologically robust, and that animals exposed to these degraded sealants suffer from problems including developmental delays and stunting, poor reflexes, tumors, and early death.⁸⁴

⁷⁹ The exact ratio depends on the formulation of the two products being compared. *See* Peter C. Van Metre, Barbara J. Mahler, "Contribution of PAHs from coal–tar pavement sealcoat and other sources to 40 U.S. lakes," 409 *Science of the Total Environment* 334, 335 (2010). There are also alternative sealant products on the market that are entirely PAH free.

⁸⁰ See, e.g. Peter C. Van Metre, Barbara J. Mahler, "Contribution of PAHs from coal-tar pavement sealcoat and other sources to 40 U.S. lakes," 409 Science of the Total Environment 334, 335 (2010).

⁸¹ Assessment of Water Quality of Runoff From Sealed Asphalt Surfaces, EPA, September 2011, available at *www.epa.gov/ORD/NRMRL/pubs/600r10178/600r10178.pdf*

⁸² USM at 191.

⁸³ Mahler, B.J.; Van Metre, P.C.; Crane, J.L.; Watts, A.W.; Scoggins, M.; Williams, E.S., "Coal-tar-based pavement sealcoat and PAHs: Implications for the environment, human health, and stormwater management," 46(6) *Environ. Sci. & Technol.* 3039, 3043(2012).

⁸⁴ See id.

A 2013 study that involved a collaboration of scientists at Baylor University and the USGS concluded that children exposed to soil and house dust contaminated by coal tar sealants take in the vast majority of their total lifetime dose of PAHs at an early age. At the extreme, those children in the 95th percentile for total lifetime dose of PAHs (reasonable maximum exposure) take in 50% of those PAHs between ages 0 and 6 and 80% of the total estimated reasonable maximum exposure dose between ages 0 and 18. Even the median child growing up in the presence of coal tar affected soil and house dust has an estimated lifetime dose of PAHs 38 times higher than a child growing up away from these sources of coal tar. The researchers calculated that these early exposures to PAH dramatically increase the risk of developing a PAHrelated cancer by age 70, from less than one in a million with no coal tar sealant exposure, to nearly one in ten thousand in the median case, and to more than one in ten thousand for the most exposed children.⁸⁵

The presence of PAHs from coal tar pavement sealant in runoff also raises stormwater management costs, including the cost of managing and remediating polluted sediments trapped in stormwater control systems, as well as polluted street sweeping debris. A number of jurisdictions have reported widespread PAH impairments:

- The Minnesota Pollution Control Agency has found PAH impairments throughout Minnesota's urban watersheds that are attributable to urban runoff, and to the use of coal tar sealants in particular.⁸⁶
- Urban runoff is estimated to account for 36% of the total PAH input into Rhode Island's Narragansett Bav.⁸⁷
- In Florida, PAH impacts were discovered in soils adjacent to and beneath an asphalt parking lot of a former retail shopping center. Concentrations adjacent to the parking lot decreased with increasing distance from the parking lot.⁸⁸
- In 2003, Ohio EPA assessed PAH concentrations in the Mad River Basin and found that a large proportion of the samples contained PAH concentrations that were greater than the Probable Effects Concentration (PEC) guidance values published in the academic literature.⁸⁹

⁸⁵ Williams, E.S., Mahler, B.J.; Van Metre, P.C.; "Cancer Risk from Incidental Ingestion Exposures to PAHs Associated with Coal- Tar Sealed Pavement," 47 (2) Environ. Sci. & Technol. 1104 (2013).

⁸⁶ Minnesota Pollution Control Agency, Contamination of Stormwater Pond Sediments by Polycyclic Aromatic Hydrocarbons (PAHs) in Minnesota (2010), available at: http://www.leg.state.mn.us/docs/2010/other/100587.pdf ⁸⁷ Christopher M. Teaf, "Polycyclic Aromatic Hydrocarbons (PAHs) in Urban Soil: A Florida Risk Assessment

Perspective," 1 International Journal of Soil, Sediment and Water, Article 2, at 5, http://scholarworks.umass.edu/intljssw/vol1/iss2/2 (2008).

⁸⁸ *Id.*, at 11. ⁸⁹ *Id.* at 9.

• Virginia DEQ has determined that the principal aquatic stressors impacting the Lewis Creek Watershed are lead, total PAHs and sediments.⁹⁰

Many of these PAH impairments are attributable to stormwater runoff from paved surfaces. And as research performed by both EPA and USGS shows, there is a high likelihood that a significant fraction of the PAH runoff from paved surfaces is attributable to the use of coal tar sealants.

There are safer and widely-used alternatives to coal tar based products, including asphaltbased and PAH-free sealants. Sealants made with asphalt instead of coal tar, for example, contain 1000 times fewer PAHs but are similar in cost and performance. Even after coal tar is refined and diluted into a final paving product, analysis of scrapings from different parking lots shows that coal tar sealants contain between 3.4% and 20% total PAHs by weight, while asphalt sealants range from 0.03% to 0.66% total PAHs by weight.⁹¹ Historically, asphalt-based sealants have dominated the western U.S. market, while coal tar sealants have been more prevalent east of the Rocky Mountains. In cities and states where coal tar sealants already are banned, they have been replaced with asphalt-based sealants without any reported disruption.

The Clean Water Act obligates EPA to ban the use of coal tar pavement sealants at industrial facilities in this MSGP. EPA regulations require that a general NPDES permit contain appropriate technology-based effluent limits.⁹² A general permit does not meet the BAT effluent standard unless it includes an effluent limitation prohibiting the use of coal tar sealants because any user of coal tar pavement sealant can easily and cost-effectively eliminate a major source of PAHs simply by switching to an asphalt or PAH-free sealant product. There are no technical, engineering, or economic considerations preventing such a switch, and the alternatives are widely available. A prohibition on the use of coal tar pavement sealants is the best available technology to prevent this source of PAH discharge from industrial facilities.

Further, a general NPDES permit must contain water quality based effluent limits for pollutant discharges that have a reasonable potential to cause or contribute to a violation of water quality standards.⁹³ Coal tar pavements sealants create a reasonable potential for stormwater discharges from paved surfaces to cause or contribute to violations of water quality standards. For instance, lab studies indicate that exposure to coal tar pavements sealants containing PAHs can have adverse effects on some amphibians species.⁹⁴ Field studies indicate that aquatic habitats contaminated by pavement sealants score lower on several measures of ecosystem health including abundance of organisms, species richness, and presence of sensitive species.⁹⁵ In three

⁹⁰ *Id.*

⁹¹ See Barbara J. Mahler, Peter C. Van Metre, Thomas J. Bashara, Jennifer T. Wilson, and David A. Johns, "Parking Lot Sealcoat: An Unrecognized Source of Urban Polycyclic Aromatic Hydrocarbons," 39 Envtl. Sci. Tech. 5560, 5563 (2005). ⁹² See 40 C.F.R. § 122.44(a).

⁹³ See 40 C.F.R. §122.44(d)(1)(iii).

⁹⁴ See Pamela J. Bryer, Jan N. Elliott and Emily J. Willingham, "The Effects of Coal Tar Based Pavement Sealer on Amphibian Development and Metamorphosis," 15 Ecotoxicology 241, 245 (2006) (developmental impairments in frogs).

⁹⁵ See M. Scoggins, N.L. McClintock, L. Gosselink, and P. Bryer, "Occurrence of polycyclic aromatic hydrocarbons below coal-tar-sealed parking lots and effects on stream benthic macroinvertebrate communities," 26

of six recently-tested watersheds in US central and eastern cities, where coal tar sealcoats are commonly used, sedimentary PAH concentrations exceeded the "Probable Effects Concentration" (PEC) of 22.8 ppm.⁹⁶ Therefore, the MSGP must control the discharge of PAHs by banning the use of coal tar pavement sealants in order to meet the Clean Water Act's water quality based provisions.

To implement this suggestion, commenters request that EPA modify the MSGP to contain, as a BMP and a non-numeric effluent limit, a categorical prohibition on the use of coal tar based pavement sealants at all covered facilities. Relatedly, EPA should modify Section 1.1.3 of the MSGP to note that pavement wash waters from coal tar sealed parking lots are not eligible for coverage under this permit, no matter what cleaning agents are used.

Second, commenters ask that EPA use its residual designation authority to extend a ban on the use of coal tar sealants to all paved surfaces at industrial sites. In other words, EPA should not only ban the use of coal tar pavement sealants on paved areas that are traditionally within the definition of an area dedicated to industrial activity, it should also extend the ban to other paved surfaces at industrial facilities such as employee parking lots. In establishing the 1999 Phase II stormwater regulations, EPA determined that administrative and employee parking lots are non-industrial areas and are not subject to industrial stormwater permit requirements.⁹⁷ But EPA explained that its decision to exclude employee parking lots and similar paved surfaces from permitting was based on the lack of "data indicating that discharges from these areas at an industrial facility cause significant receiving water impairments."98 Today, EPA has access to a considerable volume of data, compiled by the USGS and others, indicating that even a single employee or administrative parking lot can cause a significant receiving water impairment for PAHs if it is sealed with a coal tar pavement sealant. Thus, EPA has ample reason to address this regulatory lacuna. EPA also has clear authority under its reservation of residual authority.⁹⁹ Therefore, commenters request that EPA revise the MSGP to ban the use of coal tar pavement sealants on every paved surface at industrial facilities, including administrative and employee parking lots and similar areas.

Preventing pollution through a prohibition on the use of coal tar sealants at the source is by far the most cost-effective pollution reduction measure that EPA can take. Rather than passing on an unfunded mandate to clean up PAHs to local governments and MS4 operators that receive the PAH-contaminated discharge from industrial facilities, EPA should include a prohibition on the use of coal tar sealant in this MSGP.

J. N. Am. Benthological Soc'y 694, 703 (2007); Pamela J. Bryer, Mateo Scoggins, Nancy L. McClintock, "Coal-tar based pavement sealant toxicity to freshwater macroinvertebrates," 158 *Envtl. Pollution* 1932, 1935-36 (2010). ⁹⁶ *See* Peter C. Van Metre, Barbara J. Mahler and Jennifer T. Wilson, "PAHs Underfoot: Contaminated Dust from Coal-Tar Sealcoated Pavement is Widespread in the United States," 43 *Envtl. Sci. Tech.* 20, 22-23 (2009). ⁹⁷ *See* 40 C.F.R. § 122.26(b)(14).

 ⁹⁸ EPA, "National Pollutant Discharge Elimination System – Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges," 64 Fed. Reg. 68,722, 68,783 (Dec. 8, 1999).
⁹⁹ See 40 C.F.R. 122.26(a)(9).

B. EPA must ensure that its ongoing ESA Section 7 review of this MSGP covers the impact of PAHs discharged from permitted facilities into designated critical habitat for endangered sturgeon.

In the Fact Sheet, EPA notes that "[c]onsistent with Section 7(a)(2) of the Endangered Species Act (ESA), EPA has initiated and is in the process of consulting with the U.S. Fish and Wildlife Service (FWS) and NOAA Fisheries (previously referred to as the National Marine Fisheries Service), both collectively known as the 'Services."¹⁰⁰ In light of the widespread discharge of PAHs from coal tar sealed pavements at industrial facilities, EPA should ensure that its consultation on this permit's impacts specifically addresses the impact of PAH discharges on sturgeon, particularly sturgeon populations in stretches of the Connecticut river running through Massachusetts and New Hampshire where EPA Region 1 is the NPDES permitting authority.

Two ESA-listed species of sturgeon, the shortnose and Atlantic sturgeon, are found in major rivers on the east coast, notably in the Connecticut River, which for much of its length runs through states in which EPA is the primary NPDES permitting authority. As large, long-lived benthic feeders, sturgeon are known to be adversely affected by the accumulation of persistent organic pollutants, including polycyclic aromatic hydrocarbons (PAHs). Sturgeon larvae are also acutely sensitive to PAHs. PAH exposure in the doses associated with coal tar contaminated sediments has been found to cause upwards of 90% mortality in sturgeon larvae.¹⁰¹

In 2012, EPA Region 1 completed a Biological Assessment for reissuance of a NPDES permit to the Mount Tom Generating Station, located on the Connecticut River.¹⁰² The Assessment notes that listed sturgeon species in EPA-regulated stretches of the Connecticut River are adversely affected by PAHs in the river's sediment. EPA attributes these PAHs to historic coal tar deposits:

Coal tar deposits released in the Connecticut River have likely affected spawning success, egg survival and/or larval development. Coal tar contains toxic Polycyclic Aromatic Hydrocarbons (PAHs) that are known to be carcinogenic. Other pollutants in the Connecticut River, such as polychlorinated biphenyls (PCBs), could affect shortnose sturgeon reproduction as well. In the Connecticut River, coal tar leachate was suspected of impairing sturgeon reproductive success. Kocan et al. (1993) conducted a laboratory study to investigate the survival of sturgeon eggs and larvae exposed to PAHs, a by-product of coal distillation. Only approximately 5% of sturgeon embryos and larvae survived after 18 days of exposure to Connecticut River coal-tar (i.e., PAH) demonstrating that contaminated sediment is toxic to shortnose sturgeon embryos and larvae under

¹⁰⁰ Fact Sheet at 70.

¹⁰¹ See R.M. Kocan, M.B. Matta, and S.M. Salazar, "Toxicity of Weathered Coal Tar for Shortnose Sturgeon (*Acipenser brevirostrum*) Embryos and Larvae," 31 *Archiv. Envt'l. Contamination & Toxicology* 161 (1996) (attached to comments as exhibit).

¹⁰² See EPA Region 1, Water Permits Branch, Office of Ecosystem Protection, "Biological Assessment Mount Tom Generating Station National Pollution Discharge Elimination System Permit Reissuance (Permit No. MA0005339)," dated May 25, 2012.

laboratory exposure conditions (NMFS 1998). There are several known coal tar contaminated sites below the Holyoke Dam that have only recently begun to be cleaned up. It is likely that these sites as well as any others have had adverse effects on any shortnose sturgeon present in the action area over the years.¹⁰³

While EPA Region 1 attributed harmful PAH concentrations in Connecticut River sediments to historic contamination, the USGS has extensively evidence that PAH concentrations are still rising in many eastern waterbodies. USGS attributes this squarely to the use of coal tar pavement sealant on paved surfaces – including the paved surfaces at industrial facilities. The USGS estimates that coal tar sealant use is likely the largest contributing source of PAH contamination in recent sediments.

Therefore, PAHs discharged from industrial facilities regulated under this MSGP that use coal tar pavement sealants likely have a direct and adverse effect on sturgeon. In consulting with the Services, EPA must evaluate whether the agency's decision to issue a MSGP that does not control the discharge of PAHs from industrial facilities with coal tar sealed pavements "is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat."¹⁰⁴ In particular, EPA must evaluate the impact of PAHs discharged from coal tar sealed pavements at industrial facilities in the Connecticut River and in listed sturgeon habitats throughout the eastern United States.

VII. Other Concerns

A. Appendix K, the "No Exposure Certification Form," should be modified to clarify that the discharge in storm water runoff of particles or residuals from roof stacks and/or vents not otherwise regulated will preclude eligibility for the No Exposure Exclusion.

This clarification is consistent with section 3.2.1 of EPA's June 2000 Guidance Manual for Conditional Exclusion from Storm Water permitting Based on "No Exposure" of Industrial Activities to Storm Water ("No Exposure Exclusion Guidance"), which states:

Deposits of particles or residuals from roof stacks/vents not otherwise regulated and which could be mobilized by storm water runoff, are considered exposed.

It is also consistent with section 3.2.2 of the No Exposure Exclusion Guidance, which recognizes that "dissolved metals or other contaminants [on roofs] that could cause or contribute to a water quality violation" will preclude certification of no exposure.

Industrial stormwater is likely to be highly contaminated by pollutants released from air stacks or vents on enclosed facilities. As is evident from EPA's Toxic Release Inventory database, many facilities in the categories of industry subject to the terms of the Multi-Sector Permit release pounds – even tons – of heavy metals through their stacks and vents every year.

¹⁰³ *Id.* at 35.

¹⁰⁴ 50 C.F.R. § 402.14(g)(4).

Often these stacks and vents are not even covered by an air permit. Heavy metals emitted from the stacks and vents of these facilities settle on the facilities' roofs or grounds, become mobilized by precipitation, and are discharged untreated and undetected into waters of the United States. Mobilized pollutants from stack and vent emissions are a significant source of water pollution and should be monitored and controlled to the maximum extent practicable. The mere fact that a facility is enclosed does not mean it is not a significant contributor of pollutants to waters of the United States. Similarly, the mere fact that stack and vent pollution of storm water may not be visible to the naked eye does not mean that it is not present in unacceptable and harmful amounts.

As currently drafted, the conditional no exposure exclusion will effectively excuse several categories of industry from the important provisions of the Multi-Sector Permit. These categories of industry are those that traditionally carry out industrial activities indoors and vent their industrial byproducts such as heavy metals to the air through stacks and vents.

EPA should modify section 1.4 of the Permit to make clear that appropriate monitoring should be completed prior to certification of no exposure where a facility has roof vents or stacks from industrial processes. This monitoring should consist of at least round of sampling of the following parameters:

(a) any parameters for which EPA has established effluent or benchmark limits for the relevant category of industry;

(b) any applicable impairment pollutants;

(c) any heavy metal the company has reason to believe it is emitting into the air; and (d) TSS.

We further propose the following change to the language of the last row of Section E, the "Exposure Checklist" section of the No Exposure Certification Form:

Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and present evident in the storm water outflow. Note: Deposits of particles or residuals from roof stacks/vents not otherwise regulated and which could be mobilized by storm water runoff, are considered exposed.

B. Comment on eNOI process

In the Fact Sheet, EPA states that permittees will input information about the location of their outfalls into the eNOI system, and the system "will use outfall location information to automatically determine the receiving waters the site discharges to and the impairment status." Although EPA's move to electronic permitting strengthens the program overall, in the experience of commenters, facility operators frequently make errors when reporting the latitude and longitude of their outfalls. These range from omitting the coordinates entirely to using a different coordinate system from the one the agency requested. Therefore, commenters suggest that EPA should not rely exclusively on the accuracy of the coordinates provided by permittees. The paper NOI (Appendix G) seeks information on the receiving waterbody for each outfall—

the eNOI system should request something similar, so that information is at least available to EPA if the eNOI submission process generates questionable results.

C. Comment on 2.1.2.6 – Management of Runoff

The permit encourages infiltration of stormwater as a tool for minimizing pollutants in discharges. Generally, encouraging the infiltration of runoff in urban areas is preferable to rapidly discharging large volumes of stormwater into aquatic ecosystems. But many MSGP covered facilities generate contaminated runoff containing dissolved pollutants that can form plumes in groundwater. Management of runoff in this situation must be carefully controlled.

First, the Fact Sheet mentions the possibility that infiltration systems may qualify as Class V wells under the Underground Injection Control program. Experience indicates that the UIC program is not widely understood by permittees. Instead of discussing this only in the Fact Sheet, EPA should include a reference to the UIC program and the possibility that infiltration devices may be regulated as Class V wells in the general permit, and in the online eNOI submission process.

Second, how does EPA propose to address and control dissolved pollutants in discharges from MSGP permitted facilities that are deliberately infiltrated to ground? Presumably, EPA does not think it appropriate for permittees to infiltrate stormwater containing water soluble organic pollutants or metals that could form a contaminant plume if a facility overlies underground sources of drinking water, or if a facility is close to a surface water and discharges into groundwater that is directly hydrologically connected to that surface water.

To control infiltration risks, EPA should require permittees to use the results of their pollutant characterization efforts in their SWPPP to analyze the likelihood that any infiltrated stormwater is contaminated with soluble pollutants, EPA should establish clear numeric thresholds for such dissolved pollutants, and should require as a non-numeric technology based effluent limitation that permittees not use infiltration as a control measure for discharges whose concentration of dissolved pollutants exceeds or is likely to exceed the thresholds.

Finally, EPA's long-standing and court-approved interpretation of the Clean Water Act is that the Act applies "to discharges of pollutants from a point source via ground water that has a direct hydrologic connection to surface water."¹⁰⁵ Accordingly, where a permittee chooses to manage polluted stormwater by infiltrating it into groundwater that is directly hydrologically connected to surface waters, EPA should clarify in the permit, or in its response to comments, that the infiltration system in question is an *outfall*. As such, discharges to the infiltration system are subject to monitoring requirements like any other outfall.

¹⁰⁵ See EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960, 3017 (Jan. 12, 2001).

VIII. Summary of Requests

For convenience, the requests made above for EPA to take further action or to clarify or revise the terms of the MSGP are collected here. Commenters ask that EPA:

- 1. Include numeric effluent limitations in this MSGP
- 2. Set effluent limitations through a nationally applicable regulation, not in general permits that cover only a limited number of sites within a larger class or category of dischargers.
- 3. Carry out a Best Available Technology analysis and establish technology-based effluent limits based on the results or that analysis
- 4. Consider replacing the multi-sector general permit with sector-specific general permits.
- 5. Break the very large class/category of "discharges of stormwater associated with industrial activities" into smaller groups within the MSGP and begin setting BAT effluent limits for these smaller groups
- 6. Modify the first sentence in section 2.1 of the proposed MSGP as follows to clarify that the *initial* selection of control measures should be calculated to minimize pollutant discharges:

a. "You must select, design, install, and implement control measures (including best management practices) to <u>minimize pollutant discharges</u>, address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in Part 2.1.2, meet limits contained in applicable effluent limitations guidelines in Part 2.1.3, and meet the water quality-based effluent limitations in Part 2.2."

- 7. Include in Part 4 of the MSGP a requirement for any covered facility that is required to conduct a review pursuant to Section 4.1 to continue its corrective action process until it has either met benchmarks or has exhausted all of the BMPs that EPA identifies as available for the industrial sector.
- 8. To ensure that permittees progress through their available options in a timely manner and select sufficiently aggressive BMPs, EPA should specify in Part 4 of the permit that exceeding benchmarks a second time, i.e. after corrective action is taken, is a violation of the permit.
- 9. In Section 6.2.1.2 of the Permit, which covers required benchmark monitoring, EPA should specify that it is a violation of the permit for any permittee to conclude its corrective action process with a determination "that no further pollutant reductions are technologically available and economically practicable and achievable in light of

best industry practice" without having first exhausted all of the BMPs that EPA has identified as available for the industrial sector.

- 10. In Section 6.2.1.2 of the Permit, which covers required benchmark monitoring, EPA should specify that it is a violation of the permit for any permittee to conclude its corrective action process with a determination "that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice" without having first exhausted all of the BMPs that EPA has identified as available for the industrial sector.
- 11. Complete the process of establishing improved monitoring requirements
- 12. Conduct a Reasonable Potential Analysis before issuing a final permit, beginning with a complete review on a sector by sector basis of the different pollutants likely to be present in discharges of stormwater associated with industrial activity.
- 13. Once the RPA is completed, revise the MSGP's monitoring requirements to require monitoring in each sector for all pollutants likely to be present and with reasonable potential to be discharged at high concentrations, including but not limited to the following:

a. **PAHs**: Monitoring for PAHs at all industrial facilities that have applied pavement sealant (see below)

b. **Zinc**: Monitoring at all industrial facilities, because of the prevalence of zinc in discharges from uncoated galvanized metal surfaces, including roofs;

c. **Iron:** Monitoring at all industrial facilities because its widespread occurrence and high oxidation rate make it a very useful indicator of broader pollution concerns.

d. **Copper:** monitoring at water transportation and boat building and repair facilities because of the presence of copper-based anti-fouling paints on marine vessels.

e. **BOD, COD, and Total Nitrogen**: monitoring at all facilities in order to flag the possible release of a wide variety of pollutants that contribute to low dissolved oxygen, which is perhaps the most common impairment in the country. Additionally, these parameters are helpful in identifying illicit discharges to stormwater outfalls and discharges from improperly maintained septic systems.

f. **Mercury:** monitoring at auto salvage yards because of the presence of mercury switches

g. **PCBs:** monitoring at scrap metal facilities because of the presence of scrapped equipment with a higher likelihood of PCB contamination

h. Volatile and Semi-Volatile Organic Compounds: Monitoring at all industrial facilities, because of the prevalent use of VOC's and Semi-VOCs including but not limited to acetone and toluene.

- 14. Require sufficient monitoring to assure that a facility is not causing or contributing to water quality exceedances and to evaluate whether a facility is complying with the WLA assigned to it.
- 15. Set out deadline for completion, opportunity for public input, and hearing process for the Reasonable Potential Analysis and modify the following sections of the proposed MSGP to cure the impermissible degree of discretion to EPA:

a. **6.2.4.1 Permittees Required to Monitor Discharges to Impaired Waters.** *Permittees should consult the appropriate EPA Regional Office for any available guidance regarding required monitoring parameters under this part. If the Discharge Mapping Tool does not provide the information you need, you may consult the appropriate EPA Regional Office for guidance regarding required monitoring parameters under this part.*

b. **6.2.4.2 Impaired Waters Monitoring and Schedule.** *Discharges to impaired waters with an EPA-approved or established TMDL WLA:* For stormwater discharges to waters for which there is an EPA approved or established TMDL waste load allocation, you are not required to monitor for the pollutant for which the TMDL was written unless EPA informs you, upon examination of the applicable TMDL and/or WLA, that you are subject to such a requirement consistent with the assumptions of the applicable TMDL and/or WLA. EPA's notice will include specifications on which pollutant to monitor and the required monitoring frequency. Permittees must consult the appropriate EPA Regional Office for guidance regarding required monitoring under this part.

c. **6.2.5 Additional Monitoring Required by EPA.** *EPA may notify you of additional discharge monitoring requirements.*

d. **2.2.2.1 Existing Discharge to an Impaired Water with an EPA-Approved or Established TMDL.** *If you discharge to an impaired water with an EPA approved or established TMDL, EPA will inform you if any additional limits or controls are necessary for your discharge to be consistent with the assumptions of any available wasteload allocation in the TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.5.1.*

- 16. Clarify in Part 2.2 of the Permit that discharges permitted under the MSGP must be controlled such that the concentrations and mass of pollutants in the permitted discharge are at or below the water quality criteria applicable to the receiving water body.
- 17. Increase the frequency of sampling and stop relying solely on grab sampling

- 18. Remove the monitoring exemption for "data not exceeding benchmarks" found in Part 6.2.1.2 of the MSGP
- 19. Adopt the National Research Council's suggestion that any site identified as high or medium risk should be required to sample stormwater discharges with far greater frequency than the four samples per year called for in the MSGP
- 20. Identify "certain toxic pollutants of concern that are especially problematic" and would make any discharge of these pollutants above the detection limit ineligible under the MSGP as discussed in the Fact Sheet at pp. 12–14; clarify that it is a violation of the permit for a permittee to discharge any detectable amount of an excluded pollutant; and require testing for these and other toxic pollutants as part of the NOI process because without such testing this proposed exclusion is meaningless.
- 21. Strengthen the CERCLA site exclusion at Part 1.1.4.10 of the Permit by expanding the exclusion to cover all CERCLA facilities in the United States, clarifying that the exclusion applies to discharges to CERCLA sites conveyed via combined sewer overflows, and clarifying that discharges of reportable quantities of hazardous substances or oil from MSGP-covered facilities are not "federally permitted releases" under Section 103 of CERCLA and are not exempt from reporting and other CERCLA requirements.
- 22. Require concurrent public availability and opportunity for comment on the NOI and the SWPPP, both of which should be posted electronically on EPA's website. Only those MSGP applicants who request and receive a waiver from the electronic reporting requirement under Section 7.1 of the proposed MSGP should be excused from a requirement that their SWPPPs be publically available online.

a. As a minimum acceptable alternative, EPA should require a 60-day waiting period before coverage under the permit becomes effective for those facilities that fail to provide a SWPPP URL in their NOIs (as in the 2008 MSGP), in order to allow EPA and citizens sufficient time to obtain and examine the facility's SWPPP;

- 23. Add to the list of additional information required to be included in the NOI an electronic copy of the facility's engineered site plan, showing at a minimum all the information listed at § 5.2.2 of the proposed MSGP;
- 24. Require permittees to post corrective action documentation online and make such documentation readily available to the public in order demonstrate that corrective action has been taken and facilitate a review of the adequacy of the corrective action;
- 25. Cease using third-party contractors to process, compile, and store monitoring data, and instead conduct these activities in-house at EPA;
- 26. Require that each facility's annual report should be publically available online;

- 27. Require that each facility's exceedance reports should be publically available online;
- 28. Require that that all of the items required to be reported under § 7.7 be electronically filed and publically available online;
- 29. Modify the MSGP to contain, as a BMP and a non-numeric effluent limit, a categorical prohibition on the use of coal tar based pavement sealants at all covered facilities and modify Section 1.1.3 of the MSGP to note that pavement wash waters from coal tar sealed parking lots are not eligible for coverage under this permit, no matter what cleaning agents are used;
- 30. Use EPA's residual designation authority to extend a ban on the use of coal tar sealants to all paved surfaces at industrial sites;
- 31. Evaluate the impact of PAHs discharged from coal tar sealed pavements at industrial facilities in the Connecticut River and in listed sturgeon habitats throughout the eastern United States;
- 32. Modify section 1.4 of the Permit to make clear that appropriate monitoring should be completed prior to certification of no exposure where a facility has roof vents or stacks from industrial processes;
- 33. Modify the eNOI to require information on the receiving waterbody for each outfall, inadditon to the current requirement that permittees provide the latitude and longitude of their outfalls;
- 34. Include a reference to the UIC program and the possibility that infiltration devices may be regulated as Class V wells in the general permit, and in the online eNOI submission process;
- 35. Require permittees to use the results of their pollutant characterization efforts in their SWPPP to analyze the likelihood that any infiltrated stormwater is contaminated with soluble pollutants, EPA should establish clear numeric thresholds for such dissolved pollutants, and should require as a non-numeric technology based effluent limitation that permittees not use infiltration as a control measure for discharges whose concentration of dissolved pollutants exceeds or is likely to exceed the thresholds;
- 36. Where a permittee chooses to manage polluted stormwater by infiltrating it into groundwater that is directly hydrologically connected to surface waters, EPA should clarify in the permit, or in its response to comments, that the infiltration system in question is an *outfall*. As such, discharges to the infiltration system are subject to monitoring requirements like any other outfall.

IX. Conclusion

For the above-stated reasons, Conservation Law Foundation, Waterkeeper Alliance, Natural Resources Defense Council, Our Children's Earth Foundation, and Ecological Rights Foundation oppose approval of the proposed 2013 MSGP as drafted. All of the above organizations urge EPA to address the many shortcomings of the proposed permit and to issue a revised draft as soon as practicable. We particularly urge EPA to address the permit's major legal defects by adding provisions that will ensure legally-required public involvement and public access to information; compliance with water quality standards; safeguards against discharges into impaired waters; and bolstered monitoring and reporting requirements.

The development of a workable MSGP that protects water quality in non-delegated states and territories is of considerable interest to the members of Conservation Law Foundation, Waterkeeper Alliance, Natural Resources Defense Council, Our Children's Earth Foundation, and Ecological Rights Foundation. On their behalf, we thank you for your consideration of these comments.

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