Addendum to the Statement of Basis
Response to Comments

PERMIT TYPE: General Surface Water Discharge Permit for **Industrial Activities** in South Dakota

PERMIT NUMBER: SDR000000

BACKGROUND

On June 26, 2012, the South Dakota Department of Environment and Natural Resources (DENR) offered its proposed General Permit for Storm Water Discharges Associated with Industrial Activities in South Dakota. The permit was published in 12 daily newspapers across the state, announcing the availability of the general permit and requesting comments.

DENR received comments from 4 industries in the state. The department's responses to the comments are below the comment in bold and italics.

COMMENTS

TJN Enterprises, Inc. Comments

> ¶ 3.1 calls for all storm water to be treated if contact (with industrial activities) cannot be eliminated. Our opinion is that only impacted waters should have to be treated. Treatment methods vary and can be quite expensive to install and maintain so non-impacted water that is "clean" enough for discharge should not be required to be treated. It could well be that this determination will not be able to be made until testing is completed in the first year.
>
> ***This permit focuses on best management practices to prevent pollution from occurring or minimize its impacts. DENR's intention is not to require complex or expensive treatment systems. The order of priorities for preventing pollution to storm water is:***
>
> 1. ***Prevent or reduce contact with sources of pollution where possible. Keeping materials and components which are most likely to impact storm water indoors or under cover is one example of this.***
> 2. ***If contact cannot be eliminated or reduced, the water may be able to be contained. This permit regulates the discharged pollutants; water that evaporates or otherwise does not leave the site is not considered a discharge. Secondary containment around fuel or other fluid containers outdoors would be an example of this.***
> 3. ***If impacts to storm water cannot be prevented, and the storm water cannot be contained, it must be treated before it leaves the site. DENR understands that any treatment that is installed would have to be operated and maintained, so DENR***

recommends simple passive systems where possible. Sedimentation ponds or wide grass buffers for removing solids is an example of this.

The permit shall also be modified to remove the duplication of the sentence "If contact cannot be eliminated or reduced, storm water should be treated before it is discharged from the site."

¶ 3.8.2 deals with timing of actions to be taken as a result of testing. According to the paragraph, the Plan must be revised within two weeks and changes implemented within 12 weeks. It is our understanding that during the first year we must perform an inspection of discharge water to determine the presence of oil sheen. If sheen is not observed we are required to have a sample of the water tested for TSS but if sheen is observed we must also test for oil and grease. We ask that the abatement times be adjusted because just modifying a SWPPP through engineering consultants can take a significant amount of time. Specifically, we suggest that if the results of the testing, in the opinion of SDDENR, require Plan (and possibly site) changes the time allowed to modify a SWPPP be 12 weeks and if structural changes are necessary per the SWPPP modifications that we be allowed 6 months for the engineering and design cycle and 12 months for construction and implementation.

DENR does not expect most facilities will need extensive changes to meet the requirements of the permit or require the assistance of outside consultants. DENR does expect a reasonable attempt be made at solving or reducing the problem as soon as possible. The timeline currently given in the permit reflects that expectation.

TJN Enterprises offered the example of an oil sheen. In this case, finding and preventing the spill or leak that caused the sheen would be a necessary first step. However, there may be on-going problems that cannot be not solved through simple measures, and consultants may be needed. In these extenuating circumstances, DENR would be willing to approve a longer timeline if necessary. Section 3.8.2 of the permit will be modified to state this.

In reviewing the document we did not see any statements as to whether the results of testing and any other documentation will be held by the State of South Dakota as private information or be published as public. We see potential problems with making such site specific information public and suggest that it be published only in aggregate form, if at all.

The department has no plans to publish the information from the sampling. Furthermore, only the aggregate information for each of the industrial categories described in the general permit will be used for determining sampling requirements for future renewals of the general permit. However, the monitoring results would be considered public information, and would have to be provided if requested.

Otter Tail Power Company Comments

The draft general permit should be revised to clarify the conditions under which sampling and monitoring of storm water should take place.
The draft general permit should specifically state that sampling and monitoring of storm water should only occur when storm water associated with industrial activity **discharges** into waters of the state. The current wording is ambiguous and could be interpreted to mean that runoff should be sampled and monitored regardless of whether it enters waters of the state.

For example, in Section 5.1, item 3, the draft general permit states "Sampling must be conducted within 24 hours of a storm event greater than 2 inches or snowmelt large enough to cause runoff." In this item, the draft general permit does not clarify that the runoff should only be sampled when it is discharged into waters of the state. This wording is problematic for Big Stone Plant because coal pile runoff does occur at the site, but it does not discharge into waters of the state. Item 3 should be revised to read "Sampling of storm water **discharge into waters of the state** must be conducted within 24 hours of a storm event greater than 2 inches or snowmelt large enough to cause runoff." All other items in the draft general permit which mention sampling and monitoring requirements should also be revised to clarify that the requirements only apply to storm water that is discharged into waters of the state.

Alternatively, the definition of "runoff" could be included in the permit for the purpose of clarifying the conditions under which sampling and monitoring should take place. In this case, runoff should be specifically defined as storm water discharge that enters waters of the state.

The permit defines* discharge *as* "an addition of any pollutant or combination of pollutants to surface waters of the state from any point source."** ***The department will accept a report of "No Discharge" if no storm water leaves the site during the monitoring period. A sample must be taken at the facility's first reasonable opportunity, if a discharge does occur at any time during the permit cycle.

In addition, the following definition of runoff will be added to the permit to clarify its intended use: "runoff is a storm water discharge that enters waters of the state."

Homestake Mining Company

Possible Vague Language on Response to Monitoring. The proposed General Permit would require an assessment of referenced sampling results; it provides "[i]f the sample results **show problems with a pollutant**, the SWPPP must be modified to **prevent future occurrences**." Proposed General Permit at 5.1.8. (emphasis added). Homestake expects that the provision means if the numeric sampling (as opposed to visual monitoring) obligations provide data indicating concentrations of constituents that could cause or contribute to exceedances of water quality standards, the SWPPP must be modified to better manage storm water to minimize similar future occurrences.

Homestake suggests that similar clarifying language may be beneficial in implementing the referenced provision.

The quoted section is intended to require updated controls and SWPPP if pollution is noted in either numerical samples or visual monitoring. Section 5.1.8 will be modified to say "If the sample results show pollutant levels that could cause or contribute to exceedances of water quality standards, the SWPPP must be modified to prevent future occurrences."

Possible Clarifications Related to Visual (and Other) Monitoring During Storm Events. Homestake believes any approach to monitoring in the proposed General Permit (and any eventual efforts to develop numeric permit limits based on that monitoring) should recognize the fact that receiving waters (in addition to those storm water flows emanating from the site) can have high TSS concentrations during storm events that are typical of and consistent with the region's geography. Correspondingly, the burden on permittees to demonstrate facts related to background conditions during storm events may need to be more clearly identified. In particular, the proposed General Permit should not trigger additional obligations for permittees to the extent that flows in the receiving waters are, as confirmed by visual monitoring, similarly affected by the storm event. In that regard, Homestake would support specific permit recognition that any visual monitoring during storm events of flows from the "industrial site" must be considered in the context of visual monitoring of storm event flows upgradient or in the vicinity of the site and that the "presence or absence of visible pollutants, discoloration" is only relevant to assessing storm water quality-related impacts insofar as the visible pollutants and discoloration aren't already detected at that representative, alternative monitoring location.

The monitoring is intending to indicate whether or not an industry is likely to cause or contribute to a violation of the surface water quality standards, and indicate what types of pollutants of concern should be considered for future permits.

However, DENR only requires the permittee to submit the results of the required monitoring and/or sampling. Additional data, including upstream conditions in the receiving waters, will be accepted and considered in addition to the required information. If there are any other circumstances that the facility wants considered, they are encouraged to submit this additional information. The final narrative section in Attachment G of the proposed permit is intended to facilitate this. The permit will be modified to clarify this by adding the phrase "If the facility feels there is any other relevant information or any facts that are relevant to the sampling, attach it to this report. All information will be considered."

Ultimately, the permittee is responsible for minimizing the pollutants leaving its site. Oftentimes, instream conditions at the site are the result of point and nonpoint sources of pollution upstream, beyond the control of the permittee. DENR recognizes this fact and will continue to work with these sources to protect and improve water quality in South Dakota. However, regardless of instream conditions, each permittee has a responsibility to minimize its impact on a stream.

Total Recoverable vs. Dissolved. As a matter of record, Homestake wants to clarify that even though permit limits for metals are typically expressed in terms of total recoverable metals, any assessment of in-stream or storm water quality applicable to metals must focus on dissolved metals, i.e., the relevant fraction for assessing impacts to the receiving waters.

That is correct. The South Dakota Surface Water Quality Standards for metals are expressed as dissolved, which best represents the potential toxicity associated with metals instream. However, permit limits are expressed as total recoverable metals. The total recoverable test method analyzes both the readily-available portion of the metals (represented as dissolved metals) and the portion of the metal that may easily become bio-available in the environment. Therefore, the department typically requires total recoverable metals monitoring in any Surface Water Discharge permit.

If the department determines additional metals monitoring is necessary in future permits, we anticipate continuing this approach to effluent and instream metals analysis. At this time, metals monitoring is only required for a discharge to surface waters from coal pile runoff.

Data Quality/Sample Size. The proposed General Permit's Statement of Basis indicates that the one possible purpose of the sampling requirements is to gather data in support of numeric limits' development in the next permit cycle. Proposed Statement of Basis at 3. Again (and as indicated above), Homestake believes the proposed General Permit should focus on proper assessment of the visual monitoring obligations (and implementation of effective best management practices). However, to the extent that data are used for other purposes, DENR should be certain that it has adequate, representative information. For example, analyses obtained from a single sample would be insufficient to determine the nature of any storm water pollutants in those flows and would not serve as a scientifically valid foundation for the development of permit limits. Similarly, data related to constituents in storm water emanating from an "industrial site" must be considered in the context of the same type of data in the associated receiving water.

Homestake raises a valid point in its comments. Ideally, the department would like to have extensive data from each type of industry or even each actual site. This would best allow the department to make an informed decision about the potential impact associated with the runoff from each permitted site.

However, the department recognizes such data is not currently available and may be costly for permitted facilities to obtain. Therefore, the department proposed the approach to require a single sample from most industrial sites regulated under this permit. This single data point will not be used to take specific action against a single facility. Instead, the department intends to evaluate specific types of industries to determine which one(s) warrant additional testing and/or effluent limits in the future. In addition, this data will help to identify specific outliers, facilities that are either showing higher or lower levels of pollutants than other similar types of facilities. The department will use this information to identify which best management practices are

more effective and help facilities better target their water quality improvements at the site.

In addition, this data will help the department justify the need, or lack of need, for additional investigation and more intensive sampling. This is simply the first step to better understand the effectiveness of the state's storm water permitting program and to make informed decisions about requiring additional sampling in the future.

Wilson Trailer Company

What happens if a drought continues more than one year and the facilities are not able to sample two consecutive years? We request that this time period be removed from this monitoring requirement permit. This will provide some flexibility to facilities that may not be in the areas with an average 2 inch rain fall. The current requirement of the draft permit is to have a 2 inch rain fall event in order to complete sampling annually.

Samples must be taken when there is a discharge from the facility. If there is not enough precipitation to cause a facility to discharge, no sample is required. The clarifications being made in the comment by Otter Tail Power Company above may explain this further.

In addition, drought shall be removed from the list of climatic conditions listed in Sections 3.9.4 and 5.1.2 to avoid future confusion.

STATEMENT OF BASIS

Permit Number: SDR000000
Permit Type: General Surface Water Discharge Permit for **Industrial** Activities in South Dakota

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The statements in this document are intended solely as supporting documentation to aid in complying with the Storm Water Regulations. This document is not a substitute for reading the "General Permit for Storm Water Discharges Associated with Industrial Activities" and understanding all its requirements as they apply to the facility or site.

BACKGROUND

In 1987, Congress amended the Clean Water Act to require implementation of a comprehensive national program for addressing storm water discharges. The first phase of the program, commonly referred to as "Phase I," was promulgated on November 16, 1990. Under Phase I, the Environmental Protection Agency (EPA) established the permitting requirements for "storm water discharges associated with industrial activity." This definition included 11 categories of industrial activity, primarily based on a facility's Standard Industrial Classification (SIC) code. (Please note: On January 1, 1997, the Economic Classification Policy Committee changed the four-digit SIC code to a six-digit North American Industry Classification System (NAICS) code. Either number may be used in applying for the general permit, but in the case of a discrepancy the SIC code shall be used to determine requirements. More information and an industrial list for each of the different coding systems can be found on the US Census Bureau's website at www.census.gov/epcd/www/naicstab.htm).

Under the Phase II regulations, promulgated on December 8, 1999, no new categories of industrial activity were added to the program. However, the Phase II regulations did allow facilities with no exposure to be exempted from permitting. More information on the exemption is included later in this document.

The South Dakota Department of Environment and Natural Resources (SDDENR or DENR) has been the delegated permitting authority for the Storm Water Program within the State of South Dakota since December 30, 1993. The federal storm water regulations have been adopted, by reference, into the Administrative Rules of South Dakota (ARSD) Chapters 74:52:01 through 74:52:11.

INTRODUCTION

Industrial activities have the potential to produce many pollutants that may contaminate storm water runoff. Pollutants such as toxic chemicals, hazardous materials, metals, oil, organic material, pesticides, and other materials that may be harmful to humans, fish, wildlife, and plants can contaminate storm water and enter waters of the state. When these materials are not properly handled or stored, the resulting contact, leaks, and/or spills can pollute storm water and can

impact drinking water sources and waters protected for recreation, aquatic life, and other beneficial uses.

The intent of the storm water regulations is to improve and protect water quality by reducing or eliminating contaminants in storm water. Storm water runoff consists of rainwater or melted snow that runs off the land and directly (or indirectly by way of storm sewers) enters waters of the state such as lakes, rivers, streams, wetlands, and ponds. The term "industrial activity" includes but is not limited to point source discharges from areas with operations such as manufacturing, mining, transportation facilities, power plants, airports, landfills, wastewater treatment plants, and recyclers. A complete list of industrial activities requiring permit coverage is included in Appendix A of this Statement of Basis with some examples of acceptable control measures listed in Appendix B of this Statement of Basis.

The proposed storm water general permit does not authorize any non-storm water discharges, such as process wastewaters or wash waters (including truck wash out waters, vehicle wash waters, aggregate cleaning wastewater, etc.). An appropriate Surface Water Discharge permit must be obtained before allowing such discharges.

GENERAL PERMIT DESCRIPTION

SDDENR is renewing the general permit for storm water discharges associated with industrial activities. This general permit contains requirements that are based on technology considerations, available control measures, and other conditions applicable to the types of storm water discharges generated by industrial activities. The proposed permit will replace the current permit, which was issued on October 17, 2003.

A general permit is being issued for storm water discharges from industrial operations within the state of South Dakota. The general permit regulations in ARSD Section 74:52:02:46 provide for the issuance of general permits where covered facilities:

1. Are within prescribed geographic boundaries;

2. Involve substantially the same types of operations;

3. Discharge the same types of wastes;

4. Require the same effluent limits or operating conditions;

5. Require similar monitoring; and

6. Are more appropriately controlled under a general permit than individual permits.

South Dakota is proposing to issue a general permit under the Surface Water Discharge System for storm water discharges associated with industrial activities. The intent of a general permit for industrial storm water discharges associated with these activities is to:

1. Provide timely permitting for affected facilities;

2. Establish uniform criteria for management practices and effluent limits for discharges from these activities; and

3. Promote consistent permitting with respect to these activities.

GENERAL PERMIT CHANGES

Five major changes to the current general permit are being proposed with the renewal of the permit.

1. Some categories of permittees will be required to sample and report the quality of storm water runoff at their sites under the proposed permit, and all permittees will be required to visually monitor and record the quality of storm water. This information may be used to develop numeric limits in the next permit cycle. The parameters for which each industrial category must sample are listed in Appendix C of this document and in Section 5.1.4 of the permit. Sampling must be performed in the first 12 months the permittee has coverage under the proposed permit.

2. All facilities covered under the permit must perform visual monitoring for an oil sheen and for visible discolorations, foaming, muddiness, or other changes to the storm water. The visual monitoring must be performed at least once per year within 24 hours of a storm event greater than 2 inches or snowmelt large enough to cause runoff.

3. Monitoring is now required for discharges from storm water containments such as storm water ponds or secondary containment structures. This monitoring will be performed the same way as the required monitoring in sections 1 and 2 above.

4. The requirements for self-inspections have been modified to require inspections while water is leaving the site from a major (2 inches or greater) storm event or when snow melt is running off. Under the current permit, this is a suggestion.

5. In an effort to clarify permit requirements, specific requirements in the permit have been moved to the Effluent Limits section of the permit (Section 3.0 of the permit).

6. "Discharges from industrial facilities that have been designated by the Secretary as needing a permit" has been added to the list of Discharges Covered by the General Permit.

7. A provision for temporary shutdowns has been added.

COVERAGE UNDER THE GENERAL PERMIT

To obtain coverage under the proposed general permit for discharges associated with industrial activities, a Notice of Intent (NOI) form must be submitted to SDDENR at least 15 days prior to

operational start-up. The Secretary then makes the decision to grant or deny coverage, or request additional information. A copy of the NOI form is available at the department's storm water website (http://SDDENR.sd.gov/des/sw/StormWaterandIndustry.aspx) or by contacting SDDENR at 1-800-SDSTORM (737-8676).

For existing industrial operations already covered under the current storm water general permit for industrial activities, a Notice of Intent for Reauthorization needs to be submitted to continue coverage under this new permit. Coverage under the existing general storm water permit will expire on the effective date of the new permit. Notices of Reauthorization will be sent to all current permittees prior to the proposed general permit becoming effective.

SDCL 1-40-39 authorizes SDDENR to accept a document with an electronic signature. Electronic submittals may be accepted during the proposed general permit cycle. However, a system for validating the signature is not currently available. When a system is available, DENR will notify permittees.

NO EXPOSURE

The regulations provide an exemption from the storm water permitting requirements for those facilities whose industrial materials or activities are not exposed to precipitation or runoff. If there is no exposure to storm water at an industrial facility and a no exposure certification is submitted to the SDDENR, then a storm water permit is not required for that facility.

An industrial facility is eligible for the no exposure exemption when all industrial materials and activities are protected to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities such as material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products must be protected by a storm resistant shelter. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

1. Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;

2. Adequately maintained vehicles used in material handling; and

3. Final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification form must be provided for each facility that wishes to be excluded from the permitting requirements. The exemption from storm water permitting is available on a facility-wide basis only, not for individual outfalls or points of runoff. If any industrial activities or materials are or will be exposed to precipitation, the entire facility is not eligible for the no exposure exemption. If changes at a facility result in industrial activities or materials becoming

exposed to storm water, the exemption no longer applies. If SDDENR determines that a facility's storm water discharges have a reasonable potential to cause or contribute to a violation of applicable water quality standards, the no exposure exemption can be denied or revoked.

Industrial facilities wishing to be conditionally excluded from permitting requirements must submit a certification form to SDDENR. By submitting this form, the facility is certifying there is no exposure to storm water at the site. The No Exposure Certification form is found as Attachment D in the permit.

TERMINATING COVERAGE

Facilities with SIC codes in Appendix A of this Statement of Basis or other discharges from industrial facilities that have been designated by the Secretary as needing a permit must maintain coverage under the general permit. Coverage can be ended when all industrial activities authorized by the general permit are eliminated or the facility qualifies for a no exposure exemption.

Permittees wishing to terminate coverage under this general permit must submit a signed Notice of Termination (NOT). Compliance with this general permit is required until a NOT is submitted and approved by the Secretary.

Coverage is automatically terminated once the Secretary approves a no exposure exemption for facilities who are already covered under the general permit. A NOT is not required for this.

RECEIVING WATERS

Beneficial Uses

The South Dakota Surface Water Quality Standards designate beneficial uses for all waters of the state. These classifications designate the minimum quality at which the surface waters of the state are to be maintained and protected. All waterbodies in South Dakota have been assigned one or more of the following beneficial uses:

1. Domestic water supply waters;

2. Coldwater permanent fish life propagation waters;

3. Coldwater marginal fish life propagation waters;

4. Warmwater permanent fish life propagation waters;

5. Warmwater semipermanent fish life propagation waters;

6. Warmwater marginal fish life propagation waters;

7. Immersion recreation waters;

8. Limited contact recreation waters;

9. Fish and wildlife propagation, recreation, and stock watering waters;

10. Irrigation waters; and

11. Commerce and industry waters.

The proposed General Permit was developed to ensure these beneficial uses are maintained and protected.

Total Maximum Daily Load

A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant a waterbody can receive and still meet water quality standards. Under current EPA regulations, states establish TMDLs that include wasteload allocations from point sources, load allocations from non-point sources, and natural background conditions. Wasteload allocations are defined as the portion of a water body's loading capacity allocated to point source dischargers. TMDLs are established at levels necessary to attain and maintain the state surface water quality standards. TMDLs include seasonal variations and margins of safety to account for any lack of knowledge about the relationship between the effluent limits and instream water quality.

TMDLs are developed on a pollutant- and waterbody-specific basis. In some instances, TMDLs may combine multiple pollutants into one set of TMDL documents. However, the specific TMDL wasteload and load allocations are pollutant-specific. States are responsible for establishing TMDLs, which EPA approves. Once approved by EPA, TMDLs are implemented through water quality management plans and through surface water discharge permits.

The proposed General Permit is a Surface Water Discharge permit that requires best management practices to ensure the surface water quality standards are met and maintained. Therefore, the General Permit will authorize discharges to waterbodies that are listed as impaired or have an approved TMDL. However, if DENR determines a specific site has the potential to cause or contribute to an impairment of the surface water quality standards, DENR can require the owner to implement additional controls and/or obtain an individual discharge permit.

EFFLUENT LIMITS

Use of Narrative Limits

Under the federal Clean Water Act, dischargers shall comply with both technology-based and water quality-based effluent limits. Where EPA has not yet issued a technology-based effluent limitation guideline for industrial storm water, states are expected to determine the appropriate technology-based level of control based on best professional judgment. The federal Clean Water Act allows states and EPA to meet the requirement for technology-based limits using non-numeric, or "narrative," effluent limits in permits where appropriate. EPA has developed regulations allowing the use of narrative best management practices as effluent limits (40 CFR Section 122.44(k)). The proposed general permit, like the current general permit, includes non-

numeric effluent limits, including best management practices, to ensure state and federal requirements are met.

All permittees are required to implement control measures to minimize pollutants in storm water discharges. The proposed general permit does not mandate the specific control measures permittees must use to meet the effluent limits in the proposed general permit. Instead, the permittee shall select, design, and implement the controls needed to meet the applicable effluent limits at each specific site. The control measures can be structural devices or actions (such as processes, procedures, schedules of activities, prohibitions on practices, and other management practices) to minimize water pollution due to storm water runoff. This Statement of Basis provides examples of control measures in Appendix B, but permittees are expected to tailor these controls to their sites and improve upon them as necessary to meet general permit effluent limits. The examples emphasize prevention over treatment.

To make the requirements of the general permit easier to understand and implement, DENR is specifically stating the narrative effluent limits in the proposed general permit. In the current general permit, the requirements for controlling pollutant discharges were combined with the storm water pollution prevention plan and inspection requirements, making it more difficult to understand DENR's expectations with respect to the permittee's compliance. These proposed changes do not alter DENR's bottom-line intentions with this general permit. Instead, these changes are intended to more clearly articulate the general permit requirements.

Effluent Limits

Effective immediately and lasting through the life of the General Permit, all permittees shall comply with the narrative effluent limits below, which are based on best management practices to meet the South Dakota Surface Water Quality Standards and Best Professional Judgment (BPJ). All permittees are expected to meet the following effluent limits to minimize the pollutants present in the discharges associated with industrial activity.

1. **Implement Control Measures.** All necessary storm water control measures shall be implemented. If contact cannot be eliminated or reduced, storm water should be treated before it is discharged from the site.

2. **Precipitation Design Event.** All storm water control measures shall be selected, designed, and installed to minimize the pollutants present in runoff from a rainfall event of up to two (2) inches in a 24-hour period.

3. **Maintenance of Control Measures.** The permittee shall maintain all storm water control measures in effective working order. If any control measures are not operating effectively, the permittee shall perform maintenance on the control measures as necessary to maintain the continued effectiveness of the storm water control measures and before the next anticipated storm event or within seven (7) days of identifying the need for maintenance, whichever comes first.

   At a minimum, the permittee shall remove sediment from sedimentation ponds when design capacity has been reduced by 50%.

All control measures and other protective measures identified in the Storm Water Pollution Prevention Plan (SWPPP or Plan) shall be maintained in effective operating condition. If the site inspections required by Sections 3.7 or 3.8 of the permit identify control measures that are not operating effectively, maintenance shall be performed as stated above.

4. **Off-Site Pollutant and Dust Control.** The permittee shall minimize dust generation and vehicular tracking of soil or other pollutants off-site. At a minimum, street sweeping shall be performed if other best management practices are not adequate to minimize pollutants from being tracked on to the street.

   If pollutants escapes the industrial site, the permittee shall remove the off-site accumulations of pollutants at a frequency sufficient to minimize impacts.

   The permittee shall revise the SWPPP and implement control measures to minimize further off-site track-out or sedimentation.

5. **Erosive Velocity Control.** The permittee shall place velocity dissipation devices at discharge points and along the length of a runoff conveyance, as necessary, to provide a non-erosive flow and protect the receiving waters of the state natural uses and characteristics; both physical and biological.

6. **Storage of Materials.** The permittee shall properly handle, store, and dispose of litter, chemicals, scrap material, raw material, fuel, and other materials to minimize pollutants entering storm water discharges. Final products intended for outdoor use, other than products that would be mobilized in storm water discharges (e.g., rock salt) are exempt from this requirement. Permittees are required to minimize the discharge of solid materials to waters of the state (except where authorized by a Section 404 permit from the United States Army Corps of Engineers).

7. **Spills / Releases in Excess of Reportable Quantities.** The permittee shall have the capacity to control, contain, and remove spills at the site. If spills do occur, the permittee shall implement control measures to minimize the potential for contamination of the storm water and modify the SWPPP with the location of the spill and any new control measures.

   Spills in excess of reportable quantities shall be properly reported as stated in Section 2.10 of the permit.

8. **Additional Requirements for Salt Storage.** Storage piles of salt that generate a storm water discharge to waters of the state shall be enclosed or covered to prevent exposure to precipitation, except when adding or removing materials from the pile.

9. **Additional Requirements for Coal Pile Runoff.** The Total Suspended Solids (TSS) shall not exceed 50 mg/L at any time and the pH shall be maintained between 6.0

standard units and 9.0 standard units at all times. Monitoring shall be conducted as required in Section 5.1.1 of the permit to ensure these limits are met.

SELF-MONITORING REQUIREMENTS

Comprehensive Site Compliance Evaluations

1. **Comprehensive Site Compliance Evaluations.** The permittee shall conduct a comprehensive site compliance evaluation at least once a year as part of one of the two semiannual site inspections required in Section 3.8 of the permit. The results of the evaluation shall be summarized in a written report. In addition to the normal site inspection information, the evaluations shall include:

   a. Areas contributing to a storm water discharge shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine if they are adequate and properly implemented or if additional control measures are needed. Structural control measures, storm water control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. The permittee shall visually inspect equipment needed to implement the SWPPP, such as spill response equipment.

   b. Sampling shall be performed in accordance with Section 5.1.4 of the permit during the first year, and as described below during following years.

Effluent Characteristic	Reporting Values	Sample Type
Oil and Grease	Presence or Absence of Sheen	Visual[1]
Oil and Grease, mg/L[2]	Daily Maximum	Grab
Visible Pollutants	Presence or Absence of Visible Pollutants, Discoloration, Etc.	Visual

[1] The presence or absence of an oil sheen shall be visually monitored. In the event that an oil sheen or floating oil is observed during discharge, a grab sample for Oil and Grease shall be taken immediately, analyzed, and reported.

[2] Use Standard Methods 1664A – hexane extraction.

   c. Within two weeks of the inspection, the description of potential pollutant sources identified in the plan shall be revised based on the results of the inspection. Within 12 weeks after the inspection, the changes to the plan shall be implemented. Where a report does not identify any incidents of non-compliance, the permittee shall certify the facility is in compliance with the plan and this general permit. The certification shall be in accordance with Section 6.8.3 of the permit.

   d. The report shall summarize the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the plan, actions taken, and identification of any incidents of non-compliance. The report shall be signed in accordance with Section 6.8 of the permit. All inspection reports shall be retained with the SWPPP.

2. **Inspections.** In addition to or as part of, the comprehensive site compliance evaluations described above, site inspections shall be conducted at least semi-annually. An appropriately trained person, familiar with the general permit conditions and the SWPPP, must conduct the inspections. The purpose of inspections is to:

   a. determine if structural and non-structural control measures require maintenance or changes, and
   b. evaluate the completeness and accuracy of the Plan.
   c. At least one inspection each calendar year must be conducted within 24 hours of a storm event greater than 2 inches or snowmelt large enough to cause runoff.
   d. Inspection results and corrective actions taken in response to any deficiencies or opportunities for improvement identified during the inspection must be documented in the Plan.

Sampling

Sampling and testing of storm water for parameters listed in Appendix C of this Statement of Basis is required at least once during the first year of the permit cycle; coal pile runoff is required to be sampled semiannually regardless of industry. This sampling is for parameters that are believed will indicate how likely facilities are to have an impact, and is intended to focus efforts in future permit cycles.

The Secretary reserves the right to require further sampling and testing on a case-by-case basis, in the event non-compliance with the Plan is suspected, or to measure the effectiveness of the control measures in removing pollutants in the effluent. For more guidance on sampling, see the EPA industrial storm water sampling guide at:
http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf

When a facility is unable to collect a sample due to adverse climatic conditions (e.g., local flooding, high winds, tornadoes, electrical storms, drought, extended frozen conditions, etc.), the facility must include a description of why samples could not be taken. The permittee may use this sampling waiver only once during a two-year period.

REQUIRING AN INDIVIDUAL PERMIT

Based upon a number of different situations (e.g., applicable numeric effluent limitations resulting from a TMDL or a determination that the operator has the potential to cause or contribute to a water quality standard excursion), DENR may determine that coverage under an individual permit is necessary. If a permittee is currently discharging under this General Permit and DENR determines that individual coverage is required, written notification of this required change in permit coverage, including reasoning for this decision, an application form, and a deadline for filing the application, will be provided to the permittee by DENR.

Additionally, any permittee may apply for an individual permit rather than applying for coverage under this General Permit. An individual application shall be submitted for coverage under such a permit with reasoning supporting the request. DENR will review the request and will determine if individual permit coverage is appropriate. If DENR issues an individual permit to a permittee

currently covered under this General Permit or coverage under an alternative general permit is obtained, coverage under the General Permit is terminated on the effective date of the new permit.

If a permittee currently covered under the General Permit requests an alternative permit and is denied, coverage under the General Permit may also be terminated on the date of such denial, unless otherwise specified by DENR.

STORM WATER POLLUTION PREVENTION PLAN

Permittees authorized to discharge storm water under this proposed permit must develop and implement a Storm Water Pollution Prevention Plan (SWPPP or Plan) prior to the start of any industrial activity at the site. This plan details the control measures the permittee will implement to reduce or eliminate a discharge of pollutants. Permit requirements for the Plan are designed for maximum flexibility to allow the development of storm water control measures specific to the site. Some of the factors to consider when developing the plan include:

1. materials stored on-site;

2. spill potential;

3. exposure levels;

4. local development requirements and/or building codes;

5. precipitation patterns for the area;

6. soil types;

7. slopes;

8. classification of nearby water bodies; and

9. safety concerns of the storm water controls (i.e., potential safety hazards of water in storm water retention ponds to humans and wildlife; and the potential of drawing birds to retention ponds and the hazards they pose to aircraft).

Permittees covered under the expiring general permit and continuing coverage under the proposed permit must update their plan, if necessary, to comply with the requirements of the new permit. The plan shall be updated within 30 days of the effective date of the new permit.

A table listing common control measures and their uses is included in Appendix B of this Statement of Basis. The department will also post information on control measures on their website (http://SDDENR.sd.gov/des/sw/StormWaterandIndustry.aspx), which will list some examples of pollution prevention measures or control measures most applicable to specific industrial activities. Please note that this information is meant as guidance in selecting control

measures at a permitted site; the permittee is responsible for ensuring that measures implemented at the site are appropriate for controlling the pollutants of concern.

MANAGEMENT REQUIREMENTS

The Plan and a copy of DENR's letter granting coverage under this permit must be maintained on site or made readily available from the date industrial activities are initiated. The permittee shall retain copies of the Plan, all reports required by this permit, and records of all data used to complete the Notices of Intent and Termination for this permit for a period of at least three years from the date coverage is terminated. This period may be extended by request of the department at any time.

The Plan is not required to be included with the NOI submittal. If requested, the permittee shall submit the plan to SDDENR. However, if storm water is discharged into a municipal separate storm sewer system (MS4), the permittee shall submit the Plan to the municipal operator upon request.

ENDANGERED SPECIES

No listed endangered species are expected to be impacted by the activities related to this general permit.

GENERAL PERMIT DURATION

The general permit shall be five years in duration. Periodically during the term of this general permit and at the time of renewal, the permittee may be requested to reaffirm the eligibility of the permitted site to discharge under this general permit.

PERMIT CONTACT

Any questions pertaining to this Statement of Basis can be directed to Anthony Mueske, Natural Resources Project Engineer at 1-800-SDSTORM (737-8676).

June 20, 2012

APPENDIX A

List of Standard Industrial Classification Codes

The **Standard Industrial Classification (SIC) Code(s)** for a facility usually determines if general permit coverage is required. The 4-digit SIC Codes are assigned according to the primary activities performed by a company. They are often assigned for insurance purposes or when a business registers as a corporation. Industries can also determine their SIC Code by checking with their trade association, Chamber of Commerce, legal counsel, or library for the SIC Manual.

The industrial categories requiring storm water permit coverage are listed here by their SIC Code. The manufacturing industries are generally represented by SIC Codes 20-39. (A two-digit code, such as 42, means that **all** industries under that heading, from 4200 to 4299, are covered. Some common SIC codes are listed in italics.)

Below is a list of Industrial Facilities that are required to obtain a storm water discharge permit.

SIC Code	Industry Type	Notes
10	Metal mining and milling	
1041	Gold Ores	
12	Coal mining	
13	Oil and gas extraction	
20	Food and kindred products	
2041	Flour and Other Grain Mill Products	
2048	Prepared feed and feed ingredients for animals & fowl, except cats & dogs	
21	Tobacco products	
22	Textile mills	
23	Apparel and other finished products made from fabric and similar material	
24	Lumber and wood products except furniture	
2421	Sawmills & Planing Mills	
2491	Wood Preserving	
25	Furniture and fixtures	
26	Paper and allied products	
27	Printing, publishing, and allied products	
28	Chemicals and allied products	
29	Petroleum refining and related industries	
2951	Asphalt Paving Mixtures and Blocks	
30	Rubber and miscellaneous plastics products	
31	Leather Products	
3111	Leather tanning and finishing	
32	Stone, clay, glass and concrete products	
3273	Ready mix concrete facilities	
33	Primary metals industries	
34	Fabrication of metal products, except machinery and transportation equipment	
35	Industrial and commercial machinery and computer equipment	
36	Electronic and other electrical equipment and components, except computer equipment	
37	Transportation equipment	
3715	Truck Trailers	

SIC Code	Industry Type	Notes
38	Measuring, analyzing, and controlling instruments: photographic, medical, and optical goods, watches and clocks	
39	Miscellaneous manufacturing industries	
40	Railroad transportation	(a)
41	Local and suburban transit and interurban highway passenger transportation	(a)
42	Motor freight transportation and warehousing (except)	(a)
	4221 Farm Product warehousing and storage	
	4222 Refrigerated warehousing and storage	
	4225 General warehousing and storage	
43	US Postal Facilities	(a)
44	Water Transportation	(a)
45	Transportation by Air	(a)
4911	Steam electric power generation (all fuel types)	
4952	Wastewater treatment facilities with a design flow of 1.0 MGD or more	
4953	Hazardous waste treatment, storage or disposal facilities; incinerators (including boilers and industrial furnaces) that burn hazardous waste; and active or inactive landfills, land application sites, or open dumps with industrial waste and without a stabilized final cover	
5015	Motor vehicle parts, used	
5093	Scrap and waste materials	
5171	Petroleum bulk stations and terminals	(a)

Notes:

(a) In this SIC Code, only facilities that are involved in vehicle maintenance (such as vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing need a storm water permit.

APPENDIX B

Sample Control Measures

Material, Area, or Activity	Common Control Measures
Storage areas/stockpiled materials (for materials including raw, intermediate and finished product)	• Cover and/or enclose stored materials to prevent contact. • Divert storm water around storage areas. • Stack/pile material to minimize surface area exposed to precipitation. • Practice good housekeeping measures such as frequent removal of debris. • Install treatment measures to remove pollutants from runoff prior to discharge from the site.
Waste storage areas	• Minimize waste generated at the site. • Store indoors or in covered dumpsters or under other types of cover. • Divert storm water around areas. • Install treatment devices to remove pollutants from runoff prior to discharge from the site.
Loading/unloading and other material handling areas	• Cover loading and unloading areas. • Divert storm water around areas. • Where dust is likely to be generated during material handling, install equipment or change methods of handling to minimize or eliminate dust generation. • If liquid materials are being loaded or unloaded and if loading/unloading areas drain to storm sewer inlets, prevent material from getting into the storm sewer inlets. • Install treatment measures to remove pollutants from runoff prior to discharge from the site.

Material, Area, or Activity	Common Control Measures
Outdoor storage tanks or drums of fuel, lubricants, solvents.	• Store drums inside (if allowed by Fire Marshall or insurer). • Prepare and train appropriate employees in dealing with spills and leaks properly, use dry clean-up methods when possible. • Install impervious surface underneath drums. • Prevent run-on to and runoff from tank and drum storage areas, provide adequate containment to hold spills and leaks.
Obsolete equipment stored outside	• When possible, dispose of unused equipment properly or move indoors. • Drain fluids from equipment & dispose of properly. • Cover equipment. • Divert storm water around equipment.
Floor, sink, or process wastewater connected to a storm sewer	• Inspect and test floor, sink and process wastewater drains for proper connections • Remove any connections to storm sewers or waters of the state.
Exterior vehicle and equipment washing	• Conduct washing indoors or in a covered area. • Contain and recycle washwaters. • Discharge washwaters to sanitary sewer with permission of the receiving wastewater treatment authority. • Do not allow off-site discharge of washwater. • Evaluate washwater from steam cleaning of parts contaminated with oils, greases or solvents that is not recycled to determine if it is hazardous. Dispose of hazardous sludge and washwater appropriately.

Material, Area, or Activity	Common Control Measures
Fueling areas	• Minimize run-on of storm water into the fueling area. • Use dry clean-up methods for fuel area rather than hosing down the fuel area. • Train appropriate employees on proper fueling practices. • Install treatment devices to remove pollutants from runoff before it discharges from the site.
Vehicle and equipment dismantling and maintenance	• Prevent spills during dismantling process. • Contain any leaking or dripping fluids. • Store dismantled vehicles, equipment, and parts out of concentrated storm water flows (ditches, channels). • Cover parts that have been contaminated with oils, greases, or solvents. • Store batteries in a nonleaking covered container. • Promptly transfer used fluids to the proper closed container; empty drip pans when they fill. • Recycle batteries and mercury switches
Spills of liquid material	• Stop the source of the spill immediately. • Contain the liquid until cleanup is complete, and dispose of it properly. • Deploy oil containment booms if the spill may reach waters of the state or drainageways to waters of the state. • Cover the spill with absorbent material. • Dispose of cleanup materials properly. • Report the spill to the Duty Officer, when appropriate. • Report the spill to SDDENR in accordance with the general permit requirements.

Material, Area, or Activity	Common Control Measures
Areas of the facility with unstabilized soils subject to erosion.	• Minimize run-on from adjacent areas. • Seed and mulch, or sod low traffic areas. • Stabilize high traffic areas including vehicle entrances, exits, loading, unloading and vehicle storage areas. • Prevent sediment from unstabilized areas from leaving the site. • Install treatment devices to remove pollutants from the runoff prior to discharge from the site.
Surface preparation, paint removal and paint spraying	• Enclose, cover, or contain blasting, sanding, and spray painting activities to the extent practical. • Collect spent abrasives routinely and store under a cover to await proper disposal. Evaluate spent abrasives and removed paint to determine if it is hazardous. Test waste material for lead content and dispose of waste material properly.

APPENDIX C

Required Monitoring

Air Transportation Facilities (SIC beginning 45; NAICS beginning 481, and NAICS 487990, 488190, 488119, 492110, 561720, 621910) that are involved in vehicle maintenance (mechanical repairs, painting, fueling, lubrication, etc.):

Effluent Characteristic	Reporting Values	Sample Type
Oil and Grease	Presence or Absence of Sheen	Visual[1]
Oil and Grease, mg/L[2]	Daily Maximum	Grab if Oil is Observed
5-day Biochemical Oxygen Demand, mg/L	Daily Maximum	Grab
Visible Pollutants	Presence or Absence of Visible Pollutants	Visual

[1] The presence or absence of an oil sheen shall be visually monitored. In the event that an oil sheen or floating oil is observed during discharge, a grab sample for Total Petroleum Hydrocarbons shall be taken immediately, analyzed, and reported.
[2] Use Standard Methods 1664A – hexane extraction.

Food Manufacturing (SIC beginning 20; NAICS beginning 311):

Effluent Characteristic	Reporting Values	Sample Type
Oil and Grease	Presence or Absence of Sheen	Visual[1]
Oil and Grease, mg/L[2]	Daily Maximum	Grab if Oil is Observed
5-day Biochemical Oxygen Demand, mg/L	Daily Maximum	Grab
Total Suspended Solids, mg/L	Daily Maximum	Grab

[1] The presence or absence of an oil sheen shall be visually monitored. In the event that an oil sheen or floating oil is observed during discharge, a grab sample for Oil and Grease shall be taken immediately, analyzed, and reported.
[2] Use Standard Methods 5520.

Lumber and wood products except furniture (SIC beginning 24; NAICS 113310 or beginning 321):

Effluent Characteristic	Reporting Values	Sample Type
5-day Biochemical Oxygen Demand, mg/L	Daily Maximum	Grab
Total Suspended Solids, mg/L	Daily Maximum	Grab
Visible Pollutants	Presence or Absence of Visible Pollutants	Visual

Scrap Yards and Metal Salvage (SIC 5015 and 5093; NAICS 421140, 441310, or 421930):

Effluent Characteristic	Reporting Values	Sample Type
Oil and Grease	Presence or Absence of Sheen	Visual[1]

[1] The presence or absence of an oil sheen shall be visually monitored. In the event that an oil sheen or floating oil is observed during discharge, a grab sample for Oil and Grease shall be taken immediately, analyzed, and reported.

Effluent Characteristic	Reporting Values	Sample Type
Oil and Grease, mg/L[2]	Daily Maximum	Grab
Total Suspended Solids, mg/L	Daily Maximum	Grab

[2] Use Standard Methods 1664A – hexane extraction.

Landfills (SIC 4953; NAICS 562211, 562212, 562213, 562219, and 562920):

Effluent Characteristic	Reporting Values	Sample Type
pH[1]	Daily Maximum; Daily Minimum	Instantaneous
Five-Day Biochemical Oxygen Demand (BOD_5), mg/L	Daily Maximum	Grab
Total Suspended Solids, mg/L	Daily Maximum	Grab

[1] pH is to be taken within 15 minutes of sample collection with a pH meter. The pH meter must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standard units apart. The pH meter must read to 0.01 standard units and be equipped with temperature compensation adjustment.

Ethanol Manufacturing and similar Industrial Organic Chemical Manufacturing, (SIC 2869):

Effluent Characteristic	Reporting Values	Sample Type
pH[1]	Daily Maximum; Daily Minimum	Instantaneous
Oil and Grease	Presence or Absence of Sheen	Visual[2]
Oil and Grease, mg/L[3]	Daily Maximum	Grab
Five-Day Biochemical Oxygen Demand (BOD_5), mg/L	Daily Maximum	Grab
Total Suspended Solids, mg/L	Daily Maximum	Grab
Visible Pollutants	Presence or Absence of Visible Pollutants, Discoloration, Etc.	Visual

[1] pH is to be taken within 15 minutes of sample collection with a pH meter. The pH meter must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standard units apart. The pH meter must read to 0.01 standard units and be equipped with temperature compensation adjustment.

[2] The presence or absence of an oil sheen shall be visually monitored. In the event that an oil sheen or floating oil is observed during discharge, a grab sample for Oil and Grease shall be taken immediately, analyzed, and reported.

[3] Use Standard Methods 1664A – hexane extraction.

For more guidance on sampling, see the EPA industrial storm water sampling guide at http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf

APPENDIX D

Forms Available from SDDENR

SDDENR FORMS
Storm Water Permit

The following forms are available from the South Dakota Department of Environment and Natural Resources for use in administration of the Storm Water Program:

1. Notice of Intent (NOI) – application form for obtaining coverage under the general permit (Attachment A in the general permit)

2. Notice of Termination (NOT) – form to discontinue coverage under the general permit (Attachment B in the general permit)

3. No Exposure Certification – form to request an exemption from the permitting requirements for a facility where no activity or product is exposed to storm water (Attachment D in the general permit)

4. Temporary Shutdown – form to notify the SDDENR industrial activity is being halted (Attachment E in the general permit)

5. Change of Authorization (COA) – form to update information or transfer ownership of a permitted site/activity (Attachment F in the general permit)

All forms developed by the department for the Storm Water Program can be obtained by contacting the department in one of the following ways to request a copy:

Please Note: *While the department has provided several options for obtaining copies of these forms, at this time the department cannot accept electronic submittals (e-mail or fax) of the completed forms. Original copies of all forms must be received before respective requests can be processed.*

Internet:
www.state.sd.us/SDDENR/des/surfacewater/storm water.htm

Phone:
1-800-SDSTORM (737-8676)

Fax:
(605) 773-5286

Mail:
Department of Environment & Natural Resources
Surface Water Quality
PMB 2020
Joe Foss Building
523 East Capitol
Pierre SD 57501-3182