RESPONSE TO COMMENTS
for
MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVTY
MPDES PERMIT MTR000000
December 6, 2012

On October 15, 2012 the Department of Environmental Quality (DEQ) issued Public Notice MT-12-49 stating the DEQ's intent to issue the Montana Pollutant Discharge Elimination System (MPDES) *Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity* (General Permit). The Public Notice stated that the DEQ had prepared a draft General Permit, Fact Sheet, and Programmatic Review Environmental Assessment. The Public Notice required that all comments received or postmarked by November 14, 2012 would be considered in the formulation of a final decision and issuance of the General Permit.

The Department received six emails or letters from various agencies, organizations, and individuals on the MPDES General Permit and/or Programmatic Review Environmental Assessment, as listed in Table 1 below. The Department has prepared a response to all significant comments as required by ARM 17.30.1377. The Department has considered these comments in the preparation of the final permit and decision.

TABLE 1 – LIST OF PERSONS SUBMITTING WRITTEN COMMENTS

COMMENTOR	NUMBER*
Bentonite Performance Minerals (Lesley Roth) and American Colloid Company (Jessica Baldwin) - Email	1
Western Environmental Trade Association (Mark Lambrecht) - Email	2
Malmstrom Air Force Base (James Hodges) - Email	3
Montana Army National Guard (Adel Johnson) - Email	4
Montana Mining Association (Tom Hopgood) - Letter	5
Stillwater Mining Company (David Johnson) - Letter	6

* This commentor number is indicated at the end of the corresponding comment below

RESPONSE TO COMMENTS

Comment #1:

Part 1.2.2. – Four comments received about incorrect and past August 1, 2012 date being specified for when an updated SWPPP must be submitted to Department. (1)(3)(4)(6)

Response: The Department acknowledges this comment and has corrected Part 1.2.2. to specify the proper August 1, 2013 date.

Comment #2:

Part 2.5.1. - Monitoring. Please clarify in Section 2.5.1 that if a benchmark parameter is not listed under the applicable sector/sub-sector then quarterly sampling requirements under the General Permit do not apply to that specific sector/sub-sector. (1)

Response: In this part of the permit as well as others, the permit refers to Part 3.4. for various specific industrial sector-specific requirements. Consequently, it is assumed that if a specific requirement is stated, then the permittee will know it pertains to them and comply with it. Similarly, if no requirement is listed, then it would not apply. However, the Department has added language in Part 2.5.1. to help clarify this particular situation.

Comment #3:

Part 2.7.1.1. - Routine Facility Inspection Procedures. "At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring. If the facility typically does not have a storm water discharge occurring at the outfall, then this inspection must be conducted during a rainfall or snowmelt event (when prominent wet weather conditions exist at the site)."

This requirement is beyond reasonable expectations for bentonite mining operations. Bentonite mining operations span a large area (up to one hundred square miles) of private, state, and federal surface owners with numerous outfalls placed throughout these areas. To meet this requirement would force bentonite operations to cause undue environmental degradation to native and reclaimed lands (such as creating ruts which could lead to erosions issues) and be in conflict with surface owner directives to keep off their property under these conditions.

We suggest MT DEQ waive this requirement for Sector J or revise the language to state that at least one routine inspection will be conducted within 48 hours after an event. (1)

Response: The basis for conducting self-inspections is stated in Part V.F. of the Fact Sheet. The requirement to conduct an inspection during a period when a storm water discharge is occurring is only being required once a year, and this type of inspection provides the most optimal opportunity to evaluate the effectiveness of control measures, particularly as it provides the chance to visually observe for obvious indicators of storm water pollution around the site such as through color, odor, clarity, turbidity, floating solids, settled solids, suspended solids, foam, and/or oil sheen of the storm water runoff. Surface mining sites typically have relatively higher quantities of earthen materials being managed than other industrial activities, including more ground disturbance. At bentonite mining sites, some of these potential pollutant sources may consist of more relatively fine material (clay and silt-sized particles), which is more readily picked-up and transported through storm water runoff. For such sites, the Department believes quarterly routine inspections, one of which must be while a discharge is occurring, is warranted and reasonable.

Consider that in the Department's recently issued MPDES "General Permit for Storm Water Discharges Associated with Construction Activity", it requires post-storm event inspections after 0.25-inch rainfall events (instead of 0.5 inches), and that it requires routine inspections every one to two weeks. In Comment ##33 below provided from the mining industry, it implies mining sites can be similar to construction sites in some respects. However, one difference for regulated surface mining activities versus construction activities is potential control measures are typically more permanent and designed for relatively larger storm events. However, even so, this relative comparison does exemplify how inspection requirements in the General Permit are reasonable, given that some sites with many similar issues which are covered under a different permit have more strict and frequent inspection requirements.

Permitted industrial sites, particularly while in operation, usually can have qualified personnel on the sites during some rainfall events with a potential discharge, such that the relatively minimal frequency of the required self-inspections can be accommodated. It is also expected that since arrangements are made to accommodate access to the site for the actual mining and various related activities, that similar access arrangements can be accommodated for one annual self-inspection while a discharge is occurring.

Permittees have the flexibility to consider various options to accomplish this regarding contracts, resources, training, methods of access, and timing. Additionally, if standard requirements applicable to all industries in this MPDES General Permit are insufficient for a particular facility's situation, an MPDES Individual Permit is an alternative option. Consequent to the above considerations, no changes were made to the permit.

Comment #4:

Part 2.7.2 (page 21) defines a "significant rainfall event" as 0.5 inches or more. The draft permit provides no scientific basis for this determination. (2)

Response: The basis for conducting self-inspections is stated in Part V.F. of the Fact Sheet. Please be aware that this is not necessarily a new requirement. In prior versions of MPDES General Permits for industrial and mining storm water discharges, the Department has included requirements for inspections after "each significant storm water runoff event". Although these prior General Permits did not specify a particular corresponding rainfall amount to trigger this inspection, when the question arose the Department has historically specified a 0.5-inch rainfall event. To provide clarification and ensure consistency with respect to compliance expectations, the Department has determined it is necessary to provide this specific rainfall amount in this permit for what a "significant storm event" is. Also, as mentioned in the prior comment's response, the Department's recently issued MPDES "General Permit for Storm Water Discharges Associated with Construction Activity" requires post-storm event inspections after 0.25-inch rainfall events, and this 0.25 rainfall amount is what the Department had originally proposed in this General Permit for a prior draft developed for a stakeholder's input round. Based on stakeholder input earlier this year, the Department lowered the rainfall amount back to 0.5 inches.

In selecting 0.5-inches, both historically and in the draft permit, the Department has utilized information from various sources in an effort to balance the need for environmental protection with the burden to permittees. This included consulting other similar permits, considering geographic, hydrologic, and climatic conditions in Montana, considering the amount of rainfall necessary to generate lateral surface runoff given average conditions and soil types, evaluating permit needs, and considering the overall industrial permitting universe this permit applies to. The relative frequency of 0.5-inch rainfall events was considered given the predominant semi-arid conditions in Montana. On average, 0.5-inch or larger rainfall events occur relatively infrequently. This is exemplified by a prior EPA Montana rainfall analysis for Montana's seven largest cities for use in developing the last 2010-2014 MPDES "General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4)". On average for these seven cities, and based on recorded rainfall event amounts over approximately the past century of time, this analysis resulted in the 87th percentile rainfall event being 0.5 inches, and this did not even include the relatively minor rainfall events of less than 0.1 inches (which Montana predominantly receives). Consequently, based on this analysis, only 13% of the rainfall events were 0.5 inches or greater for those events over 0.1 inch.

Self-inspections are a critical tool in evaluating and keeping track of BMP effectiveness, and consequently, in minimizing or preventing pollutant discharge from a site through storm water runoff. Consequently, no changes were made to the permit other than those mentioned in the response to Comments #37 and #38.

Comment #5:

Requiring quarterly sampling (in arid Montana) is burdensome and provides no cost benefit. Moreover, it does not account for natural weather conditions (i.e. winter months in northern and eastern Montana). (2)

Response: The basis for conducting quarterly sampling is stated in Part VI of the Fact Sheet. Additionally, monitoring is an inherent part of the MPDES permit program as this is typically the most direct and tangible way to evaluate the effectiveness of regulating pollutant discharges and assessing potential effects on receiving surface waters. While additional sampling of the actual receiving surface waters may provide more useful information on evaluating these effects, the benchmark monitoring approach for the site's storm water discharges at outfall locations is what has been established as the conventional approach in Montana and nationally throughout the history of the storm water program in the past two decades. However, in general for all regulated industrial activity storm water discharges, with semi-annual monitoring requirements, insufficient data has often been accumulated to provide statistically valid information and trends through time, and it typically does not document potential seasonal variations which can occur well. Consequently, the Department has taken a similar approach to the federal EPA whereby monitoring requirements are further customized based on the particular industrial sector (type), with quarterly monitoring as the default frequency. This will allow the Department and permittees to accumulate more representative data through time in assessing the effectiveness of control measures, compliance with narrative effluent limitations, and assist in assessing progress with respect to relatively newer requirements in recent years related to Total Maximum Daily Loads and Wasteload Allocations for listed impaired receiving surface waters. Quarterly monitoring should not present unreasonable difficulties with respect to cost, as less-expensive basic indicator parameters are typically required for most industrial activities required to monitor. It should similarly not present unreasonable difficulties with respect to winters, as sampling is typically expected to occur every three months, and sampling can be performed based on either a rainfall or snowmelt event (thawing events do occur numerous times during relatively colder months of the year).

Comment #6:

Part 1.2.1.2 (very last word) the word "alleviated" should be replaced with "mitigated." (2)

Response: Although the dictionary lists the term "alleviate" under the definition of the term "mitigate", the Department agrees with this comment and has changed the permit to use the word "mitigated".

Comment #7:

Part 1.2.1.2. 1&2 – DEQ should provide guidance on what kind of time delay should be allowed for formal checks with MNHP and SHPO. (2)

Response: The Montana Natural Heritage Program (MNHP) and the State Historic Preservation Office (SHPO) are both public entities whose operational parameters are outside of the Department's authority under the Montana Water Quality Act. Their services and consequent timeframes or related requirements are independent of the Department and potentially subject to change. Consequently, the Department cannot provide time expectations in a permit, as that could imply we are indirectly regulating operations of another public entity. Information pertaining to these entities is best obtained from them directly. Based on Department experience, information requests from these could take up to 5-10 days. Consequently, no changes were made to the draft permit.

Comment #8:

Part 1.2.2. 1&2 – Both sections use the phrase "land, soil, and water conservation practices" in the last paragraph. This phrase should be replaced with "pollution prevention practices." (2)

Response: In the context of this particular sentence and what the Department is trying to accomplish with respect to ensuring the adequacy and quality control of information and practices developed/implemented through the SWPPP, this term is used because it is elsewhere utilized in regulations related to MPDES permitting such as those for surface water quality standards and procedures, nondegradation, etc. In certain circumstances, this term is used in storm water permitting regulatory documents to ensure optimal consistency and cross-coordination with other related requirements. Consequently, no changes were made to the draft permit regarding this language. However, for clarity in emphasizing that this requirement pertains to all SWPPPs regulated under this General Permit, this language was added to the beginning of the SWPPP requirements in Part 3.1.

Comment #9:

Part 1.3 – There is a potential conflict between "you have ceased operations" and "you have ceased any and all discharges." This could put the interests of the owner and operator or multiple operators at odds with each other. This condition should be the responsibility of the permit holder only. (2)

Response: The permit holder is the "owner or operator" (as defined in 75-5-103(25) MCA) which is specified on the Notice of Intent Form. This permittee can also transfer the permit coverage to another "owner or operator". To terminate permit coverage, there can be no more "storm water discharge associated with industrial activity (as defined in ARM 17.30.1102(29)) or "storm water discharge associated with mining and with oil and gas activity" (as defined in ARM 17.30.1102(30)) occurring. However, the wording of this requirement was revised for clarification as it was not clear that a facility can remain in operation, but terminate the permit authorization if the discharge has been eliminated. This first bulleted item in Part 1.3. now states "Through ceased operations of the facility or otherwise, you have ceased any and all regulated storm water discharges to state surface waters and demonstrate to the Department there is no probability of further uncontrolled discharge(s) which may effect state surface waters, and you have already implemented necessary sediment and erosion controls as required by Part 2.2.5."

Comment #10:

Part 1.3 – Why doesn't DEQ have a standard Notice of Termination Form rather than listing all of the info that must be submitted in writing? (2)

Response: The Department does have a standard Notice of Termination (NOT) Form available. The vast majority of permittees typically use this NOT Form. However, at various times the Department has received a similar request for termination in writing without the use of the standard form, and has determined that this will suffice. The permittee has a right to terminate permit coverage at any time, even though it may place them at risk of potential compliance problems through discharging without a permit. Also, active permit coverage within a given calendar year results in the accrual of an annual fee, and delays brought about through not using the form can push terminations over into another calendar year. Given these circumstances, the Department wants to provide flexibility as to how permittees can terminate. The permit includes what information must be provided in writing whether the standard form is used or not. Consequently, no changes were made to the draft permit.

Comment #11:

Part 1.4 – There is no reason a standardized Permit Transfer Form should take 30 days to become effective. It seems reasonable to submit the form within 15 days, but effective upon complete submittal would be preferred. (2)

Response: The Permit Transfer Notification (PTN) Form is a standard one-size-fits-all form used for MPDES and other permits administered through the Department's Water Protection Bureau. With respect to MPDES General Permits, it is the Department's current interpretation with respect to storm water discharges (instead of ARM 17.30.1117), that a permit transfer is a "minor modification" under ARM 17.30.1362(1)(d). As such, under ARM 17.30.1360 ("Transfer of Permits"), item (2)(a) states the current permittee must notify the Department at least 30 days in advance of the proposed transfer date. This is the basis for the requirement on the PTN Form. As a public service, the Department frequently achieves much quicker turn-around, but based on the aforementioned rule, no changes were made to the draft permit.

Comment #12:

Part 1.5 – Will DEQ send reminder notices for No Exposure Certifications like they do permit expirations and renewals? (2)

Response: Industrial No Exposure Certifications are regulated separately and independent from this General Permit. This item was only briefly mentioned in Part 1.5. of the General Permit in order to help make the regulated community aware of this potential option. It is a requirement in ARM 17.30.1116(2)(c), and in the signed certification forms submitted, that these certifications be submitted to the Department once every five years. The Department has historically not sent out reminders for when this is to occur, particularly as the renewal times vary depending on when the last certification was submitted. This may potentially change in the future, but the administration of these certifications is not a formal part of this General Permit renewal process. Consequently, no changes were made to the draft permit.

Comment #13:

Part 2.2.9 – Most certification renewal programs run on a biannual (every 2 years) period. Would DEQ be willing to change the annual requirement? (2)

Response: The purpose of the requirements in Part 2.2.9. is to ensure pertinent employees and staff receive in-house training periodically. This allows for periodic refreshment and updating of information related to the implementation and compliance of requirements in this permit (SWPPP, etc.). It is focused on the specific facility and site. Consequently, this is not a "certification" program and should not be compared in relation to such. The Department wants to provide a consistent mechanism and minimum level of expectation for this facility-specific training, and believes annually is reasonable. This will optimally help ensure changing staff and/or changing needs are accommodated without being an unreasonable burden to permittees. Consequently, no changes were made to the draft permit.

Comment #14:

Part 2.4.5 – DEQ should consider defining "permit violation." Discharge or BMP failure should not automatically represent a "permit violation" if monitoring and corrective actions were followed in accordance with the permit. (2)

Response: Part 2.4.5. is not stating that discharge or BMP failure automatically represents a permit violation. It is stating that if a violation occurred, correcting the problem does not necessarily remove the violation from the record. Consequently, no changes were made to the draft permit.

Comment #15:

Part 2.5.1.1 & 2.5.1.6 – the word "quantization" should be replaced with "quantification." Does this section

address the difference between detection and quantification or really mean to address what can be quantized? (2)

Response: The word "quantization" has and can be used in such situations, but the word "quantification" would not be appropriate. Based on the comment, the Department has revised this word to be "quantitation" as that is a more common and conventional term for this situation and need. The definition of "quantitation" is "to determine or measure the quantity of", and this term is typically what is used with respect to analytical sampling and testing protocol in environmental monitoring.

Comment #16:

Part 2.5.1.4 – This section should take weather conditions into account. It will be almost impossible to sample a snow melt event within the first hour. (2)

Response: Most storm water monitoring which has been historically achieved under this General Permit has been accomplished by the sampling associated with a rainfall event rather than a snowmelt event. However, as snowmelt is also "storm water", the Department provides this alternative flexibility to permittees to help better ensure samples are obtained through time as required under the General Permit. As both rainfall and snowmelt events are both relatively unpredictable far in advance of their occurring, and depending on the facility's unique circumstances, permittees are expected to proactively plan ahead and ensure resources are available to accomplish the monitoring as storm event (rainfall and thawing) predictability increases closer to its occurrence. Furthermore, if no discharge occurs, then this can be specified on the Discharge Monitoring Report Form.

As monitoring is typically required in the General Permit on a quarterly basis, the Department expects it is reasonable to plan for and accomplish the sampling of a rainfall or snowmelt event at a minimum of once every three months. Relative to time and duration of the storm water discharge in either case, and assuming minimal flow and site drainage area travel time variations, the loading of displaced and more mobile pollutants on the ground surface and in discharges due to the industrial activity is typically most prevalent in the initial half-hour of the storm event, and to a lesser extent the first hour (similar to "first flush" concept). Beyond this initial time period, pollutographs (pollutant concentrations versus time) indicate pollutant concentrations typically drop off. This is why the relatively conventional requirements in Part 2.5.1.4., pertaining to the timing of sampling with respect to the storm event flow, have been historically placed into various storm water permits. The Department disagrees that it will be "almost impossible" to perform sampling in the earliest stages of a snowmelt event, particularly as rainfall or snowmelt event sampling typically only has to occur every three months, thereby allowing permittees more flexibility in how to plan for and conduct sampling at their particular facility. Consequently, no changes were made to the draft permit.

Comment #17:

Part 2.5.1.4 – Samples should only be required during operating hours. It would be possible to have a dry year when the only rain event during a quarter occurred on a Sunday at 2 am, resulting in a violation for no sample under the current language. (2)

Response: Permittees are expected to plan for and reasonably attempt to perform monitoring in compliance with the General Permit. The Department does not want to limit this potential by restricting sampling to only operating hours. In fact, this is typically when such monitoring is expected to occur, at least at sites which are regularly staffed and operated. Furthermore, if no discharge occurs which can be sampled (such as the example provided in the comment), then "No Discharge" can be specified on the Discharge

Monitoring Report Form. Also, please see the response to Comment #16. However, based on comments, some additional language was added to Part 2.9.1.3. in order to clarify the "No Discharge" box on the Discharge Monitoring Report Form can be checked if no discharge occurred during times when the facility was in operation or when permittee representatives had no access to the site.

Comment #18:

Part 2.7 – As written, inspection must be conducted by "qualified personnel," currently defined as someone who has "conducted" training. This should be changed to include someone that has "completed" the training. (2)

Response: Under Part 2.7., "qualified personnel" includes not only the "SWPPP Administrator" who conducts the training as stated in Part 2.2.9., but alternatively may also include "a person who has the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and evaluate the effectiveness of control measures and best management practices required by this permit in order to meet the effluent limitations". A person who "completed" the in-house training required by Part 2.2.9. may or may not necessarily have achieved this level of knowledge and skills, but the SWPPP Administrator or person who conducts trainings typically will have. In other words, people or staff who simply attend the required in-house training may not be qualified to perform the inspections. The training is required to help ensure the proper implementation of the SWPPP and related requirements (such as the proper management of potential pollutant sources), whereas assessing the formal compliance with the permit (such as through inspections) is typically the responsibility of the SWPPP Administrator. Consequently, no changes were made to the draft permit.

Comment #19:

Part 2.10 – This section allows for electronic copies of the permit. Are electronic copies of all documents acceptable? This is hinted at in Part 3.1.1, but should be clarified. (2)

Response: The Department consistently provided access to the signed General Permit on the Department's website. It is for this reason that Part 2.10. specifically allows an electronic copy of the General Permit to suffice. Also, it should help reduce the need for printed hard-copies at facilities, as this is a relatively longer permit in the number of pages. This allowance of electronic copies is not intended to apply to other document retention requirements at this time, particular as many documents are expected to be appropriately certified and signed. Based on this comment, and in order to clarify this, minor wording was revised in the last sentence of Part 3.1.1.

Comment #20:

Part 3.1.3 – For "directions of storm water flow on the site map," would contour lines—rather than arrows—also be acceptable? (2)

Response: In many situations topographic contour lines are very useful in indicating storm water flow directions, but this information must be supplemented with arrows as necessary for clarity. One or more site maps must be developed of sufficient scale and legibility to show the required site features. Also, topographic contours must reflect real-time and up-to-date ground and drainage conditions at the site, which may often not be the same as historical topographic maps due to development since the maps were created. A combination of topographic information and flow direction arrows is ideally often used, particularly on larger and more complex sites. Relatively larger and more spread-out sites may be able to better utilize topographic information, whereas relatively smaller or complex industrialized areas may be highly

dependent on the need for directional arrows. The bottom line is that the site map must be clear about storm water management features and drainage patterns on the site, including identified outfalls and receiving surface waters. Consequently, no changes were made to the draft permit.

Comment #21:

Part 3.1.6.2 – Does DEQ have a preferred site or method for determining "runoff coefficient?" (2)

Response: The Department does not have a preferred site or method for determining runoff coefficient. However, as stated in the response to Comment #8, this and other technical information in SWPPPs must be developed using reasonable land, soil, and water conservation practices and good standard engineering practices. This requirement has been in prior versions of the General Permit (both MTR000000 and MTR300000), and consequently, the Department expects runoff coefficients to be similarly determined using conventional protocol. Runoff coefficients are based on the type of ground cover at the site. Although a number of technical factors can influence the runoff coefficient, for regolith (unconsolidated surficial earth material), the runoff coefficients are typically determined based on the predominant soil type (grain size distribution). Runoff coefficients can be determined using real-time field information and testing at the site, or estimated through literature/reference values.

Comment #22:

Part 3.2 – DEQ is requiring evaluation for Impaired Waters downgradient of the direct receiving waters. How far downgradient evaluation required? (2)

Response: There is no specific downgradient distance requirement for a listed impaired waterbody for use in determining whether Part 3.2. requirements are applicable. This needs to determined on a case-by-case basis. On the NOI Form the permittee is required to provide outfalls and the corresponding name of the receiving surface water, and so indicate this information on a map which extends at least one mile beyond the site boundaries. However, the receiving surface water specified may actually be an included tributary for an identified listed impaired waterbody watershed, particularly if the receiving surface water on the NOI Form is indicated to be an ephemeral stream or intermittent waterbody. The typical conservative assumption would be that given a large-enough storm event in a short-enough time period, storm water from the site could flow downhill and ultimately discharge into the listed impaired waterbody. Consequently, depending on the hydrology, and what watershed information is provided on the Department's Clean Water Act Information Center (CWAIC) website (referenced in Part 3.2.), the permittee needs to check whether they are in a respective watershed for the listed impaired waterbody. Sometimes a listed impaired waterbody may be relatively close to the site, other times it could be relatively far (miles) away.

Comment #23:

Section 2.2.1, page 13, 7th bullet: We think the word "beamed" be replaced with "bermed"? (3)(4)

Response: The Department concurs and has corrected this typographical error to state "bermed".

Comment #24:

Part 2.5.1.1, second paragraph states, "You must monitor for any benchmark parameters specified for the industrial sector or subsector…". Our facility benchmarks for Air Transportation listed in Table 3.4.S-1 apply to "airports with over 50,000 flight operations per year and which have storm water discharges from areas where aircraft or airport deicing operations occur". Our facility does not have 50,000 flight operations

per year or perform deicing operations. Would we have to monitor for these parameters, since the subsector definition does not fit our facility? Would we be required to conduct routine facility inspections at least monthly during the deicing season according to Part 3.4.19.5.1? (4)

Response: Similar to prior versions of MTR000000, the need to monitor at airports is based on having 50,000 flight operations (takeoffs and landings by any aircraft) or more per year. Consequently, this monitoring requirement would not apply at Malmstrom AFB if you are below that threshold. Based on your identified industrial subsector, the other requirements would apply as pertinent to your particular facility. For example, if Malmstrom AFB is not doing any aircraft deicing, then the default quarterly routine inspections in Part 2.7.1. will apply. Also, see the response to Comment #2. For clarification of the applicability of Part 3.4.19. requirements if the airport is not doing deicing (includes both "deicing" and "anti-icing" as stated in Part 3.4.19.2.1.), a sentence was added to Part 3.4.19.1.

Comment #25:

Part 2.5.1.4 states grab samples must be collected within the first 30 minutes of the discharge unless impracticable. Would "the facility was not manned when the discharge occurred" be considered impracticable? Could a definition of impracticable be added to Part 5.1? (4)

Response: The standard dictionary definition of "impracticable" should be utilized in assessing this requirement. The Department does not want to include a different definition of "impracticable" in this permit, as the term is used elsewhere in permitting documents. The Department expects permittees to make a reasonable attempt to perform sampling as required in this permit. The determination of what is impracticable will vary from facility to facility depending on a number of variables, such as when the site is in operation and/or staffed, accessibility issues, the planning and predictability of the storm event, and the flow and duration of the storm event. Also, see the response to Comments #16 and #17.

Comment #26:

We would particularly like to comment on the frequency of inspections for storm water disposal systems. We note that storm water disposal system inspections are significant cost and time centers for mining operations. Simply stated, requiring costly and time-consuming inspections after each and every 0.5" rainfall event, would impose significant additional burdens on mining operations in terms of time and money. The imposition of this significant burden does not, referring to the statement above, "Contribute to the viability and growth of our members' operations [or to] the economic health of our state and its citizens."

We would note that best management practices for mines are typically engineered for long-term, low maintenance storm water control and those systems simply do not require inspection more often than quarterly.

We would most respectfully note: The requirement for "significant storm event inspection" is completely discretionary for the DEQ. We would suggest that the Department's discretion would be better exercised by revising this requirement to require inspections no more often than quarterly. (5)

Response: The basis for conducting self-inspections is stated in Part V.F. of the Fact Sheet. Also, please see the response to Comments #3, #4, #31, #37, and #38. Consequently, no changes were made to the draft permit other than those mentioned in the response to Comments #37 and #38.

Comment #27:

Page 47. Table 3.4.G-2. Benchmark Parameter -Turbidity -50 NTU Comment: It seems redundant and unnecessary to have a turbidity limit when there is a benchmark of 100 mg/l for total suspended solids. (5)

Response: For the purpose of benchmark monitoring, upon reconsideration the Department believes the requirement for TSS will suffice in this permit, particularly as turbidity has not been required and is not included elsewhere in this particular General Permit. Consequently, the permit was revised to delete the turbidity parameter from Table 3.4.G-2. in Part 3.4.7.7.2.

Comment #28:

A TSS benchmark of 100mg/l is unrealistic for discharges in erosive ephemeral channels resulting from intense thunderstorms or rapid snowmelt. This benchmark value should be related to the typical values of the receiving waters which are probably five to ten times higher than the benchmark value. The DEQ should establish guidelines for how permit holders can demonstrate that the receiving waters will have much higher values. It is well documented in fluvial geomorphologic literature that clear water (rain) in an erosive channel picks up a suspended load and reaches an equilibrium carrying capacity depending on the particle size distribution of the substrate. (5)

Response: A benchmark concentration value of 100 mg/l for TSS is a continuation of what has been used in the Montana DEQ's historical versions of MTR000000 (and MTR300000). It is also a value which is typically used by the federal EPA and other similar permits. The benchmark concentration is not a numerical effluent limit or enforceable water quality standard, such as what is typically to be used for "compliance monitoring" instead of "benchmark monitoring". Benchmark values are intended to serve as a "yardstick" for judging BMP effectiveness, and often represent typically-expected pollutant loadings for similar types of industrial activities. Also, benchmarks are typically assessed for the storm water discharges at the outfalls into the receiving surface waters, and not for the receiving surface waters themselves. Consequently, an ephemeral stream or channel may actually be a receiving surface water.

Sampling receiving surface waters is not incorporated into this type of permit, or is customizing requirements for a particular facility based on if the facility has unique characteristics and/or hydrologic factors affecting the sampled storm water at the identified outfalls. If a facility's particular hydrologic and discharge characteristics may be unusually affecting sampled parameter concentrations, then the permit provides mechanisms to explain and address this through Parts 2.5.1.6., 2.5.1.7., and 2.5.1.8, as well as in the SWPPP. These permit conditions also provide an opportunity to factor in how background runoff and receiving surface waters may contain relatively higher pollutant concentrations. Consequently, accommodating the concern is already largely built into the permit. Also, as each facility and hydrologic setting result in the need for a case-by-case assessment regarding the above and other variables, developing generic guidance applicable to all types of facilities and settings is difficult. Additionally, this General Permit provides a one-size-fits-all approach for various types of industrial facilities. If generalized requirements in a MPDES General Permit are insufficient in resolving technical and compliance-related issues pertaining to a particular facility's situation, an MPDES Individual Permit is an alternative option. This allows customized considerations, monitoring, and compliance-related requirements and/or determinations to be more optimally addressed should the need occur. Consequently, no changes were made to the draft permit.

Comment #29:

Section 2.5.1.7 of the draft permit provides for Naturally Occurring Background Pollutant levels. Many hard rock mines are located in districts of naturally occurring mineralization. In fact many mines were discovered by analyzing surface soil samples for elevated concentrations of lead, zinc, copper, gold, silver, cadmium, arsenic, antimony, mercury, nickel and selenium. For existing facilities that for various reasons cannot simply perform analysis on upgradient storm water to determine background levels, could DEQ provide more information on what the Department may view as acceptable "supporting rationale" for concluding that benchmark exceedances are attributable to naturally occurring levels of pollutants? (5)

Response: What the comment is asking is that if background storm water cannot be sampled, then how do you demonstrate that pollutants in the discharge are not due to the industrial activity. This demonstration would therefore need to indicate where the pollutants are coming from and why. This will vary depending on the particular site, geology, hydrology and a number of other factors. If the site's natural ground cover has not been disturbed, the hydrology has not been altered, outfalls and drainage areas have been optimally selected to represent only the regulated industrial activity, and it is certain the industrial activity is not responsible for having the negative effect on the storm water quality, then the demonstration analysis would typically be more focused on the particular natural geologic materials (whether surficial or bedrock materials), as was implied in the comment. This "supporting rationale" would equate to a technically-defendable analysis of where the pollutants are coming from if not from the industrial activity or background storm water. The necessary scope of this analysis can vary from site to site, with a number of potential investigation or test method variables to consider. It is expected the permittee would have to perform field-based research and analysis of the earthen materials which are the apparent source, and then an analysis of the hydrology in order to demonstrate the potential mobility and transport of such pollutants through storm water runoff. Please also refer to the response to Comment #28 above.

Comment #30:

Page 9 of 134 of the draft permit requires that NOI Forms must be submitted by December 31, 2012 and that updated SWPPP be provided to the Department no later than August 1, 2012. Are these deadlines valid? (5)

Response: Yes, these deadlines are valid except there was an error in the second date specified in the comment. As stated in the response to Comment #1, the correct date is August 1, 2013.

Comment #31:

Page 11 of 17 of Fact Sheet. V.F.1. Routine Inspections 1st Paragraph. "Permittees are required to conduct routine inspections, at least quarterly." 4th Paragraph "At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring."

With the erratic and unpredictable nature of thunderstorm events which produce at least 95% of the runoff, this requirement is impracticable with normal work schedules. For instance, many of the thunderstorms occur in the late afternoon or evening and very often during darkness. In situations like this, it would be necessary to ask someone to work overtime to by chance catch a sample form a storm which may not produce enough rain in the right location to produce runoff. Also, there are issues with safety and access.

Many mines have lightning policies which safeguards employees during storms by restricting being out of shelter of a building or the faraday shield of a vehicle. Also, during storms access to some sampling

locations is restricted by impassable mud or rolling rock conditions. Oftentimes conditions have to "dry-out" before some sites can be reached. (5)

Response: Self-inspections are a critical tool in regulating storm water discharges from industrial sites, particularly sites which are managing earthen materials and may have relatively widespread disturbance, thereby resulting in the potential need for relatively more erosion and sediment controls. Routine inspections help ensure storm water control measures are operated and maintained properly, which is particularly important in areas which are semi-arid (less vegetation) and where significant storm event inspections may not occur for many months at a time and/or are relatively unpredictable in time. Routine inspections help identify new potential pollutant sources, consequent necessary BMPs, and related issues needing attention in a proactive and preventative sense when compared to significant storm event inspections, which tend to be more reactionary based on the consequences of a particular storm event.

A minimum frequency of quarterly routine inspections is required because during at least certain times of the year, significant storm events (0.5 inches or larger) may not occur for many months, and comprehensive site inspections only occur once per year. Additionally, different seasons will have different type storm events, such as more snowmelt instead of rainfall, and having a routine inspection will help ensure potential problems or issues with respect to snowmelt events will be better captured and addressed. Overall, in performing a routine inspection every three months, and in consideration of the relatively infrequent nature of the other inspections types, having this “routine” periodic inspection will help ensure potential problems or issues are identified in a relatively timely fashion without being too burdensome on the permittee. Also, please see the response to Comments #3, #4, and #26. Consequently, no changes were made to the draft permit.

Comment #32:

In section 3.4.7.1.3 of the draft permit, it appears that storm water discharges from mineral exploration activities are not covered by the Industrial Activity MSGP. What is the appropriate permit to discharge storm water from mineral exploration activities? (5)

Response: In Part 3.4.7.1.3., this requirement is stating that discharges from “exploration and construction of metal mining and/or dressing facilities” is not eligible for coverage under this permit because it is a “storm water discharge associated with construction activity”, which is formally defined in ARM 17.30.1102(28). These types of storm water discharges are typically covered under the MPDES “General Permit for Storm Water Discharge Associated with Construction Activity”, although should the need arise they can alternatively be covered under a MPDES Individual Permit. Also, for further clarification please refer to the definitions in Part 3.4.7.3.

Comment #33:

In section 3.4.7.1.3 of the draft permit, it states that storm water discharges associated with construction activities are not covered by the Industrial Activity MSGP. ARM 17.30.1102(28) defines construction activities as including "clearing, grading, excavation, stockpiling earth materials, and other placement or removal of earth material". To a large extent, this is also the definition of mining. Clearly mines in construction and not yet in production would not be covered by this MSGP. However, for a producing mine, would there be routine mining related activities, such as soil salvage, that would not be covered by this MSGP and would be considered "construction activities"? (5)

Response: It is acknowledged that at mine sites it may seem difficult to draw a clear line between mining and construction. In Montana, there are a number of regulated industrial activities which have obtained permit authorizations under both the Industrial (#MTR000000) and Construction General Permit (#MTR100000) at certain times. The Department largely uses a system and set of regulatory requirements originally developed by the federal EPA. In this system, construction activity storm water discharge permitting is essentially based on whether an acre or more of ground is being disturbed, and these permit authorizations are relatively short-term finite permit authorizations, often depending on temporary or smaller design storm event BMPs. Industrial activity storm water discharge permitting is based on the facility type, typically by the Standard Industrial Classification (SIC) code, and these permit authorizations are oriented around longer-term operational storm water discharges and consequent potential pollutant sources and BMPs. Consequently, as these two permit needs are determined through different means which may not correlate well, sometimes there can be some overlap or gray areas between the two permits, particularly at mine sites or landfills. This is one reason why in the draft permit we have added additional information to help clarify how to differentiate between the two permits, such as in Part 3.4.7.1.3. For clarification, Part 3.4.7.1.2. contains a list of covered discharges (mining activities or areas) under this General Permit. For example, this includes overburden and topsoil piles as being covered under the General Permit, in reference to the "soil salvage" mentioned in the comment. Candidate permittees must evaluate each General Permit in order to determine which permit is most applicable in their particular situation for discharge permitting.

Comment #34:

On page 10 (Section 1.3, second bulleted list), information in the fourth bullet references "the four conditions stated above." Should this bullet reference "the three conditions stated above"? (6)

Response: The Department concurs and has revised this item to state "three" instead of "four".

Comment #35:

In Section 2.4.1 of the Draft MSGP, the fourth bulleted condition specifically requires permittees to review and revise the selection, design, installation, and implementation of their control measures if findings from a routine inspection show the control measures are not being properly maintained and operated. SMC believes a full review and revision of these control measures should not always be required, especially when routine maintenance items are identified during an inspection. It is common for routine maintenance to be performed on BMPs during normal operation. In our view, the routine inspections provide a means of identifying and ensuring such BMPs are being maintained in working order. Thus, SMC recommends adding language to further define "corrective action," especially when it relates to routine operation and maintenance activities. (6)

Response: The Department concurs that some additional clarification is necessary regarding this matter and the corrective action requirements. Consequently, in the first sentence of Parts 2.4.1. and 2.4.2., we have added the word "maintenance". In satisfying this requirement, permittees may simply just have to review and revise the maintenance protocol for a particular control measure rather than the revision of the actual control measure itself. Resolution can then be accomplished by a more relatively-simple change to maintenance or implementation (operation) protocol for the particular control measure. As this requirement is relatively broad, and if the full Part 2.4. is read and taken in context with the rest, this requirement does not necessarily mean that one control measure has to be replaced with another of a different type. This requirement is included to ensure that action is taken to consider all potential improvements to the control

measures and managing potential pollutant sources, including improvements related to operation and/or maintenance if that is the identified problem. With the revision to this language, the Department does not see the need for a definition of "corrective action", particularly as that is what is meant to be defined or delineated in the entire Part 2.4.

Comment #36:

In Section 2.4.3 of the Draft MSGP, corrective action deadlines specific to documentation are detailed (example, 24 hours to document the discovery of any conditions listed in Parts 2.4.1. and 2.4.2. and 14 days to document any corrective actions to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination). However, if any control measure changes are deemed necessary following the permittee's review, the modifications "must be made before the next storm event if possible, or as soon as practicable following that storm event." SMC believes the "as soon as practicable" timeframe could vary significantly from site to site, based on the control measures being used. Thus, SMC recommends the statement read "any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event according to the permittee's documentation." (6)

Response: The Department concurs with this comment, and has added revised language to Part 2.4.3. similar to the recommendation in the comment. It states, "If you determine that changes are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event according to the permittee's documentation as required in Part 2.4.4."

Comment #37:

In Section 2.7.2 of the Draft MSGP, additional routine inspections following significant rainfall or snowmelt events are described. The requirements state that "These inspections must be conducted as soon as practicable after such a rainfall or snowmelt event or in the timeframe specified in Part 3.4 for your particular sector or subsector if specified." If a permittee's sector or subsector does not identify an inspection timeframe, SMC believes guidance should be provided regarding the Department's definition of "as soon as practicable" following a significant event. SMC recommends an appropriate timeframe be identified, especially since most facilities lack resources during weekends and holidays. SMC believes a 72hour window to conduct follow-up inspections would limit the burden on permittees. (6)

Response: The Department concurs and has revised Part 2.7.2. to specify "within 72 hours" of the end of a significant rainfall or snowmelt event. For inactive or unstaffed facilities, the requirement remains "as soon as practicable". Also, see the response to Comment #38.

Comment #38:

Regarding the storm water inspection frequency in Section 2.7 of the Draft MSGP, SMC recommends that the Department maintain consistency with EPA's 2008 MSGP, which does not identify or define a rainfall quantity associated with a significant storm event, nor require inspections following a significant storm event.

As required in Section 2.7, permittees must conduct inspections after significant storm events in addition to quarterly, routine facility inspections. For purposes of the significant storm event inspection, a "significant

rainfall event" is defined as 0.5-inches/24-hour period. SMC believes this single storm event criteria is not appropriate as a 'one-size fits all' for all Montana facilities for the following two reasons. One, inspections following the termed "significant rainfall event" seem unreasonable at remote, unmanned, and/or abandoned properties. And two, storm water storage/handling capabilities at each facility will differ significantly based on the storm water management practices and BMPs employed. For example, some sites with less developed storm water handling systems (capable of handling only smaller storm events) will receive greater benefits from routine inspections following the defined "significant rainfall event." However, other sites with more permanent, established storm water handling systems (designed to handle storm events much larger than the 0.5-inch/24-hour criteria) will incur a greater burden than benefits gained from routine inspections following the defined "significant rainfall event."

Case in point, storm water inspections at SMC's larger operations, utilizing more permanent, robust BMPs, require two full days to complete a storm water inspection; one full day for the field inspection and an additional day for follow-up and recordkeeping. Comparing site precipitation records against the defined "significant rainfall event" of 0.5 inches/24 hour period, SMC's East Boulder Mine Site, Stillwater Mine Site, and Columbus Metallurgical Complex would have performed 10, 6, and 8 inspections (respectively) in 2010 and 11, 10, and 11 inspections (respectively) in 2011. These totals represent inspections following a "significant rainfall event" only and do not include inspections following a "significant snowmelt event." The potential impact on SMC's operations from these inspections would have been an additional 16 to 22 working days per year. SMC believes this burden goes beyond the intent of the program's targeted inspection rate (quarterly).

Given these reasons, SMC recommends that the Department modify the MSGP to either 1) combine Sections 2.7.1 and 2.7.2 requiring that quarterly, routine facility inspections occur immediately following significant storm events, or 2) modify the "significant rainfall event" definition such that each site would be allowed to determine storm significance according to site-specific weather/climate and individual storm water management systems. (6)

Response: The basis for conducting self-inspections is stated in Part V.F. of the Fact Sheet. Also, please see the response to Comments #4, #26, and #39.

Regarding the portion of the comment about EPA's 2008 MSGP, while what is stated is accurate, the EPA permit actually includes an additional different type of inspection which the Department did not include in this General Permit. This is a requirement to collect a sample and perform a visual assessment of every outfall quarterly, in addition to the benchmark monitoring (which may not be performed at each outfall).

Regarding the portion of this comment which states "permittees must conduct inspections after significant storm events in addition to quarterly routine facility inspections", this is not accurate. As stated at the end of Part 2.7.2., a significant storm event inspection can be credited as a routine inspection. Similarly, as stated in Part 2.7.1.2., a routine inspection can be counted as a significant storm event inspection if it meets the rainfall or snowmelt criteria for that.

As stated in the response to your Comment #37, the requirements in Part 2.7.2. were revised to allow more flexibility in performing significant storm event inspections for sites which are documented to be inactive or unstaffed.

As indicated in the Fact Sheet and in the response to other similar comments in this document, and given that the purpose of this General Permit is to regulate pollutant discharges through storm water runoff (wet weather events), the Department believes that evaluating sites after significant storm events is a valuable

and optimal tool in this effort. Also, as this General Permit is designed to essentially serve as a "one-size-fits-all" set of requirements, it is difficult to accommodate all permittees optimally as there is an extremely wide diversity of industrial facilities and contributing circumstances covered under this General Permit. As such, and depending on a particular facility's circumstances and in-house protocols, some requirements may atypically be more burdensome to certain facilities and less burdensome to others. As stated elsewhere in these responses, if such requirements in a MPDES General Permit are insufficient in resolving technical and compliance-related issues pertaining to a particular facility's situation, an MPDES Individual Permit is an alternative option.

In consideration of this and other comments received regarding the frequency of significant storm event inspections, and to help ensure a reasonable amount of significant storm event inspections are required in a given calendar month should more than two significant storm events occur, language was added to Part 2.7.2. to minimally require these types of inspections only twice in that calendar month. The specific language added at the end of Part 2.7.2. states: "Also, within the same calendar month, only two significant storm event inspections (performed on different days) are minimally required if more than two significant storm events occur (on different days) during that same calendar month."

Comment #39:

If a "significant storm event" is defined over a 24-hour period, SMC believes an additional qualifier is necessary given available precipitation data for some areas. Specifically, SMC believes the 24-hour period should be from hour/minute/second 00:00:00 to 11:59:59 each day, or the typical reporting period for most weather stations in the National Weather Service database. This additional qualifier will reduce the burden on permittees from having to retrieve, collect, and analyze precipitation data on an hourly basis. (6)

Response: Facilities are encouraged to use rain gauges at their site if possible to assess the need for a post-storm event inspection as it provides the most site-specific and valid rainfall amount information, at least if there are permittee representatives at the site. Rainfall gauges are relatively inexpensive, and easy to use by site personnel. If this is not possible for whatever reason, and the facility must depend on other off-site sources of information, then that is also acceptable. However, natural rainfall amounts and distributions with respect to time are not oriented around the time clock. If the Department were to utilize the protocol suggested in the comment, then significant storm events based on rainfall would be periodically missed because they are straddling two days. Furthermore, as significant rainfall events of 0.5 inches or more are relatively infrequent (see response to Comment #4), and their occurrence is often relatively predictable within a few days, the Department does not believe this requirement places an unreasonable burden on permittees. Consequently, no additional changes were made to the permit other than those stated in the response to Comments #37 and #38.

Comment #40:

In Section 3.1.7 of the Draft MSGP, each permittee's SWPPP must be modified "whenever necessary to address any of the triggering conditions for corrective action in Part 2.4.1. and to ensure that they do not reoccur or to reflect changes implemented when a review following the triggering conditions in Part 2.4.2. indicates that changes to your control measures are necessary to meet the effluent limits in this permit." This section also states that "The SWPPP must be maintained and kept up-to-date to reflect current site conditions." While permittees know that an updated SWPPP must be maintained at their site, this section does not address if and when updated SWPPPs must be submitted to the Department. Thus, SMC recommends including guidance as to when SWPPP changes and/or updates must be submitted. (6)

Response: Similar to the preceding versions of the General Permit (both MTR000000 and MTR300000), SWPPP modifications or updates are not required to be submitted to the Department unless specifically requested by the Department (see Part 4.8 – Duty to Provide Information), such as through a Department inspection. A SWPPP is a "living document" whereby it is expected there will be numerous changes to the SWPPP throughout the term of permit coverage and/or within each five-year General Permit cycle. The Department requires SWPPPs to be submitted with initial new applications, and periodically requires updated SWPPPs in renewal cycles (such as the requirement to submit updated SWPPPs by August 1, 2013 as stated in Part 1.2.2.). The permit is focused on stating what is required, as opposed to what is not required. However, for clarification, a sentence was added to Part 3.1.7. to indicate SWPPP modifications or updates are not required to be submitted to the Department unless specifically requested through the authority of Part 4.8.