Multi-Sector General Permit

for

Storm Water Discharges Associated with Industrial Activity

MPDES Permit Number MTR000000

Response to Public Comment

The Montana Department of Environmental Quality (DEQ) issued Public Notice MT-22-02 on January 24, 2022. The Public Notice provided the tentative determination to issue a state-wide wastewater discharge permit renewal for the Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity, under the Montana Pollutant Discharge Elimination System (MPDES) permit MTR000000. The notice included the draft Permit, Fact Sheet, draft Environmental Assessment (EA), and associated draft Permit forms.

The public notice required that all written comments be received or postmarked by February 24, 2022 in order to be considered in formulation of the final determination and issuance of the permit. DEQ held a public hearing on February 24, 2022 at the Metcalf Building in Helena, Montana. DEQ received the following sets of comments:

Public Commenter Name	Comment Source(s)	Comments
BNSF Railway Company (Violet Fisher, Manager Environmental Operations)	Email	1-9
Eastern Resources Inc. (James Lloyd, Environmental and Regulatory Coordinator)	Email	10-12
Corey McBain	Email	13
Upper Missouri Waterkeeper (Guy Alsentzer, Executive Director)	Verbal/Email	14-27
Montana Environmental information Center (Derf Johnson, Staff Attorney)	Verbal	28

DEQ has considered these comments in preparation of the final permit and decision. A copy of the unabridged comments is available from DEQ upon request. A synopsis of the significant comments and DEQ's responses are included below. This Response to Comments is an addendum to and supersedes the Fact Sheet to the extent specific changes or clarifications are discussed herein. Not in response to received comments, DEQ has updated the final permit as follows: corrected typographical and grammatical errors in the final permit. The aforementioned updates are insubstantial and do not change the intent of provisions in the final permit.

To be consistent with EPA requirements, the Department modified the draft MSGP to include SIC code 2441 Nailed and Lock Corner Wood Boxes and Shook under subsector A4. This removed Sector A5. See Table 3.4-A of the final permit. The department also removed the benchmark monitoring requirement of total iron from Sector E2 to be consistent with EPA's removal of total iron monitoring.

BNSF Railway Company – Violet Fisher

Comment #1: Indicator monitoring is a new requirement but a summary of indicator monitoring results is not included in the annual report requirements. To be consistent with providing a summary of benchmark monitoring results, the annual report should also require a summary of indicator monitoring results.

Response #1: DEQ agrees and has made the suggested edits.

Part 2.9.3: *This Annual Report must be completed using a standard Department form to include a summary of the past year's:*

- *Routine facility inspections documentation.*
- *Significant storm event inspection documentation.*
- *Corrective actions performed.*
- *Incidents of noncompliance observed.*
- *Benchmark and/or indicator monitoring results.*
- *Required revisions to the SWPPP.*

Comment #2: Language in the MSGP Part 2.2.8 was changed to indicate that all employees who work in areas where industrial materials or activities are exposed to storm water must be members of the storm water pollution prevention team. The storm water pollution prevention team is typically limited to higher level positions such as managers and supervisors who direct work of other employees whose job activities may have the potential to impact storm water. While all employees who work in areas where industrial materials or activities are exposed to storm water must be trained on an annual basis, requiring all these employees to be on the stormwater pollution prevention team would result in the storm water pollution prevention team becoming excessively large, with some sites having 50 or more members. Part 2.2.8 of the MSGP should be revised to indicate that these employees must receive annual training but should not require all of these employees to be part of the storm water pollution prevention team. Part 3.1.3 of the MSGP identifies storm water pollution prevention team requirements and no changes are suggested for this part of the MSGP.

Response #2: DEQ agrees and has made the suggested edits.

Part 2.2.8.1: *All employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including the members of the storm water pollution prevention team, must receive appropriate training on an annual basis.*

Comment #3: The ability for Permittees to combine one routine inspection and one significant storm event inspection per year should be retained. As identified in MSGP Part 2.4.2 Routine Facility and Significant Storm Event Inspection Procedures and Part 2.4.5 Routine Facility and Significant Storm Event Inspection Documentation, the procedures for completing routine facility and significant storm event inspections are the same. As such, it makes sense to allow one significant storm event inspection per year to count as a routine facility inspection,

especially when considering that significant storm event inspections provide a greater benefit for identifying potential storm water related issues at a site due to the timing of the inspection after significant rainfall or thawing. By removing the ability to count a significant storm event inspection as a routine facility inspection, the financial burden to comply with the MSGP has been increased for all permittees. Allowing Permittees to combine one inspection per year provides some relief from the burdens of MSGP compliance.

Response #3: While the procedures for completing the routine facility and significant storm inspections are the same, the two types of inspections are intentionally different methods of visual monitoring. The routine inspection provides an opportunity for a preventative, dry weather evaluation prior to pollutant mobilization and the significant storm event inspection provides an opportunity for a reactive, wet weather evaluation during potential pollutant mobilization in storm water discharges. The significant storm event inspection and routine inspection: (1) complement each other; (2) foster a comprehensive self-inspection program; and (3) strategically manage storm water from regulated industrial activities. Collectively, these inspections provide a greater benefit for identifying potential storm water related issues routinely before and after significant rainfall or thawing. However, DEQ recognizes the constraints associated with inspections and updated the 2023 MSGP to reinstate the 2013 permitting flexibility for potential annual credit.

Part 2.4.3: *One routine facility inspection per year may be used or credited towards one of the significant storm event inspections if it meets the criteria in Part 2.4.4.*

Part 2.4.4*: One significant storm event inspection per year may be used and credited towards one of the routine facility inspections, as identified in Part 2.4.3.*

Comment #4: This definition was changed from the current version of the permit which states, "A significant snowmelt event is thawing conditions above freezing which produce a visible runoff or drainage from snowmelt on the site where visible and discernible erosion of sediment is occurring at the site; or where temperatures remain above freezing for more than 24 hours." Using the proposed definition for "significant snowmelt event" would require a facility to conduct a significant snowmelt inspection any time there is snow melting at the facility. This change, combined with the proposed removal in the draft MSGP of crediting a significant storm event inspection towards the routine quarterly inspections (see Comment 2 above) would create an unreasonable burden on permittees to meet this proposed permit requirement. Given the potential inefficiencies and increased burdens with the proposed change to require a significant snowmelt event any time snow is melting on the site, the definition for significant snowmelt should be changed to clarify that significant snowmelt events are only required when snowmelt causes an actual discharge from the facility. Including language on snowmelt causing an actual discharge from the facility removes subjectivity in determining when a significant snowmelt event has occurred and will also help ensure that the snowmelt events that require inspection are indeed significant.

Response #4: Significant storm event inspections are regardless of discharge from the facility. Self-inspections are a critical tool in evaluating BMP effectiveness, compliance with permit

requirements, and triggering corrective actions to ensure protection of water quality from storm water discharges from the regulated industrial activities. No changes have been made to the permit in response to this comment.

Comment #5: A definition for "discharge point" should be added to clarify that a discharge point is where storm water discharges leave the industrial site. The definition for "outfall" should be clarified as the point where discharges from the industrial site enter a receiving water. In some cases where an industrial site discharges directly into a receiving water, the "discharge point" and "outfall" would be at the same location. However, the "discharge point" would typically be upstream of the "outfall."

Adopting this change would add significant clarity to the MSGP on distinguishing between these two terms and the associated requirements under the MSGP that apply to each and would facilitate permit compliance for Permittees.

Should this change be adopted, then other Parts of the MSGP would need to be updated to reflect the new / modified definitions. If Montana DEQ would like, BNSF can assist with identifying where additional changes to the MSGP would be required. For example, Part 2.5.1 Monitored Outfalls would need to be changed to Part 2.5.1 Monitored Discharge Points with language under this section revised accordingly.

The definition for "outfall" should be simplified with explanatory language on sampling included under Part 2.5.1, instead of in the definition for "outfall" (see Comment 6 below). If additional information is needed to explain the requirements to Permittees, this would be better included in a guidance document rather than the permit itself.

Response #5: The suggested definition of "discharge point" described above is already included in the definition of outfall in Part 5: "Sometimes the actual receiving waterbody may be some distance from the industrial site. In such cases, the facility's outfall is considered to be the location(s) where the discharge(s) leaves the industrial site." No changes have been made in response to this comment.

Comment #6: The description of monitoring locations varies in different Parts of the MSGP and should be clarified / made consistent with each other. The description of monitoring locations in Part 2.5.1 should be clarified and the description of monitoring locations in Part 2.5.4 could be removed with a reference added to Part 2.5.1 instead (to avoid repetition and promote consistency). Monitoring locations are also referenced in the existing definition for "outfall." Note that suggested permit language [below] includes the proposed change for a new definition of "discharge point."

Response #6: Parts 2.5.1 and 2.5.4 are consistent with each other. See Response #5 regarding "discharge points". We have added the following language for clarity.

Part 2.5.4: Samples must be collected at the point of discharge or the last point of control after treatment and prior to discharge to receiving water (Part 2.5.1).

Comment #7: Parts 2.5 and 2.5.3 of the MSGP indicate that both indicator monitoring and benchmark monitoring must be performed on every storm event that causes an actual discharge from the facility. Part 2.6.2 indicates that benchmark monitoring must be performed on every storm event that causes an actual discharge from the permitted facility with a sample frequency of once per discharge. However, the sampling frequency for indicator and benchmark monitoring is quarterly meaning that storm water samples must be collected from a minimum of one storm event per quarter, assuming there is a discharge from the permitted facility during a given quarter. Changes should be incorporated to clarify that the frequency of storm water monitoring is quarterly, not once per discharge or every storm event.

Response #7: DEQ agrees and has made the following changes.

Part 2.5.3: *Required monitoring must be performed on storm events that result in actual discharge from the site.*

Part 2.6.1: *Benchmark monitoring samples are collected from storm events that result in actual discharge.* Also, the benchmark monitoring table updated sample frequency is 1/quarter.

Comment #8: Parts 2.5, 2.5.4.1 and 2.6.2 of the MSGP specify that samples must be taken in the first thirty minutes of discharge with Part 2.5.4.1 indicating that a sample can be collected within the first hour of a discharge if an explanation is provided with the Discharge Monitoring Report. This requirement goes beyond the EPA MSGP for Industrial Storm Water and makes it difficult for Permittees to comply with the Montana MSGP under certain circumstances. For example, at more remote locations that may not always be actively staffed or for facilities with multiple locations where storm water samples must be collected, limiting the collection of storm water samples to the first hour of a discharge event makes it difficult for permittees to comply with the requirement of sample collection within one hour of the start of discharge.

To facilitate the collection of storm water samples within the prescribed timeframe, language in the MSGP should be revised to match the EPA MSGP for Industrial Storm Water which does not specify a time limit on collection of samples. EPA MSGP (Page 32): You must collect samples within the first 30 minutes of a discharge associated with a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, you must collect the sample as soon as possible after the first 30 minutes and keep documentation with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. This will promote permittee compliance with the MSGP and facilitate collection of storm water samples with the timeframe prescribed in the MSGP. Similar timeframes for collection of storm water samples are allowed in other state-level industrial storm water permits and some states such as Washington allow collection of storm water samples within the first 12 hours of a discharge. Note that the suggested revisions below include the changes recommended under comment 7.

Response #8: DEQ agrees and has made the following changes.

Part 2.5.4.1: *If it is not possible to collect the sample within the first thirty minutes of discharge, the sample must be collected as soon as practicable after the first thirty minutes and the*

permittee must document why it was not possible to take the sample within the first thirty minutes.

Comment #9: Part 2.7.3.2 of the draft MSGP removed the ability for permittees to request an extension for corrective actions beyond the 45-day timeframe. Storm water best management practices (BMPs) are considered to be either an operational BMP or a structural BMP. While operational BMPs can typically be implemented immediately or within 14 days of discovery, structural BMPs require planning, design, capital budget allocations, and company approvals. The process for implementing a structural BMP often extends beyond 45 days and setting an ultimate 45-day deadline for completing all corrective actions, including installing structural BMPs, is unreasonable and will result in permittees being out of compliance with the MSGP.

Consideration must also be given to site-specific scenarios, such as accumulated snow depth or frozen ground conditions that may impact a permittee's ability to implement BMPs within the proposed timeframe. The goal of corrective actions is to implement long-term storm water management strategies that are protective of storm water quality. Establishing an arbitrary 45-day deadline for all corrective actions to be completed, regardless of scope and complexity, will lead to the implementation of hastily planned corrective actions that may not be well-designed. This will result in permittees not being in compliance with the MSGP and having to "redo" corrective actions that were hastily implemented to meet this ultimate 45-day corrective action deadline. Likewise, making repairs to certain types of equipment or controls could require ordering parts or include a large capital expense, which could reasonably be expected to require more than 45 days to complete (particularly in light of current supply chain delays). As such, the ability for permittees to request an extension for corrective actions beyond the 45-day timeframe should be retained in the MSGP.

Response #9: The timeframes outlined in the Correction Schedule and Corrective Action Reporting include clear, specific, measurable, and enforceable requirements for corrective actions. DEQ disagrees that categories of structural BMPs should be permitted to have an open-ended corrective action completion date within the MSGP requirements. Regardless of conditions triggering the corrective action of a structural or operational BMP, DEQ recognizes that many factors may affect the remediation and elimination actions needed to complete a corrective action. The permit language already reflects the consideration of site-specific scenarios with permittee request and DEQ approval. No changes have been made to the permit in response to this comment.

Eastern Resources, Inc. – James Lloyd

Comment #10 – Under Part 1.1 Eligibility, the department is using all inclusive language implying all industrial sites are required to obtain permit coverage; when this is not the case. The agency should also identify the exclusions for permit coverage as provided in ARM 17.30.1106.

Response #10: DEQ acknowledges that there are exclusions to industrial facilities needing coverage under the MSGP in ARM 17.30.1106. However, because exclusions listed are rare and must be analyzed on a case-by-case basis; therefore, DEQ will not include these as permit

conditions and encourage permittees who believe they qualify for one of these exclusions to contact DEQ. No changes have been made to the permit in response to this comment.

Comment #11 – Under Part 1.3 Public Sign Requirement, stipulates a sign be erected to display permit information for public use. This stipulation is new this permit cycle and is not founded by statute or rule. The practicality of this requirement is also questioned. In the urban settings signage can be one method to inform the public of permit coverage. For site like ours which are rural and remote, signage provides a means for vandalism and target practice. If the Department would like to enter into a cost sharing agreement for re-habilitation of signage after every incidence of vandalism it would be agreeable. However, it would be better served if the Department developed and hosted a GIS based mapping page, much like the GIS based mapping for the open cut program. The Department would have control of the information available, and the permittee is not burdened by repeated construction and repair costs.

Response #11: DEQ agrees that a GIS-based map would be helpful; we have created a GIS Data Viewer for all active water quality permit coverages in Montana (available at the water quality Permitting and Operator Assistance page https://deq.mt.gov/water/assistance). However, a GIS-based map is not a replacement for a public sign. A public sign allows for real-time water quality impacts such as failed Best Management Practices to be identified and reported by the public. Furthermore, public sign requirements are industry standard and consistent with EPA requirements. No changes have been made to the permit in response to this comment.

Comment #12 – In Section 3.4.7.7.2 Benchmark Monitoring Requirements the Department lists 12 metals which require analysis. In most cases one or two of these metals may be present (dependent on ore mineralogy) but not all 12. The Department should request a listing of metals believed to be present much like the EPA 2A application form. The Department should then tailor the benchmark monitoring towards those metals and not include a laundry list of analysis which is meaningless.

Response #12: Storm water discharges regulated under the MSGP must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. Permittees are required to complete benchmark monitoring for parameters specific to the industrial subsector to ensure water quality standards are not exceeded. No changes have been made to the permit in response to this comment.

Member of the Public – Corey McBain

Comment #13: As stated in section II.B of the fact sheet, a new requirement is being added for a "Public Sign of Permit Coverage" that will be "a large and readable size; be visible from the nearest road". I do not believe that such a sign improves the quality or quantity of stormwater discharges. Nor do I believe that it has any impact on enforceability of stormwater discharge laws - other than being a very easy thing for an inspector to see. Adding additional required signage will likely be no more than a nuisance to the public. Personally, I would like to see less signs on public roadways, not more.

Additionally, I believe that added requirements like signage allow for inspectors to believe they are doing their job for writing up violations like missing signs. Inspectors should be focused on the details of actual stormwater discharge. Adding "low hanging fruit" in requirements encourages them to focus less on things that have a true impact on stormwater quality.

Response #13: Please see response to comment 11. No changes have been made to the permit in response to this comment.

Upper Missouri Waterkeeper – Guy Alsentzer

Comment #14: Stormwater Pollution Prevention Plans should be online and publicly accessible.

The proposed permit should require concurrent public availability and opportunity for comment on the NOI and SWPPP, both of which should be posted electronically on DEQ'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 requirements of developing a SWPPP and having it on file.

Under Section 1.2.1 'New Authorizations' a facility or operator seeking coverage under the MSGP must submit a complete application package that includes a SWPPP. 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 is 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 requirements of the proposed MSGP. Requiring the applicant to provide a link to an online copy of its SWPPP would allow both DEQ 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 an exclusion for the purposes of fully enclosed facilities should be excused from a requirement that their SWPPPs be publicly available online.

As a minimum acceptable alternative, applicants who do not provide a URL linking to an electronic copy of their SWPPP 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 DEQ and the public to obtain and review a copy of the SWPPP.

We note that presently Section 3.3 'SWPPP Availability' the permittee is required to retain a copy of the SWPPP on premises, and DEQ "may provide access to portions of the SWPPP to a

member of the public upon request." DEQ may not qualify the public's fundamental right to review and provide comments upon SWPPPs. Either section 3.3's discretionary language must be changed and DEQ itself provide direct access to SWPPPs, ideally through posting online, or the revisions suggested above regarding SWPPP availability should be made. The public cannot be made to perform a tedious and indefinitely drawn-out formal records request for documents to which it is squarely entitled as part of the MPDES permit process and mandatory public participation and citizen enforcement provisions of the federal CWA.

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

- Proposed MSGP Section 3.2 'Modifications and Updates' – *The permittee must modify the SWPPP whenever necessary to address any of the triggering conditions for corrective action in Part 2.7. Changes to the SWPPP document must be made in accordance with the corrective action deadlines in Part 2.7.3, and must be signed and dated by the SWPPP Administrator or the permit signatory (Part 4.18).*
    - We note that citizen enforcers cannot make the conclusion of a need for corrective action without having had the opportunity to review the SWPPP, which requires that the SWPPP be publicly available online.
    - We also object to the following Section 3.2 language as implicating both public participation and citizen enforcement: *The SWPPP must be maintained and kept up to date to reflect current site conditions. SWPPP modifications or updates are not required to be submitted to the Department unless specifically requested by the Department*.
        - Modifications or updates must be submitted to the Dept and made immediately available to the public. Without the public, much less DEQ, understanding modifications of terms of the SWPPP, enforcement of applicable terms are meaningless. DEQ should strike this offending language from the permit.
- For both new applications and renewals under the MSGP we note that it will be more efficient and produce better outcomes if a SWPPP is publicly available online at the outset. As requested above, in the alternative DEQ should require a 60-day waiting period before coverage under the permit becomes effective for those facilities that fail to provide an online URL SWPPP in their NOI to allow sufficient time for interested parties to obtain and review the facility's SWPPP.
- We further note that the list of additional information to be included in the NOI should include an electronic copy of the facility's engineered site plan, including at a minimum elements of Section 3.1.5 (site map) and Section 3.1.6 (areas with potential pollutants).

Response #14:

The public noticed *General Permit* includes all the requirements, limits, and conditions for the contents of Storm Water Pollution Prevention Plans tailored to the industrial activity. The General Permit is made available for public comment and review every five years. DEQ is required to public notice any limits. Site-specific BMPS are not limits, but technology and

methods for achieving limits. This is no different than a municipal wastewater where DEQ public notices discharge limits and the city has to design a wastewater treatment plant to meet those limits. BMPs are selected based on sound engineering and scientific judgment. It is critical that through monitoring, site inspections and on-site knowledge, permittees are able to repair, modify and add BMPs to protect water quality without additional procedural steps.

DEQ reviews SWPPPs along with the application form prior to issuing authorizations under the MSGP. The public can request a copy of the SWPPP and application materials at any time by contacting DEQ. If permit noncompliance is observed, citizens are welcome to report it to DEQ. The MSGP requires a sign at each facility for the public to contact DEQ.

Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good engineering practices and manufacturer's specifications. All control measures must be documented in the SWPPP, site map(s), and inspection records (as applicable). Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards and protect beneficial uses of the receiving water body. In addition, the General Permit, see page 8, requires that all control measures and effluent limits listed in Part 2 are implemented at the time the application package is submitted to DEQ for coverage under the permit.

See response to comment 11. A member of the public may identify facilities and associated permit numbers, and request NOIs and SWPPPs via the public records request.

No changes have been made to the permit in response to this comment.

Comment #15: All monitoring data, reports, and plans should be online and publicly 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 DEQ pursuant to the permit and/or SWPPP should be posted electronically for public access. This comment regarding the need for the applicant's monitoring data, reports and plans to be online and readily available to DEQ and the public relates to several sections of the proposed MSGP:

- Section 2.7 Corrective Actions
    - We note that permittees should be required to post corrective action documentation online and such documentation should be readily available to DEQ

and the public in order to demonstrate that corrective action has been taken and facilitate a review of the adequacy of the corrective action.

- Section 2.9.3 Annual Report
  - We note that each facility's annual report should be publicly available online.
- Section 2.6.2 Benchmark Monitoring and/or Section 2.9.1 DMRs
  - We note that benchmark monitoring sample results and/or DMRs should be publicly available online.

Response #15:

The public may access compliance history using EPA's Enforcement and Compliance History Online (ECHO) database https://echo.epa.gov/. Members of the public can contact the permitted facility directly or DEQ to request monitoring data. No changes have been made to the permit in response to this comment.

Comment #16: The Draft MSGP relies almost entirely on non-numeric effluent limits and self-evaluation by permittees. DEQ and EPA have considerable evidence that this permitting approach is ineffective and deeply flawed, and fails to comply with the Clean Water Act.

The technology based effluent limits included in this permit, as in previous iterations, are almost entirely non-numeric and rely heavily on the permittee to select control measures for itself. The MSGP also leaves it to permittees to determine for themselves whether those control measures are in fact meeting the permit's effluent limits. Without numeric limits, this is a task that is challenging for even a neutral observer. DEQ provides benchmarks and indicators that a permittee may use to determine whether it is meeting the BAT standard, but exceedances are specifically noted in the permit as not constituting violations.

The MSGP requires only that permittees review their performance if their discharges exceed benchmarks, and corrective action is only triggered by the rolling average of 4 most recent quarterly benchmark monitoring values. In essence, a potential year's worth of polluting activities before any corrective action would even be considered. The MSGP leaves permittees free to decide for themselves that, notwithstanding triggering the rolling quarterly average benchmark or 7 narrow conditions under Sections 2.7.1, 2.7.2, that they are nonetheless in compliance with the BAT/BCT standard as applicable and need not take any further action.

There is substantial evidence that this permitting approach – self evaluation by permittees using non-numeric effluent limits as the metrics of performance – is ineffective. Has DEQ performed an audit of its monitoring files of all entities covered by the MSGP to assess, cumulatively, whether in fact routing benchmark exceedances occur while annual reports are submitted stating they have reviewed their SWPPP and concluded no modifications are required? How many facilities state in their reports that they are taking corrective action, yet continue to exceed benchmarks? In commentors experience, 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.

The National Research Council produced an incredibly critical review of the EPA's industrial stormwater general permit, which contains similar provisions to DEQ's. The 2009 report entitled "Urban Stormwater Management in the United States" can be summarized as regards industrial stormwater briefly: industrial facilities are highly concentrated sources of pollution, especially toxic metals and organic toxics, and permitting programs are 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. Among the many problems identified by the National Research Council with the industrial stormwater MSGP, the following are 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."
- General permits need clear and enforceable terms because agencies do 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." 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."
- 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."
- The effluent limits in the MSGP "have not been updated to reflect the best available technology relevant to pollutants of most concern."
- "There is limited information available on the effectiveness and longevity of many SCMs [structural control measures], thereby contributing to uncertainty in their performance." Agency reliance on SCMs without the backstop of numeric effluent limits is questionable.
- "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.

Response #16:

Pollutant loading varies because storm water discharges are highly intermittent and occur during episodes of high flows over a short period of time. EPA's 2021 MSGP fact sheet (pages 31-32)

found here https://www.epa.gov/sites/default/files/2021-01/documents/2021_msgp_-_fact_sheet.pdf includes a more in depth description of the infeasibility of numeric effluent limits and why narrative requirements aimed to minimize pollutant discharges are appropriate for storm water discharges.

The Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity and the requirements therein were developed in accordance with the Montana Water Quality Act, the Clean Water Act, the Administrative Rules of Montana, along with state and federal guidance and policies for implementation of the same. The majority of comment 16 is a non-substantive critique of the implementation of national storm water programs.

The commentor incorrectly states that the 2009 study completed by the National Academies of Sciences, National Research Council (NRC) titled *Urban Stormwater Management in the United States* is a "review of the EPA's industrial stormwater general permit." While the report does include information on the MSGP, the focus of the report is on urban storm water management through Municipal Separate Storm Sewers (MS4s).

The commenter paraphrases from the 2009 report that "permitting programs are not currently able to adequately monitor pollution in stormwater associated with industrial activity." However, since the 2009 was published, two permit cycles have passed for both the EPA and Montana MSGPs The National Research Council superseded its earlier 2009 report with a 2019 report specific to Industrial Storm Water Discharges. The suggestions of the 2019 report were included in EPA's 2021 MSGP and incorporated into DEQ's draft MSGP.

Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good engineering practices and manufacturer's specifications. All control measures must be documented in the SWPPP, site map(s), and inspection records (as applicable). Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards and protect beneficial uses of the receiving water body.

Permittees authorized under the General Permit must comply with all conditions of the General permit and compliance determinations are solely based on benchmark monitoring. This is only one aspect of the General Permit.

Specifically, the commenter criticizes well-established and accepted methods for developing the level of controls and monitoring required in all MPDES storm water general permits, as well as the MPDES program as a whole. Compliance within the constraints of the MPDES program are based to a significant degree on the concept of "self-monitoring" and this concept is

implemented in the MSGP. The MPDES program also relies on routine inspections by DEQ staff to verify that the self-monitoring, self-reporting, and self-inspection requirements of the program are followed by the permittees.

The commenter claims that DEQ and EPA have "considerable evidence" that non-numeric effluent limits and permittee self-evaluation fail to comply with the Clean Water Act. The commenter says that there is "substantial evidence" to support that permittee self-evaluation and non-numeric effluent limitations are ineffective, but does not provide such evidence. EPA maintained non-numeric effluent limits in its 2021 MSGP, and DEQ agrees this approach is reasonable and will continue to use non-numeric effluent limits in the Montana MSGP.

No changes have been made to the permit in response to this comment.

Comment #17: DEQ Should Include Numeric Effluent Limitations In This MSGP

Numeric limits are required in a NPDES permit where practical. EPA has always understood that the CWA expressed a Congressional preference for clear, uniform, national and numeric effluent limits where feasible. In fact, in the early CWA 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.11 Section 304(b) of the CWA requires that agencies set effluent limits 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€ makes clear that, at least in the case of toxic pollutants, numeric effluent limits are the preferred control strategy while best management practices and other control measures are intended only as supplementary limits on pollution. Following 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 CFR § 122.44(k)(3)-(4). If it is feasible to develop numeric effluent limitations then DEQ must do so and include these numeric limits in the MSGP.

DEQ's Fact Sheet implicitly claims that development of numeric effluent limitations was infeasible. See Part VII Effluent Limits, Section A. This rationale has worn thin. DEQ, and its partner EPA, have 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. Now, in 2022, it is time for DEQ to take the data it has amassed and use it to establish numeric effluent limits in this MSGP.

DEQ has access to all the data that it needs to set numeric effluent limits. States that require stormwater sampling as a condition of their MSGP like Montana maintain this data in electronic form and provide sampling results to EPA for inclusion in national databases. Since the National Research Council issued its report in 2008, we note that both DEQ and EPA have integrated enforcement and water pollution monitoring databases into a unified framework. With its expertise and hundreds, if not thousands, of observations of stormwater pollutant concentrations from industrial sites DEQ is well-positioned to establish numeric effluent limitations for

industrial sectors under this MSGP. We note as but one example that DEQ can use both its internal database and EPA's ECHO database to access thousands of individual parameters from at least 381 permittees under DEQ's MSGP.

If DEQ wishes, it can draw on hundreds if not thousands of samples taken from scrap recyclers, cement plants, marinas, asphalt pavement plants, and every other industrial sector covered under the MSGP.

In short, data concerning stormwater permit efficacy is readily available, but DEQ has not performed the work needed to translate this data into the basis for numeric effluent limitations. Since the NRC's 2009 report DEQ has modernized its data collection systems and 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 calls for – i.e., numeric limits. DEQ's failure to consider all the stormwater sampling data it can access before issuing the draft MSGP, and 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 DEQ's duty under the CWA to set numeric effluent limitations unless infeasible.

To the extent DEQ remains concerned about how variability in stormwater samples affects numeric effluent limits, those concerns can be addressed and resolved. The NRC explained to EPA what it, and state agencies, must specifically to do better monitor individual industries, control variability, and determine effluent limits for industrial categories. 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. Any reservations about some facilities finding it difficult to meet numeric effluent limits are not warranted. 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, DEQ can use statistical cut-offs (i.e. removal of outliers) to set numeric limits, DEQ has the ability to subdivide the industrial facilities covered by this permit into subcategories to facilitate establishment of numeric limits, and DEQ 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. Or DEQ could allow such dischargers to seek coverage under individual permits. At the very least, DEQ could convert its existing benchmarks to effluent limitations.

Response #17:

The MSGP was developed in accordance with established best practices for managing storm water discharges. The MSGP includes a provision requiring a permittee authorized under the general permit to obtain an individual permit when DEQ determines, through benchmark monitoring, that the facility, after complying with the BMP requirements in the general permit, has the reasonable potential to cause or contribute to an exceedance of a state water quality standard. As stated in the permit and fact sheet, the control of pollutants in storm water discharges is most efficiently achieved via BMPs that minimize or eliminate exposure of pollutants to storm water and minimize the discharge of storm water when exposure is

unavoidable. The benchmark values, while not effluent limitations, provide a mechanism for determining when changes to BMPs, or additional BMPs, are necessary to prevent pollution of state waters before exceedances of water quality standards occur.

See also Response #16.

EPA does not have numeric limits for their MSGP. DEQ requires benchmark monitoring for only nearly half of the industrial subsectors that the MSGP requires; for subsectors that have never had benchmarks, there is no data to create numeric limitations so DEQ is requiring indicator monitoring moving forward.

No changes have been made to the permit in response to this comment.

Comment #18: DEQ must carry out a BAT analysis and establish TBELs based on the results.

Regardless of whether EPA adopts national effluent limitations and guidelines, industrial stormwater discharges must be subject to effluent limitations, expressed in MPDES permits, that require a reduction in pollution based on the degree of control achievable through use of the Best Available Technology Economically Achievable (BAT), including, where feasible, the complete elimination of pollutant discharge. In the absence of national guidelines, DEQ must set effluent limits in the permit on the basis of its best professional judgment. These BAT effluent limits must be expressed clearly in the MPDES permit itself. And the agency must consider the same statutory factors for developing BAT effluent limits in this single permit that EPA would apply in setting national effluent limits and guidelines.

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.” The average performer within a category of dischargers, even a “well-run” facility, is not representative of BAT. “Rather 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.”

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. 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.BAT should represent a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges.” “[T]he reasonableness of what is ‘economically 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."

There are three major steps that DEQ must take to develop technology based effluent limits in the MSGP. The first step is to identify candidate BAT technologies. 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. The third step is to derive effluent limits that represent that degree of reduction – expressed in terms of amounts achievable through the application of BAT technologies. The limits must be expressed numerically, unless numeric limitations are infeasible, in which case they may be expressed narratively.28

DEQ has not engaged in the required analysis to establish TBELs. Nowhere in the Draft Permit or Fact Sheet does DEQ identify candidate technologies, explain its consideration of the required factors, or derive numeric or narrative limits. Instead, DEQ puts this responsibility on permittees. This attempt to push responsibility for BAT analysis down onto permittees is 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?

TBELs must be established by the permitting authority not the permittee, and must be contained within the MPDES permit issued to the permittee. Once DEQ 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 DEQ. As a practical matter, to allow for the development of BAT effluent limits, Waterkeeper suggests that DEQ consider replacing the multi-sector general permit with sector-specific general permits.

At the very least, we suggest that DEQ break the very large class/category of "discharges of stormwater associated with industrial activity" 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. DEQ 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 paved surfaces sealed with coal tar," or "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.

Response #18:

Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good

engineering practices and manufacturer's specifications. All control measures must be documented in the SWPPP, site map(s), and inspection records (as applicable). Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards and protect beneficial uses of the receiving water body.

The development of BPJ effluent limitations corresponding to BPT, BAT, and BCT levels of technology-based controls are described in the permit fact sheet. These effluent limits are based on implementation of storm water control measures through BMPs. The permit requires and describes the design considerations for minimal control measures applicable to all permittees authorized under the MSGP. The permit further requires implementation of additional sector-specific non-numeric technology based effluent limits, including minimum BMP requirements and benchmark monitoring, to achieve those limits.

No changes have been made to the permit in response to this comment.

Comment #19: The MSGP should incorporate EPA-approved BMPs for particular industrial sectors and DEQ should clarify that these BMPs are all are economically available and technologically achievable for particular sectors.

Until DEQ conducts the mandatory BAT/BCT analysis above, DEQ should ensure that permittees are in fact applying BAT before permittees claim that they cannot further minimize discharge. To that end, DEQ should clarify in the permit that the various guidance documents and "menus" of BMPs that the EPA 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 non- structural 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.30 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 addition, DEQ 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 already identified for their industry.

To implement this suggestion, we request that DEQ:

- Include a requirement for any covered facility that is required to conduct a review 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 that exceeding benchmarks a second time, i.e. after corrective action is taken, is a violation of the permit.
- As regards required benchmark monitoring, DEQ 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.

Response #19:

The effluent limits in this permit do not identify specific control measures because the MSGP already set the necessary effluent limits. The permittee maintains the flexibility to select and adaptively manage control measures that are the most effective for their specific facility/operation and meet permit limits. Some industrial sectors in the proposed MSGP contain suggested BMPs permittees can use at their facility. Permittees are welcome to consult EPA's fact sheets for additional BMPs ideas or use the large number of BMP resources available on the internet.

Additionally, the EPA guidance documents mentioned are available to both permittees and DEQ, and will be used when reviewing SWPPPs and during inspections.

If the permittee becomes aware, or the Department determines, that the control measures are not stringent enough for the discharge to meet applicable water quality standards, the permittee must review and revise the selection, design, installation, implementation, and maintenance of the control measures to ensure that the condition is eliminated and will not be repeated in the future

Permittee determinations that no further pollutant reductions are technologically available and economically practicable and achievable are subject to Department review.

Failing to take corrective action in accordance with Part 2.7 of the MSGP is a permit violation requiring corrective action and subjecting the permittee to potential enforcement actions.

No changes have been made to the permit in response to this comment.

Comment #20: DEQ has not competed the reasonable potential analysis needed to establish WQBELs.

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 DEQ 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, DEQ 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 DEQ 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 in its analogous review of EPA's MSGP:

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).33

To correct the "glaring deficiencies" criticized by the National Research Council, DEQ should conduct a Reasonable Potential Analysis before issuing a final permit. DEQ 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.

DEQ 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 DEQ 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.

Response #20: WQBELs are required in MPDES permits when DEQ determines that TBELs are not sufficient to protect the water quality standards. The 2023 General Permit's water quality-based effluent limits include implementing measures to control storm water discharges as necessary to meet applicable numeric and narrative water quality standards and consistent with the assumptions of any applicable TMDL wasteload allocation. Compliance with the conditions in the 2023 General Permit will control discharges as necessary to meet applicable water quality standards, so there is no reasonable potential to exceed the water quality standards. Corrective actions must be undertaken if at any time the permittee or DEQ determine that the storm water discharge causes or contributes to an exceedance of applicable water quality standards. Benchmark and indicator monitoring are used to assess the effectiveness of site BMPs and as an initial indicator that water quality standards are protected. The permit includes a provision that DEQ may require permittees to obtain coverage under an individual permit, which would subject the discharge to more stringent controls, treatment, and effluent limits, if the corrective actions do not protect the water quality standards.

See also Responses #16 and #17.

No changes have been made to the permit in response to this comment.

Comment #21: The proposed MSGP fails to include sufficient monitoring to assure compliance with water quality standards.

Section 2.3.2 of the proposed MSGP sets out the requirements related to discharges to impaired waters.

Reading Sections 2.3.2 and 2.5-2.6 together, it appears DEQ proposes to require monitoring on every storm event that results in an actual discharge from the site. We are uncertain what is intended by the clarifier "actual discharge." If DEQ means for this phrase to mean "a discharge capable of sampling under EPA sampling requirements," it should say so and remove the ambiguity. If DEQ intends some other quantitative measurement, it should describe such qualifier here as presently the "actual discharge" trigger is ambiguous to commenters. Conversely, in 2.5.5 it appears DEQ qualifies the monitoring frequency to require sampling at least once per quarter, per annum. We presume these two frequency requirements operate such that the most prescriptive is the baseline (e.g., monitoring must occur in response to any precipitation event).

We are concerned that there is no discussion of any additional monitoring required for discharges to waters listed as impaired pursuant to Section 303(d) of the Act as necessary to "ensure compliance" with water quality standards. In fact, for impaired waters with TMDLs, DEQ requires no sampling other than the actual discharge and/or quarterly sampling requirement, and the onus is placed on the permittee to describe why requirements in its SWPPP are sufficient to satisfy any applicable WLA. As described above, the public has no opportunity to comment on the adequacy of an individual SWPPP and those terms are reviewed by DEQ after a permittee has filed and gained coverage under the MSGP NOI. Doing so is contrary to public participation requirements of the Act. We encourage DEQ to require additional representative monitoring for all dischargers with the potential to discharge stormwater containing pollutants of concern to an impaired or TMDL waterway.

We also note that impairment designations by DEQ's monitoring team usually require statistically significant sample sizes to assure defensible data sets capable of determining compliance with water quality standards, usually more than a dozen samples. There is no narrative or description of how DEQ's monitoring requirements are alleged 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.

Response #21:

The Department finds that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If at any time the permittee becomes aware, or the Department determines, that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective actions. See Fact Sheet pages 6-9.

Section 2.3.2 of the MSGP requires facilities that discharge to impaired water bodies to implement BMPs that target the reduction of the pollutants causing impairments.

The permittee must identify if storm water discharges from their industrial activity will discharge to impaired waterbodies and consider all impairments and the presence of the corresponding pollutants of concern in their proposed discharges

The permittee must ensure that all discharges are consistent with the assumptions of any applicable TMDL wasteload allocation. All EPA-approved TMDL wasteload allocations applicable to MPDES-regulated storm water industrial activities are incorporated by reference into this permit.

In the proposed permit, all permittees are required to complete storm water sampling. This will ensure better compliance with TMDLs than previously.

No changes have been made to the permit in response to this comment.

Comment #22: DEQ should clarify that permitted discharges under the MSGP must be in attainment with ambient water quality standards.

Because of long-standing confusion by permittees, DEQ should clarify that Section 2.3.1 'Water Quality Standards' 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 "Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards."

These statement has only one subject – discharges – which should make it clear that it is the discharges themselves that must meet applicable water quality standards. Nonetheless, both experience and the record for this permit show that permittees do not accept that their discharges must meet water quality standards at the point of discharge and, in practice, routinely 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 technologically available and economically practicable and achievable in light of best industry practice to meet the technology- based effluent limits or are necessary to meet the water-quality-based effluent limitations in Part 2 of this permit. Yet in most cases, the benchmarks that permittees violate are equivalent to or many times higher than applicable state water quality standards.

Waterkeeper requests that DEQ please clarify the Permit so 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.

Response #22: The claim that the permittees "routinely discharge storm water that exceeds applicable water quality standards but fail to take corrective action" is unsubstantiated.

If at any time the permittee becomes aware, or the Department determines, that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective action and document the corrective actions. See Part 2.7 of the MSGP.

The Department may require the permittee to obtain coverage under an individual permit, if information in the NOI-SWI, required reports, or from other sources indicates that the discharges are not controlled as necessary to meet applicable water quality standards.

No changes have been made to the permit in response to this comment.

Comment #23: Deferral of reasonable potential analysis and development of water quality based effluent limits until after issuance of the permit violates the public participation requirements of the act.

The MSGP materials explain that upon NOI and SWPPP submission, DEQ will implicitly evaluate the facility and the receiving water(s), and determine whether additional WQBELs will be required to be consistent with the WLA, where it exists, or to comply with applicable WQS. However, neither the proposed MSGP or Fact Sheet describe: (1) the data that would be considered (would it consist of past sampling, future annual sampling, 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 WQS, modeling, or something else?); (3) the timing of the analysis and any additional WQBELs,; or (4) how a determination of the effectiveness of the additional measures would be conducted.

The analysis which DEQ proposes to potentially conduct some time in the future, on a site-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. The additional measures to ensure compliance with TMDL WLA and/or WQS which DEQ may (or may not) impose 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 stormwater discharges to impaired waters, entirely to the discretion of DEQ, 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)(1); Environmental Defense Center v. EPA, 344 F.3d at 856. Specifically, we note that the following provisions of the proposed MSGP grant an impermissible degree of discretion to EPA:

- No additional monitoring or discussion of monitoring necessary for discharges to impaired waters to assure compliance with WQS. At minimum a rationale must be provided to support a finding that the BMPs under the MSGP are adequate to satisfy the Act.
- 2.3.2.2 – discharges to an impaired waterbody with an approved tmdl - "Permittees will be informed if any additional controls are necessary for discharges to protect beneficial uses or to be consistent that the assumptions of any available TMDL wasteload allocation. Such additional controls must be identified within the permittees SWPPP. In certain cases, the Department may find coverage under an MPDES individual permit necessary."
- 2.3.1 – "If at any time the permittee becomes aware, or the Department determines, that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective action as required in Part 2.7 and document the corrective actions as required in Parts 2.7.3.4, 2.8, and 2.9.3….On a case-by-case basis, permittees will be informed if any additional controls are necessary for discharges to meet water quality standards; such additional controls must be implemented and identified within the SWPPP."

Response #23:

Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good engineering practices and manufacturer's specifications. All control measures must be documented in the SWPPP, site map(s), and inspection records (as applicable). Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards and protect beneficial uses of the receiving water body. See page 7 of the Fact Sheet. DEQ retains the ability deny permit coverage to facilities who appear to not be able to achieve water quality standards, see the General Permit 1.1.6. The General Permit also expressly prohibits any discharge of storm water to water bodies impaired unless consistent with approved TMDLs and any assigned WLA, see 1.1.4.

If coverage under the GP is denied or the discharge is ineligible for coverage under the General Permit, the permittee must then either eliminate the storm water discharge or apply for and receive and individual MPDES permit. Each individual MPDES permit includes the development of a fact sheet, a draft permit and draft environmental assessment. These documents are then made available for a minimum 30-day public comment period. DEQ must consider all substantive comments.

The language in Part 2.3 of the General permit is describing a situation where, based on information received during the permit term, a permittee or DEQ finds additional controls are needed. DEQ modified this language to specify the DEQ may require individual permit coverage or that discharge must be eliminated.

Part 2.3.1: *Additionally, the Department may require the permittee to obtain coverage under an individual permit if storm water discharges are not controlled as necessary to meet applicable water quality standards, or discharges must be eliminated.*

Comment #24: DEQ should improve the MSGP's monitoring requirements and increase the frequency of sampling.

In order to adequately monitor compliance with the permit's effluent limits, as required by Section 402 of the Clean Water Act,34 DEQ must increase the frequency of sampling and stop relying solely on grab sampling. The National Research Council suggested that agencies could significantly improve monitoring programs through reliance on continuous sampling methods that are flow weighted and continue for the duration of a rain event."

We point out the tension between what we understand to be the monitoring requirement under the MSGP for all permittees to do sampling at every precipitation event (including snowmelt) and the most authoritative discussion of industrial stormwater variability of which we are aware, that of the NRC 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."

Even if DEQ 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. "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." 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 DEQ asks permittees to obtain under the MSGP.

However, we note that this concern over sampling frequency may be misplaced if we have misconstrued the monitoring requirements to in fact require monitoring at every precipitation event capable of measurement (including snowmelt). Conversely, if the MSGP requirement is to gather a maximum of four samples per annum, then such a requirement 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. If only four samples annually are in fact required, DEQ's adoption of those sampling requirements in light of their established inadequacy would be unlawful, arbitrary, capricious, and an abuse of permit writing discretion.

We therefore request that DEQ make more clear required monitoring and specifically frequency and type under the MSGP.

Response #24: The NRC's recommendations for the EPA are in the context that the EPA only requires permittees to monitor for the first and fourth years of permit coverage.

DEQ has improved the MSGP's monitoring requirements by instituting quarterly indicator monitoring for industrial subsectors previously not required to monitor under the subsector specific benchmark monitoring under the previous MSGP. *All* permittees under Montana's MSGP are required to monitor with this change.

See Response #7 for monitoring frequency clarity. Permittees are not required to monitor every discharge, but must monitor once per quarter from a storm event that results in a discharge of storm water from the facility. Therefore, if the permittee has adequate storm water controls to prevent discharge, it is possible then that fewer than 4 samples may be collected in a year. Conversely, it is also possible that more than 4 samples may be collected.

No changes have been made to the permit in response to this comment.

Comment #25: More frequent sampling is economically practicable.

Waterkeeper strongly supports 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. Waterkeeper believes 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.40 Based on our 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.

Response #25: The monitoring frequency requirements included in the MSGP were developed to ensure adequate characterization of storm water discharges. DEQ finds the frequency of monitoring quarterly is appropriate and adequate to characterize discharges of storm water and ensure beneficial uses of the receiving water bodies are protected. The MSGP includes minimum monitoring frequency; permittees may choose to monitoring more frequently. See also Response #24.

No changes have been made to the permit in response to this comment.

Comment #26: We note that the MSGP is silent as regards control of stormwater via infiltration methods. 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. A primary concern here is how DEQ plans to address and control dissolved pollutants in discharges from MSGP facilities that are deliberately infiltrated to ground. Presumably, DEQ 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, DEQ 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, DEQ 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.

In addition, 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." Accordingly, where a permittee chooses to manage polluted stormwater by infiltrating it into groundwater that is directly hydrologically connected to surface waters, DEQ 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.

Response #26: ARM 17.30.1106(1)(a) states that point source discharges composed entirely of storm water to ground water do not require MPDES permits. The 2023 MSGP does not allow infiltration of contaminated runoff as a stormwater control, so will not create a functional equivalent to discharge to surface water through hydrologically connected ground water. Permittees regulated under the MSGP must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3.

No changes have been made to the permit in response to this comment.

Comment #27: Finally, we specifically draw DEQ's attention to its ongoing duty to act in an anticipatory and preventative fashion to protect and restore Montana's water quality under the Montana Water Quality Act and citizens' constitutional rights to a clean and healthful environment. Although the substantive portion of this comment letter references federal requirements under the CWA, those requirements are directly applicable to Montana through the MWQA, and DEQ must implement baseline requirements thereof and, we would argue, go a step further to make findings showing how, on the basis of record evidence, the MSGP will assure compliance under both the CWA and MWQA. Without such findings and affirmative demonstrations the noted inadequacies herein take on the flavor of substantive violations of both state and federal law. Therefore we strongly encourage DEQ to amend its MSGP as requested herein as doing so represents affirmative steps by the agency to increase collective pollution control requirements and effectuates the purposes of Montana's constitutional imperatives to a clean and healthful environment.

Response #27: The Department agrees that the legislature enacted the Montana Water Quality Act mindful of its constitutional obligations under Article II, section 3 and Article IX of the Montana constitution. *See* § 75-5-102, MCA. Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good engineering practices and manufacturer's specifications. All control measures must be documented in the SWPPP, site map(s), and inspection records (as applicable). Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards and protect beneficial uses of the receiving water body. No changes have been made to the permit in response to this comment. A storm water discharge associated with industrial activity must not cause or contribute to an exceedance of applicable water quality standards. The Department expects that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable water quality standards.

No changes have been made to the permit in response to this comment.

<u>Montana Environmental Information Center – Derf Johnson</u>

Comment #28: I would just like to reaffirm and support Mr. Alsentzer comments previously, and in particular highlight that you do not just have an obligation to comply with the Clean Water Act, and we're concerned about narrative standards. You not only have an obligation to comply with the principles and mandates of the Clean Water Act, but in Montana, as you know, we have a fundamental right to a clean and healthful environment. This particular provision isn't just words, it has real meaning, and it has application in the law, and it requires that your agency be both, and anticipatory and preventative in your rulemakings, and in your permit issuance. So I would, encourage you to come up with mechanisms that comply with the constitutional

obligations and to really consider whether or not a narrative standard also meets that particular heightened threshold for your rulemakings. So with that, again, I support the comments, the detailed comments of Mr. Alsentzer, and I would ask for you to reject this permit. Go back to the drawing board and start over. Thank you.

Response #28: Under the MSGP, permittees must select, design, install, and implement storm water control measures – including best management practices (BMPs) or other structural or non-structural practices – to meet the non-numeric technology-based effluent limits in Part 2.2 of the MSGP, and the water quality-based effluent limitations in Part 2.3. The selection, design, installation, and implementation of these control measures must be in accordance with Part 2.1.1 and good engineering practices and manufacturer's specifications. The Department finds that compliance with the conditions in the MSGP will control discharges as necessary to meet applicable narrative and numeric water quality standards and protect beneficial uses of the receiving water body. No changes have been made to the permit in response to this comment. See responses to comments 14-27.