

**ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM****Permit Fact Sheet**

Permit Number: AKR060000

**MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)****DEPARTMENT OF ENVIRONMENTAL CONSERVATION****Wastewater Discharge Authorization Program****555 Cordova Street  
Anchorage, AK 99501**

Permit Issuance Date: February 19, 2015

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[Alaska Online Public Notice System](#)

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**Issuance of the Alaska Pollutant Discharge Elimination System (APDES) General Permit for Storm Water Discharges Associated with Industrial Activity within the State of Alaska**

The Alaska Department of Environmental Conservation (the Department or DEC) is reissuing a Multi-Sector General Permit (MSGP, general permit, or permit) for storm water discharges from industrial activity. The permit authorizes and sets conditions on the discharge of pollutants from certain industrial activities to waters of the United States. In order to ensure protection of water quality and human health, the permit establishes control measures and best management practices that must be used to control the types and amounts of pollutants that can be discharged from certain industrial activities.

This fact sheet explains the nature of potential storm water discharges from industrial activities and the steps in the development of the permit, including:

- Information on public comment, public hearing, and appeal procedures;
- A listing of proposed control measures and other conditions for industrial activities;
- Technical material supporting the conditions in the permit; and
- Proposed inspection, monitoring, and reporting requirements in the permit.

## Appeal Process

The Department has both an informal review process and a formal administrative appeals process for final APDES permit decisions. An informal review request must be delivered within 15 days after receiving the Department's decision to the Director of the Division of Water at the following address:

Director, Division of Water  
Alaska Department of Environmental Conservation  
555 Cordova Street  
Anchorage, AK 99501

Interested persons can review 18 AAC 15.185 for the procedures and substantive requirements regarding a request for an informal Department review. See <http://dec.alaska.gov/commish/InformalReviews.htm> for information regarding reviews of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department within 30 days of the permit decision or a decision issued under the informal review process. An adjudicatory hearing will be conducted by an administrative law judge in the Office of Administrative Hearings within the Department of Administration. A written request for an adjudicatory hearing shall be delivered to the Commissioner at the following address:

Commissioner  
Alaska Department of Environmental Conservation  
410 Willoughby Street, Suite 303  
Juneau, AK 99811-1800

Interested persons can review 18 AAC 15.200 for the procedures and substantive requirements regarding a request for an adjudicatory hearing. See <http://dec.alaska.gov/commish/ReviewGuidance.htm> for information regarding appeals of Department decisions.

## Documents are Available

The permit, fact sheet, and related documents can be reviewed or obtained by visiting or contacting the Department between 8:00 a.m. and 4:30 p.m., Monday through Friday at the addresses below. The permit, fact sheet, and related documents can also be located on the Department's Wastewater Discharge Authorization Program website <http://dec.alaska.gov/water/wwdp/index.htm>.

Dept of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501 (907) 269-6285	Dept of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 610 University Ave. Fairbanks, AK 99709 (907) 451-2183
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<p>Dept of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 410 Willoughby Ave. Juneau, AK 99811 (907) 465-5300</p>	<p>Dept of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 43335 Kalifornsky Beach Rd. Soldotna, AK 99615 (907) 262-5210</p>
<p>Dept of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 1700 E. Bogard Road #B Wasilla, AK 99654 (907) 376-1850</p>	

## Table of Contents

<b>1.0 INTRODUCTION.....</b>	<b>7</b>
<b>2.0 PROPOSED PERMIT CHANGES.....</b>	<b>8</b>
2.1 New Applicable Federal Requirements.....	8
2.2 Summary of the Proposed Changes in the APDES 2015 MSGP.....	9
<b>3.0 DESCRIPTION OF INDUSTRY AND RECEIVING WATERS.....</b>	<b>9</b>
3.1 Industry Summary.....	9
3.2 Potential Industry Impacts on Water Quality.....	9
3.3 Potential Industry Pollutants of the Receiving Waters.....	10
3.4 Receiving Waters.....	11
3.4.1 Water Quality Standards.....	11
<b>4.0 PERMIT CONDITIONS.....</b>	<b>11</b>
4.1 Coverage under this Permit.....	11
4.1.1 Permit Area.....	11
4.1.2 Facilities Covered.....	11
4.1.3 Allowable Storm Water Discharges.....	12
4.1.4 Allowable Non-Storm Water Discharges.....	12
4.1.5 Limitations on Coverage.....	13
4.1.6 Conditional Exclusion for No Exposure.....	14
4.2 Authorization under this Permit.....	15
4.2.1 How to Obtain Authorization.....	15
4.2.2 How to Submit an NOI.....	16
4.2.3 Submission Deadlines.....	16
4.2.4 Date of Authorization to Begin Discharge.....	16
4.2.5 Continuation of Expired General Permit.....	17
4.2.6 Permit Compliance.....	17
4.2.7 Submittal of Modification to Original NOI.....	18
4.2.8 Alternative Permits.....	18
4.3 Compliance with Standards and Limits.....	19
4.3.1 Requirements for all Facilities.....	19
4.3.2 Water Quality Considerations.....	20
4.4 Control Measures.....	21
4.4.1 Control Measure Selection and Design Considerations.....	21
4.4.2 Non-Numeric Technology-Based Effluent Limits.....	22
4.4.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines.....	27
4.4.4 Plan Approval for Nondomestic Wastewater Treatment Works.....	27

4.5	Storm Water Pollution Prevention Plan .....	27
4.5.1	Storm Water Pollution Prevention Plan .....	27
4.5.2	Contents of the SWPPP .....	28
4.5.3	Inspections .....	30
4.5.4	Monitoring .....	30
4.5.5	Documentation of Permit Eligibility Related to a Total Maximum Daily Load .....	30
4.5.6	Maintaining and Updated SWPPP .....	30
4.5.7	SWPPP Availability .....	31
4.5.8	Additional Documentation Requirements.....	31
4.6	Inspections.....	31
4.6.1	Routine Facility Inspections .....	31
4.6.2	Quarterly Visual Assessment of Storm Water Discharges .....	32
4.6.3	Comprehensive Site Inspections .....	34
4.7	Monitoring.....	35
4.7.1	Monitoring Procedures.....	35
4.7.2	Required Monitoring.....	38
4.7.3	Follow-up Actions if Discharge Exceeds Numeric Effluent Limit .....	41
4.8	Corrective Actions.....	41
4.8.1	Conditions Requiring Review and Revision to Eliminate Problem.....	41
4.8.2	Conditions Requiring Review to Determine if Modifications are Necessary.....	42
4.8.3	Corrective Action Deadlines.....	42
4.8.4	Corrective Action Report .....	42
4.8.5	Effect of Corrective Action.....	42
4.8.6	Substantially Identical Outfalls.....	43
4.9	Reporting and Recordkeeping.....	43
4.9.1	Reporting Monitoring Data to DEC.....	43
4.9.2	Annual Report.....	43
4.9.3	Exceedance Report for Numeric Effluent Limits .....	43
4.9.4	Additional Reporting .....	43
4.9.5	Recordkeeping .....	44
4.9.6	Address for Reports .....	44
4.10	Terminating Coverage .....	44
4.10.1	Submitting a Notice of Termination .....	44
4.10.2	When to Submit a Notice of Termination.....	45
4.11	Sector-Specific Requirements for Industrial Activity .....	45
4.11.1	Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing) .....	45

4.11.2	Sector I (Oil and Gas Extraction).....	48
4.11.3	Sector J (Non-Metallic Mineral Mining and Dressing) .....	49
4.11.4	Sector S (Air Transportation).....	50
<b>5.0</b>	<b>ANTIBACKSLIDING .....</b>	<b>51</b>
<b>6.0</b>	<b>ANTIDEGRADATION .....</b>	<b>52</b>
<b>7.0</b>	<b>OTHER LEGAL REQUIREMENTS .....</b>	<b>56</b>
7.1	Endangered Species Act.....	56
7.2	Essential Fish Habitat.....	57
7.3	Permit Expiration .....	57

### List of Tables

Table 4-1:	Industrial Activity Sectors.....	12
Table 4-2:	Water Bodies Impaired for Sediment or Turbidity – 2010 .....	21
Table 4-3:	MSGP Benchmark Values and Sources .....	40

## 1.0 INTRODUCTION

The Alaska Department of Environmental Conservation (the Department or DEC) is proposing to issue an Alaska Pollutant Discharge Elimination System (APDES) permit that authorizes the discharge of pollutants in storm water from selected industrial sectors, referred to as the Multi-Sector General Permit (MSGP). In October 2008, EPA approved Alaska's application to administer the National Pollutant Discharge Elimination System (NPDES) Program. The State's program is called the APDES Program. The permit is a reissuance of the U.S. Environmental Protection Agency (EPA) permit that was adopted by DEC when the agency took over as the primary authority for storm water permitting on October 31, 2009. EPA issued the previous permit (AKR050000) on September 29, 2008, which expired on September 29, 2013, but was administratively extended. For a detailed description of the 2008 EPA-issued MSGP and its relationship to earlier permit versions, refer to the EPA Fact Sheet for the 2008 MSGP. The changes from the 2008 EPA-issued MSGP to the 2015 DEC-issued MSGP are described in this fact sheet.

The permit and fact sheet reference various state and federal regulations. The state regulations primarily providing the regulatory framework for the 2015 MSGP are found in Alaska Administrative Code (AAC), Chapter 83 "Alaska Pollutant Discharge Elimination System Program" (18 AAC 83). The federal regulations specific to this permitting action are adopted by reference in the state APDES regulations in 18 AAC 83.010(b)(3). As an aid to readers, however, the permit and fact sheet in some areas cite the federal regulations where the complete regulatory language can be found.

Section 301(a) of the Clean Water Act (CWA) and 18 AAC 83.015 provide that the discharge of pollutants is unlawful except in accordance with an APDES permit. Although such permits are usually issued to individual dischargers, DEC regulations, at 18 AAC 83.205, also authorize the issuance of "general permits" to categories of discharges when a number of point sources are:

- Located within the same geographic area and warrant similar pollution control measures;
- Involve the same or substantially similar types of operations;
- Discharge the same types of wastes;
- Require the same effluent limits or operating conditions;
- Require the same or similar monitoring requirements; and
- In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits.

Like individual permits, a violation of a condition contained in a general permit constitutes a violation of the CWA and subjects the owner or operator of the permitted discharge to the penalties specified in Section 309 of the CWA.

Section 402(p) of the CWA provides the basis for regulating storm water from certain categories of industry described in 40 CFR 122.26(b)(14). DEC also notes that the issuance of this permit, including the requirements to submit information in the Notice of Intent (NOI) to be covered, is based, in addition, on the Department's authority under section 308(a) of the CWA.

The 2015 MSGP contains provisions that require industrial facilities in 29 different industrial sectors to, among other things, implement control measures and develop site-specific storm water pollution prevention plans (SWPPP) to comply with APDES requirements. In addition, the 2015 MSGP includes a thirtieth sector, available for DEC to permit additional industrial activities which the Department determines require permit coverage for industrial storm water discharges not included in the other 29 industrial sectors.

If this permit is not reissued or replaced (or revoked or terminated) prior to its expiration date, then an existing permittee will be covered under an administrative extension, in accordance with 18 AAC 83.155 (i.e., their authorization continues in force and effect until a new authorization is issued under a new or reissued permit). If coverage is provided to a permittee prior to the expiration date of the permit, the permittee is authorized to discharge under the permit until the earliest of the following occurs: (1) the authorization for coverage under a reissuance or replacement of the permit, following timely and appropriate submittal of a complete NOI; (2) submittal of a Notice of Termination; (3) issuance or denial of an individual permit for the permittee's discharge; or (4) a formal permit decision by DEC not to reissue the general permit, at which time DEC will identify a reasonable time period for covered permittees to seek coverage under an alternative general permit or an individual permit.

Any permittee with a discharge covered under the 2008 MSGP that the Department determines shall transition to a different APDES permit for that discharge that filed a timely and complete NOI and was granted administrative extension of the 2008 MSGP, the administrative extension (i.e., continued permit coverage) from the 2008 MSGP survives the effective date of the 2015 MSGP until the facility receives coverage under the new APDES permit.

Throughout this fact sheet, DEC uses consistent terms when referring to different responsible entities. The term "operator" will be used when discussing those actions required prior to permit authorization, while "permittee" will be used for an entity authorized to discharge under the subject permit.

## **2.0 PROPOSED PERMIT CHANGES**

### **2.1 New Applicable Federal Requirements**

On May 16, 2012, EPA promulgated Effluent Limitations Guidelines (ELGs) including new source performance standards for the airport deicing point source category (FR Vol. 77, No. 95 pp. 29168-29205). The ELGs address control of the wastewater discharges from deicing operations based on product substitution, wastewater collection practices used by airports, and treatment practices for the collected wastewater. New source airports within the scope of this rule are now required to collect spent aircraft deicing fluid and meet numeric effluent discharge limits. Those airports and certain existing airports performing airfield pavement deicing are to use non-urea-containing deicers, or alternatively, meet a numeric effluent limit for ammonia prior to discharge.



## 2.2 Summary of the Proposed Changes in the APDES 2015 MSGP

- A major change to the 2015 MSGP designated the annual comprehensive site inspection period to follow the calendar year from January 1 through December 31<sup>st</sup> on whichever year permit coverage was first obtained.
- With exception to the sector specific changes made to sectors G, H, I, J, P, and S, which are detailed in Part 4.11 of this fact sheet, only minor content changes were made in this permit for clarification.
- Two additional control measures Storm Water Diversions, and Velocity Dissipation Devices were added to Sectors L, Q, and R.
- Inclusion of 10 benchmark values (arsenic, cadmium, copper, cyanide, lead, mercury, nickel, selenium, silver, and zinc) for facilities that are required to sample for metals and that discharge into saline waters (saltwater).
- In addition to the above noted content changes, the general structural layout of the 2015 MSGP was changed to correspond to the Alaska Construction General Permit, (CGP, Permit #: AKR100000) layout. The sections of the 2015 MSGP were re-ordered to coincide with the CGP to provide consistency with the two major state storm water general permits. The new layout of the 2015 MSGP now has parts 1 through 10 matching the CGP with Part 11 consisting of the industrial sectors. This format change provided a new look, but resulted in no substantial content changes.

## 3.0 DESCRIPTION OF INDUSTRY AND RECEIVING WATERS

### 3.1 Industry Summary

Storm water discharges associated with industrial activities are defined by 40 CFR 122.26(b)(14)(i-ix and xi), which specifies ten categories of regulated industry. These ten categories of industry are divided into twenty-nine sectors, based on Standard Industrial Classification (SIC) code or narrative activity. The 2015 MSGP contains provisions that require industrial facilities in twenty-nine different industrial sectors to implement control measures and develop site-specific SWPPPs to comply with APDES requirements. An additional thirtieth sector is available to DEC to permit additional industrial activities which the Department determines require permit coverage not included in the other 29 industrial sectors. Approximately 284 facilities located in the State of Alaska have been operating under the 2008 EPA-issued MSGP; and approximately 47 facilities have filed for Non-Exposure Certification. Potential applicants for this permit are public and private facility Owners/Operators whose facilities have storm water discharges as described in 40 CFR 122.26(b)(14)(i-ix and xi).

### 3.2 Potential Industry Impacts on Water Quality

This general permit is intended to regulate storm water (rain, snow, and snowmelt) runoff which comes into contact with industrial activities and significant materials (materials which have the potential to

cause contamination, see appendix C). The quantities and types of storm water discharged are dependent on many variables, including the type of industrial activity that the facility is engaged in (sector of industry), pollutants of concern, and the type and intensity of the runoff event.

DEC has identified six types of activities at industrial facilities that have the potential to be major sources of pollutants in storm water:

- **Loading and Unloading Operations.** Loading and unloading operations can include pumping of liquids or gases from tankers to storage facilities, pneumatic transfer of dry chemicals, transfer by mechanical conveyor systems, or transfer of bags, boxes, drums, totes, or other containers by forklift or other material handling equipment. Material spills or losses in these areas can accumulate and be washed away during a storm.
- **Outdoor Storage.** Outdoor storage activities include storage of fuels, raw materials, by-products, intermediate products, final products, and process residuals. Materials may be stored in containers, on platforms or pads, in bins, boxes or silos, or as piles. Storage areas that are exposed to rainfall and/or runoff can contribute pollutants to storm water when solid materials wash off or materials dissolve into solution.
- **Outdoor Process Activities.** Although many manufacturing activities are performed indoors, some activities, such as timber processing, rock crushing, and concrete mixing, occur outdoors. Outdoor processing activities can result in liquid spillage and losses of material solids, which makes associated pollutants available for discharge in runoff.
- **Dust or Particulate Generating Processes.** Dust or particulate generating processes include industrial activities with stack emissions or process dusts that settle on surfaces. Some industries, such as mines, cement manufacturing, and coal handling, also generate significant levels of dust that can be mobilized in storm water runoff.
- **Illicit Connections and Non-Storm Water Discharges.** Illicit connections of process wastes or other pollutants to storm water collection systems can be a significant source of storm water pollution. Non-storm water discharges include any discharge from the facility that is not generated by rainfall runoff (for example, wash water from industrial processes). With few exceptions, these non-storm water discharges are prohibited. Refer to the permit for a list of authorized non-storm water discharges.
- **Waste Management.** Waste management practices include everything from landfills to waste piles to trash containment. All industrial facilities conduct some type of waste management at their site, much of it outdoors, which must be controlled to prevent pollutant discharges in storm water.

### 3.3 Potential Industry Pollutants of the Receiving Waters

Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. Material handling activities include, but are

not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product.

Pollutants exposed to storm water could consist of petroleum, oil, and lubricants used in industrial equipment which may leak onto impervious areas and become entrained in storm water runoff. The industrial storm water waste stream could contain various petroleum products, heavy metals, salts, anti-freeze and other automotive fluids which may be present at industrial sites. Operations which also consist of earth disturbance activities would also be a significant source of sediment.

### **3.4 Receiving Waters**

#### **3.4.1 Water Quality Standards**

The protection of surface water occurs primarily through the development, adoption, and implementation of water quality standards (WQS) and the use of the WQS in APDES permits. The WQS designate specific uses for which water quality must be protected. Alaska WQS designate seven uses for fresh waters (drinking water; agriculture; aquaculture; industrial; contact recreation; non-contact recreation; and growth and propagation of fish, shellfish, other aquatic life, and wildlife) and seven uses for marine waters (aquaculture; seafood processing; industrial; contact recreation; non-contact recreation; growth and propagation of fish, shellfish, other aquatic life, and wildlife; and harvesting raw mollusks or other raw aquatic life for human consumption).

Alaska's water resources are extensive and the state is rich in water quantity, water quality, and aquatic resources – almost half of the total surface waters of the United States are located in Alaska. Because of the state's size, sparse population, and remote character, the vast majority of Alaska's water resources are in pristine condition. More than 99.9% of Alaska's waters are considered unimpaired. The protection of surface water occurs primarily through the development, adoption, and implementation of WQS and the use of the WQS in APDES discharge permits. The WQS designate specific uses for which water quality must be protected.

## **4.0 PERMIT CONDITIONS**

### **4.1 Coverage under this Permit**

#### **4.1.1 Permit Area**

The 2015 MSGP provides coverage within the State of Alaska's jurisdictional surface waters, except the Indian Reservation of Metlakatla and the Denali National Park and Preserve. EPA retains the authority to permit discharges in these areas. Operators in these areas must apply for permit coverage through EPA.

#### **4.1.2 Facilities Covered**

This permit is available for storm water discharges from the following 29 sectors of industrial activity (Sector A – Sector AC), as well as any discharge not covered under the 29 sectors (Sector AD) that has been identified by DEC as appropriate for coverage. The sector descriptions are based on Standard

Industrial Classification (SIC) Codes and Industrial Activity Codes consistent with the definition of storm water discharge associated with industrial activity at 40 CFR 122.26(b)(14)(i-ix, xi). See Appendix D in this permit for specific information on each sector. The sectors are listed below:

**Table 4-1: Industrial Activity Sectors**

<b>Sector A</b> – Timber Products	<b>Sector P</b> – Land Transportation
<b>Sector B</b> – Paper and Allied Products Manufacturing	<b>Sector Q</b> – Water Transportation
<b>Sector C</b> – Chemical and Allied Products Manufacturing	<b>Sector R</b> – Ship and Boat Building or Repairing Yards
<b>Sector D</b> – Asphalt Paving and Roofing Materials Manufactures and Lubricant Manufactures	<b>Sector S</b> – Air Transportation Facilities
<b>Sector E</b> – Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing	<b>Sector T</b> – Treatment Works
<b>Sector F</b> – Primary Metals	<b>Sector U</b> – Food and Kindred Products
<b>Sector G</b> – Metal Mining (Ore Mining and Dressing)	<b>Sector V</b> – Textile Mills, Apparel, and other Fabric Products Manufacturing
<b>Sector H</b> – Coal Mines and coal mining-Related Facilities	<b>Sector W</b> – Furniture and Fixtures
<b>Sector I</b> – Oil and Gas Extraction and Refining	<b>Sector X</b> – Printing and Publishing
<b>Sector J</b> – Mineral Mining and Dressing	<b>Sector Y</b> – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
<b>Sector K</b> – Hazardous Waste Treatment Storage or Disposal	<b>Sector Z</b> – Leather Tanning and Finishing
<b>Sector L</b> – Landfills and Land Application Sites	<b>Sector AA</b> – Fabricated Metal Products
<b>Sector M</b> – Automobile Salvage Yards	<b>Sector AB</b> – Transportation Equipment, Industrial or Commercial Machinery
<b>Sector N</b> – Scrap Recycling Facilities	<b>Sector AC</b> – Electronic, Electrical, Photographic and Optical Goods
<b>Sector O</b> – Steam Electric Generating Facilities	<b>Sector AD</b> – Reserved for Facilities Not Covered Under Other Sectors and Designated by the Department

#### 4.1.3 Allowable Storm Water Discharges

Permit Part 1.2.2 lists the type of storm water discharges eligible for coverage under the permit. Operators should use this section to determine which storm water discharges from their site can be covered under the 2015 MSGP. For example, Permit Part 1.2.2.3 specifies that discharges that are not otherwise required to obtain APDES permit authorization, but are commingled with discharges that are authorized under this permit (e.g., under-drain water combining groundwater and surface water subject to this permit) are eligible for coverage under this permit.

#### 4.1.4 Allowable Non-Storm Water Discharges

Permit Part 1.2.3 lists the non-storm water discharges authorized under the permit. The section specifies which non-storm water discharges are covered under the permit as exceptions to the general exclusion of non-storm water discharge from eligibility. To be authorized under this permit, any sources of non-storm water (except flows from firefighting activities) must be identified in the SWPPP.

#### **4.1.5 Limitations on Coverage**

##### ***Discharges Mixed with Non-Storm Water***

The 2015 MSGP does not authorize storm water discharges that are mixed with non-storm water other than those non-storm water discharges listed in Permit Part 1.2.3. The prohibition on mixed storm water and non-storm water discharges further ensures that non-storm water discharges (except for those classes of non-storm water discharges that are specifically authorized by the permit) are not authorized by this permit. Where a storm water discharge is mixed with non-storm water that is not authorized by the 2015 MSGP or another APDES permit, the operator must submit the appropriate application forms to obtain authorization to discharge the non-storm water portion of the discharge in accordance with the CWA and implementing APDES regulations.

##### ***Storm Water Discharges Associated with Construction Activity***

This permit does not apply to storm water discharges associated with construction activity, defined in 40 CFR 122.26(b)(14)(x) and (b)(15), unless it is in conjunction with mining or oil and gas activities, where the applicable sector-specific requirements for construction storm water discharges as specified in sectors G, H, I and J are met. The exception to this provision is that discharges from land disturbances less than one (1) acre in size are covered by this permit consistent with Permit Part 1.2.2 of the permit for discharges not otherwise required to obtain permit coverage but that are commingled with discharges that are authorized under this permit. The exclusion of coverage for construction storm water discharges recognizes the distinction that has been made between construction and other types of storm water discharges associated with industrial activity. The exception to this provision for sectors G, H, I, and J acknowledges that many of the industrial activities associated with mining, and oil and gas extraction are similar to construction activities, and adding construction activities for these sectors establishes a more streamlined approach for operators preferring to be covered by one permit, instead of two.

##### ***Discharges Currently or Previously Covered by another Permit***

This section of the 2015 MSGP describes situations where an operator is ineligible for coverage under this permit because of coverage under another permit. These include operators covered by a permit within the past five years prior to the effective date of this permit, which established site-specific numeric water quality-based limitations developed for the storm water component of the discharge; or operators with discharges from facilities where the associated APDES permit has been or is in the process of being denied, terminated, or revoked by the regulated authority; although this last provision does not apply to the routine reissuance of permits every five years. To avoid conflict with the anti-backsliding provisions of the CWA, transfer from an individual permit to the 2015 MSGP is only allowed under limited conditions, including that the individual permit does not contain numeric water quality-based effluent limits. Where a transfer is permissible, DEC believes that compliance with all the conditions of the 2015 MSGP is at least as stringent as meeting the conditions of an individual permit.

##### ***Discharges Subject to Effluent Limitations Guidelines***

Discharges subject to storm water-specific effluent limitations guidelines that are eligible for coverage under this permit are listed in Permit Table 7-1. All other storm water and non-storm water discharges subject to effluent limitation guidelines must be covered under any applicable alternate general permit or

an individual permit. This provision ensures that discharges subject to Federal effluent limitations guidelines comply with all relevant limits.

### ***New Dischargers Based on Water Quality Standards***

Permit Part 1.2.4.5 describes permit eligibility with regard to new discharges (as defined in Appendix C). If the facility is a “new discharger”, it is not eligible for coverage under the MSGP for any discharges that DEC determines will not meet any applicable WQS. Where such a determination is made prior to authorization, DEC may notify the permittee that an individual permit application is necessary in accordance with Permit Part 2.8. However, DEC may authorize coverage under this permit after the permittee has included appropriate controls and implementation procedures designed to ensure the discharge meets WQS. Part 1.2.4.5 describes that in the absence of information demonstrating otherwise, DEC expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Permit Part 4, will result in discharges that meet applicable WQS.

Permit Part 1.2.4.5 is a new requirement that provides greater guidance for new dischargers in complying with 40 CFR 122.4(i). Part 1.2.4.5 clarifies that, in the absence of information demonstrating otherwise, DEC expects that compliance with the permit will not adversely impact applicable water quality. DEC notes that while Part 1.2.4.5 is designed to specifically implement 40 CFR 122.4(i), other water quality-based requirements apply to new and existing dischargers. Part 3.2 of the permit includes water quality-based effluent limits applicable to all sources, which are designed to ensure that discharges from both new and existing permittees are controlled as necessary to meet WQS. In addition, Part 1.2.4.6 of the permit includes specific eligibility requirements that are designed to comply with 40 CFR 122.4(i) for new dischargers who are discharging to impaired waterbodies.

### ***New Discharges to Water Quality Impaired Waters***

Part 1.2.4.6 of the permit requires any new discharger to demonstrate its ability to comply with 40 CFR 122.4(i) (prohibiting the issuance of permits to new dischargers that will cause or contribute to the violation of WQS) prior to coverage under the permit. To satisfy the requirements of 40 CFR 122.4(i), an operator must (a) eliminate all exposure to storm water of the pollutant(s) for which the water body is impaired, and document no exposure and retain such documentation with the SWPPP; or (b) demonstrate that the pollutant for which the water body is impaired is not present at the site, and retain documentation of this finding with the SWPPP; or (c) submit data to the appropriate DEC office documenting that the pollutant discharge will not cause or contribute to an excursion of WQS because the discharge will meet WQS at the point of discharge or because there are sufficient remaining waste load allocations in an approved Total Maximum Daily Load (TMDL) and the discharge is controlled at least as stringently as similar discharges subject to that TMDL. Permit Part 1.2.4.5, which applies to new dischargers and not to existing dischargers, is designed to comply with 40 CFR 122.4(i) requirements that address new discharges to water bodies not meeting in-stream WQS.

#### **4.1.6 Conditional Exclusion for No Exposure**

Permit Part 1.3 states that after submittal of a No Exposure Certification, a permittee is no longer authorized by, nor required to comply with, the 2015 MSGP (including the Notice of Termination

requirements). To be excluded from APDES industrial storm water requirements, the operator must submit a No Exposure Certification once every five years. This provision allows permittees who become eligible for a no exposure exclusion from permitting under 40 CFR 122.26(g) to file a No Exposure Certification to DEC. For background, under the conditional no exposure exclusion, operators of industrial facilities have the opportunity to certify to a condition of “no exposure” if their industrial materials and operations are not exposed to storm water. As long as the condition of “no exposure” exists at a certified facility, the operator is excluded from APDES industrial storm water permit requirements provided that the operator notifies the permitting authority at least every five years consistent with 40 CFR 122.26(g) requirements.

## **4.2 Authorization under this Permit**

### **4.2.1 How to Obtain Authorization**

Permit Part 2.1 specifies that to be covered under the 2015 MSGP as a permittee, the operator must meet the requirements in Part 2.1, and submit to DEC a complete and accurate NOI prior to obtaining coverage (see 18 AAC 83.210). Submission of a complete and accurate NOI eliminates the need to apply for an individual permit for a regulated discharge, unless DEC specifically notifies the applicant that an individual permit application must be submitted. DEC also clarifies that authorization is not valid if the NOI upon which authorization is based is incomplete or inaccurate, or if the discharge is not eligible for permit coverage. DEC has included these provisions in the 2015 MSGP to establish the fundamental principle that discharges of storm water are not authorized until permit coverage is obtained, and that permit coverage is obtained for the 2015 MSGP through the submission of a complete and accurate NOI.

A complete NOI shall include the following information. If the information is incorrect or is missing, the NOI will be deemed incomplete and permit authorization will not be granted.

- The operator information includes: organization name, contact person, complete mailing address, telephone number and fax and email address if available.
- The billing contact information includes: organization name, contact person, complete mailing address, telephone number and fax and email address if available. If the billing contact information is the same as the operator information, check the box on the NOI indicating that it is the same.
- The industrial facility information includes: facility name, physical location, the city and zip code, the borough, latitude and longitude, how the latitude and longitude were determined, and an estimate of the area of industrial activity exposed to storm water, if the facility storm water discharges have been previously permitted under an APDES permit, if this is a federal facility.
- The discharge information includes:
  - does the facility discharge to a municipal separate storm sewer system (MS4), and if so the name of the MS4 operator;
  - the name(s) of the water bodies to which the facility discharges;

- does the facility discharge to a water body that is impaired or have a TMDL, if it does is the discharge consistent with the assumptions and requirements of the TMDL;
  - if a new discharge, is the discharge to a tier 2 or tier 3 water body (see Section 6.0 of this fact sheet for more info on tiers);
  - is the request for permit coverage for any storm water discharge subject to federal effluent limitation guideline and sector-specific requirements, and if so, which affected 2015 MSGP Sector;
  - and if Sector S (Air Transportation) facility annual use rate determination of deicing chemicals;
  - the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products or services rendered by the facility is primarily engaged, and applicable sector and subsectors of industry activity, including co-located industrial activity, for which coverage is requested;
  - is the facility presently inactive or unstaffed, and if so for how long.
- The SWPPP information includes: SWPPP contact name, phone, email, and URL of SWPPP (if applicable). The SWPPP posted to the internet is the SWPPP completed at filing of the NOI. As the SWPPP is updated it does not need to be updated on the internet. The signatory information in compliance with Permit Appendix A, Part 1.12.

#### **4.2.2 How to Submit an NOI**

Permit Part 2.2 requires operators to either use DEC's electronic NOI system (accessible at <http://dec.alaska.gov/water/wnpssc/stormwater/index.htm>) or use a paper form (included at this website) and then submit that paper form to the appropriate address (See Part 9.6).

DEC encourages operators to submit an NOI via the electronic filing system and emphasizes that filing via the electronic filing system will be the quickest way to obtain permit coverage because the system will automatically process the information, disallow incomplete submissions, and flag certain entries as possibly incorrect.

#### **4.2.3 Submission Deadlines**

Timeframes for discharge authorization are contained in Table 2-1 of the permit, which identifies the category of discharger, NOI Submission Deadline, and Discharge Authorization Date. Existing dischargers (those facilities that have been paying their annual fee based on invoices from DEC) will continue to pay the annual fee based on invoices from DEC. They will not need to pay permit fee when they submit their NOI at the start of the new permit term.

#### **4.2.4 Date of Authorization to Begin Discharge**

A permittee is authorized to discharge storm water from industrial activities under the terms and conditions of the permit seven days after DEC's acknowledgment of receipt that a complete NOI is posted on DEC's website <http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx>,



unless DEC notifies the applicant that authorization has been delayed. The permit will remain in effect until midnight on the day the permit expires.

The seven-day waiting period provides DEC an opportunity to evaluate NOIs and possibly delay authorization for potential permit eligibility concerns (see Permit Part 1.2) as part of a commitment to increase oversight of permittees. The waiting period was reduced from 60 days in the 2008 MSGP to seven days in the 2015 MSGP. During the seven-day NOI review period, DEC may notify the operator that additional action must be taken before discharge authorization is obtained, based on concerns regarding eligibility as described in Permit Part 1.2. For non-eNOI submissions, DEC cannot guarantee the paper NOI will be processed as quickly as the eNOI. DEC strongly encourages applicants to use the eNOI system to speed processing. DEC will attempt to contact the NOI submitter directly with information about delays as soon as possible (by telephone, fax, or email), but it is the applicant's responsibility to ensure that authorization has been granted.

Actions to be taken depend on the nature of the eligibility concerns (e.g. water quality or impaired receiving waters). Additional actions may include review of the SWPPP; a requirement to revise the SWPPP; or required to submit an application for an individual permit or coverage under an alternative APDES general permit, as per Permit Part 2.8. For sake of expediency in obtaining coverage, any requests should be complied with as soon as possible. When an applicant is notified that additional actions must be taken, a discharge is not authorized until notified of such by DEC.

#### **4.2.5 Continuation of Expired General Permit**

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with 18 AAC 83.155 and remain in force and effect for discharges that were covered prior to expiration. The permittee is required to abide by all limitations, monitoring, and reporting included in the permit when the permit enters administrative extension until such time a permit is reissued authorizing the discharge or an NOI is submitted by the permittee. If a permittee is authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of set of conditions specified in Permit Part 2.5 are met.

Any permittee with a discharge covered under the 2008 MSGP that the Department determines shall transition to a different APDES permit for that discharge that filed a timely and complete NOI and was granted administrative extension of the 2008 MSGP, the administrative extension (i.e., continued permit coverage) from the 2008 MSGP survives the effective date of the 2015 MSGP until the facility receives coverage under the new APDES permit.

#### **4.2.6 Permit Compliance**

Permit Part 2.6 of the permit explains that any failure to comply with the conditions of this permit constitutes a violation of the CWA. Where requirements and schedules for taking corrective actions are included, the time intervals are not grace periods, but are schedules considered reasonable for making repairs and improvements. For provisions specifying a time period to remedy noncompliance, the initial failure, such as a violation of a numeric or non-numeric effluent limit, constitutes a violation of the 2015 MSGP and the CWA, and subsequent failure to remedy such deficiencies within the specified time

periods constitutes an independent, additional violation of this permit and CWA. However, where corrective action is triggered by an event, which does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation provided the permittee takes the required corrective action within the deadlines in Permit Part 8.3. Part 2.6 is intended to instruct the permittee of the ramifications for failure to comply with the conditions of the permit. Also applicable to all permittees is the standard APDES permit condition for the “duty to comply”, included in Permit Appendix A, Section 1.2.

#### **4.2.7 Submittal of Modification to Original NOI**

A permittee must file an NOI modification form with DEC to update or correct information on the original NOI (e.g. such as name of receiving water body, acreage of industrial area exposed to storm water, addition or deletion of industrial sectors, and facility contact information) using a paper form available on DEC’s website <http://dec.alaska.gov/water/wnpssc/stormwater/index.htm>. No general permit authorization fee is required when submitting an NOI modification. Submit the paper form to the Department at the address in Permit Part 9.6.

At facilities where there is a transfer of ownership and/or a new operator takes over operational control at an existing facility, the new operator shall submit an NOI no later than 30 calendar days after a change in owner/operator. The previous owner/operator must submit a Notice of Termination no later than 30 calendar days after DEC authorization of the new permittee.

#### **4.2.8 Alternative Permits**

DEC may require an individual permit in accordance with 18 AAC 83.215 or coverage under an alternative APDES general permit instead of the 2015 MSGP. These regulations also provide that any interested party may petition DEC to take such an action. The issuance of the individual permit or alternative APDES general permit is in accordance with 18 AAC 83.115 and 18 AAC 83.210 and provides for public comment and appeal of any final permit decision.

Permit Part 2.8.1 clarifies that DEC may require any permittee covered under this general permit to apply for and/or obtain coverage under an APDES individual permit, or coverage under an alternative APDES general permit, based upon a number of different situations (e.g., applicable numeric effluent limitations resulting from a TMDL, or a determination that the permittee has the potential to cause or contribute to a water quality standard excursion). If DEC determines that APDES individual permit coverage or an alternative APDES general permit coverage is necessary, written notification of this required change in permit coverage, including the reason for this decision, an application form, and a deadline for filing the application, will be provided to the permittee. DEC may grant additional time to submit the application upon request. If the permittee is covered under the permit and fails to submit in a timely manner an individual or alternative general permit application as required by DEC, then the coverage under the permit is automatically terminated at the end of the day specified by DEC as the deadline for application submittal.

Additionally, Permit Part 2.8.2 clarifies that any industrial activity may apply for an APDES individual permit or alternative APDES general permit rather than apply for coverage under this general permit, in accordance with 18 AAC 83.215. An individual or alternative general permit application must be

submitted for coverage under such a permit with reasoning supporting the request within 90 days of the effective date of this general permit. If such reasoning is considered adequate by DEC, the request will be granted and an APDES individual permit will be issued or authorization to discharge under an alternative APDES general permit will be provided.

If an APDES individual permit is issued to an industrial activity (as an entity that is otherwise subject to the permit), or is authorized to discharge under an alternative APDES general permit, the applicability of the general permit is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. If an industrial activity (as an entity that is otherwise subject to the permit) is denied an APDES individual permit or an alternative APDES general permit; the applicability of the general permit is automatically terminated on the date of such denial, unless otherwise specified by DEC.

### **4.3 Compliance with Standards and Limits**

#### **4.3.1 Requirements for all Facilities**

APDES regulations at 18 AAC 83.435 state that permits must contain conditions to achieve WQS. Unlike an individual permit that includes requirements tailored to site-specific considerations, a general permit, while tailored to specific industrial processes or types of discharges (e.g., offshore oil and gas or storm water), does not contain site-specific requirements that address the water quality conditions of the waters receiving the discharge. Therefore, a general permit relies on permittees to certify that they meet the eligibility conditions and implement requirements that will ensure compliance with the conditions of the permit. The requirements in Permit Part 3.1.1 are intended to ensure that those seeking coverage under this general permit select, install, implement, and maintain control measures at their construction site that will be adequate and sufficient to meet WQS.

Permittees determine whether their discharges are eligible for authorization under the general permit and, if so, certifies to that determination and implements control measures to achieve the protections described in Part 4.0 of the permit. The permit language is included to ensure that those seeking coverage under the permit select, install, implement, and maintain control measures at their industrial site that will be adequate and sufficient to meet WQS. Based on EPA's 1996 *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits (EPA 833-D-96-001)*, DEC determined that control measures when properly selected, installed, implemented, and maintained provide effluent quality that can meet WQS. However, because proper selection, installation, implementation, and maintenance are so critical to the success of control measures, the effectiveness of simply "installing control measures" at industrial sites may not provide adequate water quality protection. Unless notified otherwise by DEC, compliance with the permit requirement will be assumed to be as stringent as necessary to ensure that discharges do not cause or contribute to an excursion above any applicable WQS.

Permit Part 3.1.3 specifies that DEC may determine that the permittee's discharge will cause, have reasonable potential to cause, or contribute to an excursion above WQS, including failure to protect and maintain existing designated uses of receiving water. This sub-part is adapted from the APDES

Construction General Permit. Where such a determination is made, DEC may require the permittee to take one of three actions (Permit Part 3.1.3):

- Take corrective actions and modify storm water controls to adequately address the identified water quality concerns;
- Submit to DEC valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining WQS; or
- Minimize discharges of storm water from the facility or industrial activity, implement corrective actions, and apply for an individual permit in accordance with Permit Part 2.8.

Data that are valid and verifiable are collected and analyzed with a level of precision, accuracy and representativeness that yield data to help ensure that Alaska Water Quality Standards are met and that water quality uses (Public health and public resource protection) are protected. If additional control measures are required, DEC expects the permittee to follow in-good-faith and document the process for control measure selection, installation, implementation and maintenance, and cooperate to eliminate the identified problem within a time frame stipulated by DEC.

#### **4.3.2 Water Quality Considerations**

Permit Part 3.2 requires a permittee to determine whether an approved or established TMDL exists that specifically addresses its discharge and if so, implement measures consistent with the assumptions and requirements of that approved TMDL, including any specific waste load allocation that has been established that would apply to the discharge. To make such a determination, a permittee can access DEC's TMDL website at [http://dec.alaska.gov/water/tmdl/tmdl\\_index.htm](http://dec.alaska.gov/water/tmdl/tmdl_index.htm). See Table 4-2 of this Fact Sheet for the 2010 list of water bodies impaired for sediment or turbidity. Part 3.2 of the permit requires the permittee to implement control measures necessary to be consistent with the assumptions and requirements of such TMDLs. In certain instances, the TMDL may specifically identify each discharger contributing (or that will be contributing) pollutants to the receiving stream and the controls that are necessary for each discharger to meet the established waste load allocation. More likely for industrial activities, the TMDL will identify a category of dischargers and will identify the types of controls necessary to meet the cumulative waste load allocation for the group of dischargers. If the TMDL specifically identifies measures or controls, the permittee must implement these. If specific measures or controls are not required in the TMDL, the permittee should continue to apply the control measures in Permit Part 4.0. If necessary, DEC may notify the permittee that additional requirements are necessary to be consistent with the assumptions and requirements of the TMDL, or that an individual permit is required.

The CWA mandates that states monitor and report on the quality of their waters. Section 305(b) requires that the quality of all water bodies be characterized and Section 303(d) requires that states list any water bodies that do not meet WQS. DEC develops and publishes an integrated water quality assessment report every two years as required by the CWA. The most recent report is the *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report* (ADEC, 2010).

DEC is incorporating this language to emphasize the importance of implementing control measures required to be consistent with the assumptions and requirements of the TMDL, where applicable. DEC considers it to be inherent in a requirement to document measures taken to ensure that the discharge is consistent with the assumptions and requirements of a TMDL that such measures actually be implemented.

Waters that do not meet the numeric/narrative criteria for their use designation(s) are listed as impaired, in compliance with the CWA and state rules. DEC currently lists approximately 65 waters as impaired, with about 30 listed as candidates for development of a TMDL (DEC, 2010). TMDLs are a calculation of the maximum amount of a pollutant that a water body can receive and still meet WQS and an allocation of that amount of pollutant to the source of the pollutant. Section 303(d) of the federal CWA requires states to identify waters that do not meet applicable WQS applying technology-based controls alone. The Department identifies and prioritizes the water quality-limited waters and then develops TMDLs at a level necessary to achieve the applicable WQS. Table 4-2 summarizes the water bodies in Alaska listed as impaired for sediment or turbidity.

**Table 4-2: Water Bodies Impaired for Sediment or Turbidity – 2010**

Pollutant Source	Water Body	Location	Category
Urban Runoff	Duck Creek	Juneau	4a
Urban Runoff	Jordan Creek	Juneau	4a
Urban Runoff	Lemon Creek	Juneau	4a
Urban Runoff	Vanderbilt Creek	Juneau	4a
Urban Runoff	Chena River	Fairbanks	5
Urban Runoff	Chena Slough	Fairbanks	5
Urban Runoff	Noyes Slough	Fairbanks	5
Gravel Mining	Granite Creek	Sitka	4a
Placer Mining	Birch Creek drainage, Upper Birch Creek, Eagle Creek, Golddust Creek	North of Fairbanks	4a
Placer Mining	Crooked Creek, Bonanza, Crooked, Deadwood, Ketchum, Mammoth, Mastodon, Porcupine	North of Fairbanks	5
Placer Mining	Goldstream Creek	Fairbanks	5
Mining	Slate Creek	Denali National Park	5
Timber Harvest	Fubar Creek	Prince of Wales Island	4b
Timber Harvest	Katlian River	North of Sitka, Baranof Island	5
Source: <i>Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report</i> (July 2010)			
Note: Category 4a – Impaired water with a final/approved TMDL			
Category 4b – Impaired water with other pollution controls			
Category 5 – Impaired water, Section 303(d) list, require TMDL			

## 4.4 Control Measures

### 4.4.1 Control Measure Selection and Design Considerations

Permit Part 4.1 of the permit requires the operator to select, design, install and implement control measures to meet the technology-based effluent limits listed in Permit Parts 4.2 and 4.3. The selection,

design and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Regulated storm water discharges from the facility include storm water run-on that commingles with storm water discharges associated with industrial activity at the facility. If operators find their control measures are not reducing pollutant discharges adequately, the control measures must be modified as expeditiously as practicable.

#### **4.4.2 Non-Numeric Technology-Based Effluent Limits**

This permit requires permittees to comply with non-numeric technology-based effluent limits (found in Permit Parts 4.2 and 11) by implementing control measures. The achievement of these non-numeric limits will result in the reduction or elimination of pollutants from the operator's storm water discharge. Such limits constitute this permit's technology-based limits, expressed narratively per 40 CFR 122.44(k), and are developed using best professional judgment (BPJ).

DEC notes that this permit uses the term "control measures" more often than "best management practices" and "BMPs". This change was adopted to better describe the range of pollutant reduction practices that may be employed, whether they are structural, non-structural or procedural. In addition, the definition of "control measures" in Appendix C of this permit includes both BMPs and "other methods" used to prevent or reduce the discharge of pollutants to receiving waters. The greater breadth of meaning for control measures vis-à-vis BMPs is why DEC uses this term in Permit Part 2.1, and throughout the permit.

The permit requires the operator to achieve all of the non-numeric effluent limits delineated in Permit Part 4.2. The following is a summary of the permit's non-numeric technology-based effluent limits.

***Minimize Exposure to Storm Water.*** To the extent technologically available and economically practicable and achievable, locate industrial materials and activities inside or protect them with storm-resistant coverings: this is one of the most important control options. Minimizing exposure prevents pollutants from coming into contact with precipitation and can reduce the need for control measures to treat or otherwise reduce pollutants in storm water runoff. Examples include covering materials or activities with temporary structures (e.g., tarps) when wet weather is expected or moving materials or activities to existing or new permanent structures (e.g., buildings, silos, sheds). Even the simple practice of keeping a dumpster lid closed can be very effective. While the permit requires consideration of exposure minimization, DEC does not recommend significantly increasing impervious surfaces to achieve it.

In minimizing exposure, the permittee should pay particular attention to manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, and cleaning, maintenance, and fueling operations).

***Good Housekeeping.*** Keep all exposed areas that are potential pollutant sources clean. Good housekeeping is an inexpensive way to maintain a clean and orderly facility and keep contaminants out of storm water discharges. Often the most effective first step towards preventing pollution in storm water from industrial sites simply involves using common sense to improve the facility's basic housekeeping methods. Poor housekeeping can result in more storm water running off a site than necessary and an increased potential for storm water related contamination. A clean and orderly work

area reduces the possibility of accidental spills caused by mishandling of chemicals and equipment. Well-maintained material and chemical storage areas will reduce the possibility of storm water mixing with pollutants.

There are some simple procedures a facility can use to meet the good housekeeping effluent limit, including improved operation and maintenance of industrial machinery and processes, improved materials storage practices, better materials inventory controls, more frequent and regular clean-up schedules, maintaining well organized work areas, and education programs for employees about all of these practices.

Examples of control measures that a permittee may implement to meet the good housekeeping effluent limit include: containerizing materials appropriately, storing chemicals neatly and orderly; maintaining packaging in good condition; promptly cleaning up spilled liquids; sweeping, vacuuming or other cleanup of dry chemicals and wastes to prevent them from reaching receiving waters, and using designated storage areas for containers or drums to keep them from protruding where they can be ruptured or spilled. Proper storage techniques can include:

- Providing adequate aisle space to facilitate material transfer and easy access for inspections;
- Storing containers, drums, and bags away from direct traffic routes to prevent accidental spills;
- Stacking containers according to manufacturers' instructions to avoid damaging the containers from improper weight distribution;
- Storing containers on pallets or similar devices to prevent corrosion of the containers, which can result when containers come in contact with moisture on the ground; and
- Assigning the responsibility of hazardous material inventory to a limited number of people who are trained to handle hazardous materials.

***Maintenance.*** Regularly inspect, test, maintain and repair or replace all industrial equipment and systems to prevent releases of pollutants to storm water. Maintain all control measures in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel trained).

Most facilities will already have preventive maintenance programs (PMPs) that provide some environmental protection. Preventive maintenance involves regular inspection and testing of equipment and operational systems to uncover conditions such as cracks or slow leaks that could cause breakdowns or failures that result in discharges of pollutants to storm sewers and surface water. To prevent breakdowns and failures, operators should adjust, repair or replace equipment.

As part of a typical PMP, operators must include regular inspection and maintenance of storm water management devices and other equipment and systems. Operators should identify the devices, equipment and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair or replacement of devices, equipment and systems. For storm water management devices such as catch basins and oil-water separators, PMPs should include the periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and

systems, there should be procedures to reveal and correct conditions that could cause breakdowns or failures that may result in the release of pollutants.

The PMP should include a suitable records system for scheduling tests and inspections, recording test results and facilitating corrective action. The program should be developed by qualified plant personnel who evaluate the existing plant and recommend changes as necessary to protect water quality.

***Spill Prevention and Response Procedures.*** Minimize the potential for leaks, spills and other releases, which are major sources of storm water pollution, to be exposed to storm water. The purpose of this effluent limit is not only to prevent spills and leaks but, in the event one does occur, to limit environmental damage via development of spill prevention and response procedures. Operators should identify potential spill areas and keep an inventory of materials handled, used and disposed of. Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and, in the event of a spill, ensure proper and timely response.

Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be addressed in the procedures. For a spill prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.

The following are suggestions to incorporate into spill prevention and response procedures:

- Install leak detection devices, overflow controls and diversion berms;
- Perform visual inspections and identify signs of wear;
- Perform preventive maintenance on storage tanks, valves, pumps, pipes and other equipment;
- Use filling procedures for tanks and other equipment that minimize spills;
- Use material transfer procedures that reduce the chance of leaks or spills;
- Substitute less toxic materials;
- Ensure that clean-up materials are available where and when needed;
- Ensure appropriate security; and
- Notify emergency response agencies where necessary (as specified in Permit Part 4.2.4.4).

In the event of a spill, it is important that the facility have clear, concise, step-by-step instructions for responding to spills. The approach will depend on the specific conditions at the facility such as size, number of employees and the spill potential of the site.

***Erosion and Sediment Controls.*** Stabilize and contain runoff from exposed areas to minimize onsite erosion and sediment creation, and the accompanying discharge of pollutants (other pollutants can bind to soil and other particles and be discharged along with the sediment).



There may be exposed areas of industrial sites that, due to construction activities, steep slopes, sandy soils or other factors, are prone to soil erosion. Construction activities typically remove grass and other protective ground covers resulting in the exposure of underlying soil to wind and rain. Similarly, steep slopes or sandy soils may not be able to hold plant life so that soils are exposed. Because the soil surface is unprotected, dirt and sand particles are easily picked up by wind or washed away by rain. This erosion process can be controlled or prevented through the use of certain control measures.

To meet this limit, operators must select, design, install and implement controls to address the on-site exposed areas prone to soil erosion. Erosion control practices such as seeding, mulching and sodding prevent soil from becoming dislodged and should be considered first. Sediment control practices such as silt fences, sediment ponds, and stabilized entrances trap sediment after it has eroded. Sediment control practices, such as flow velocity dissipaters and sediment catchers, should be used to back-up erosion control practices.

***Management of Runoff.*** Operators must divert, infiltrate, reuse, contain or otherwise reduce storm water runoff to minimize pollutants in the discharge. Employ practices that direct the flow of storm water away from areas of exposed materials or pollutant sources. Such practices can also be used to divert runoff that contains pollutants to natural areas or other types of treatment locations.

To meet this effluent limit, operators may consider vegetative swales, collection and reuse of storm water, inlet controls, snow management, infiltration devices, and wet detention/retention basins. If infiltration is a selected control, permittees should pay special attention to the fact that storm water infiltration control measures that meet the definition of a Class V Injection Well could be subject to the Underground Injection Control (UIC) Regulations.

***Salt Storage Piles or Pile Containing Salt.*** Enclose or cover piles of salt or piles containing salt used for deicing or other industrial purposes. Implement appropriate measures to minimize the exposure of the piles during the adding to or removing from processes.

Options for meeting the salt pile effluent limit include covering the piles or eliminating the discharge from such areas of the facility. Preventing exposure of piles to storm water or run-on also eliminates the economic loss from materials being dissolved and washed away. A permanent under-roof storage facility is the best way to protect chemicals from precipitation and runoff, but where this is not possible, salt piles can be located on impermeable bituminous pads and covered with a waterproof cover.

***Sector-Specific Effluent Limits.*** Achieve any additional non-numeric limits stipulated in the relevant sector-specific controls in Permit Part 11.

***Employee Training.*** Operators must train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit.

Employee training programs should thoroughly educate members of the Storm Water Pollution Prevention Team (see Permit Part 5.2.2) on their roles in implementing the control measures employed to meet the limits in the permit. Training should address the processes and materials on the plant site, good housekeeping practices for preventing discharges, and procedures for responding properly and

rapidly to spills or other incidents. The training program should also address other requirements in the permit such as inspections and record-keeping.

Training sessions should be conducted at least annually to assure adequate understanding of the objectives of the control measures and the individual responsibilities of each employee. More frequent training may be necessary at facilities with high employee turnover or where storm water programs are involved or multi-faceted. Often, training could be a part of routine employee meetings for safety or fire protection. Where appropriate, contractor personnel also must be trained in relevant aspects of storm water pollution prevention.

Training sessions should review all aspects of the control measures and associated procedures. Facilities should conduct spill or incidence drills on a regular basis which can serve to evaluate the employee's knowledge of the control measures and spill procedures and are a fundamental part of employee training. Such meetings should highlight previous spill events or failures, malfunctioning equipment and new or modified control measures.

***Non-Storm Water Discharges.*** Eliminate non-storm water discharges that are not authorized by an APDES permit. This limit is intended to reinforce the fact that, with the exception of the allowable non-storm water discharges listed in Permit Part 1.2.3, non-storm water discharges are ineligible for coverage. Operators needing help in finding and eliminating unauthorized discharges may find the following guidance helpful: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Chapters 7, 8, 9 at: [http://www.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](http://www.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)

***Waste, Garbage, and Floatable Debris.*** Operators must ensure that waste, garbage and floatable debris are not discharged to receiving waters. Trash and floating debris in waterways have become significant pollutants, especially near areas where a large volume of trash can be generated in a concentrated area. Trash can cause physical impairments in water bodies to aquatic species and birds and is also visual pollution and detracts from the aesthetic qualities of receiving waters.

This effluent limit can be met through the implementation of a variety of control measures. For instance, to prevent garbage from being carried in runoff to receiving waters, there are essentially two methods of control: source control and structural control. Source control includes personnel education, improved infrastructure and cleanup campaigns. Education, such as informing employees about options for recycling and waste disposal and about the consequences of littering, is one of the best ways. Another topic that should be emphasized is proper trash storage and disposal. Improved infrastructure can include optimizing the location, number, and size of trash receptacles, recycling bins, and cigarette butt receptacles based on expected need. Clean-up campaigns are an effective way to reduce trash. Facilities should determine whether the number and placement of receptacles are adequate and if regular maintenance activities (e.g., sweeping, receptacle servicing) are preventing litter from entering receiving waters. Structural controls include physical filtering structures and continuous deflection separation. Filtering structures concentrate diffuse, floating debris and prevent it from traveling downstream. Some examples are trash racks, mesh nets, bar screens and trash booms. Continuous deflection separation targets trash from storm flows during and after heavy precipitation.

**Dust Generation and Vehicle Tracking of Industrial Materials.** Operators must minimize generation of dust and off-site tracking of raw, final or waste materials. Dust control practices can reduce the activities and air movement that cause dust to be generated. Control measures to minimize the generation of dust include:

- **Vegetative Cover.** In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. By establishing a vegetative cover, exposed soil is stabilized and wind velocity at ground level can be reduced, thus reducing the potential for dust to become airborne.
- **Mulch.** Mulching can be a quick and effective means of dust control for a recently disturbed area.
- **Wind Breaks.** Wind breaks are barriers (either natural or constructed) that reduce wind velocity through a site which then reduces the possibility of suspended particles. Wind breaks can be trees or shrubs left in place during site clearing or constructed barriers such as a wind fence, snow fence, tarp curtain, hay bale, crate wall or sediment wall.
- **Stone.** Stone can be an effective dust deterrent in areas where vegetation cannot be established.
- **Spray-on Chemical Soil Treatments (Palliatives).** Examples of chemical adhesives include anionic asphalt emulsion, latex emulsion, resin-water emulsions and calcium chloride. Chemical palliatives should be used only on mineral soils. When considering chemical application to suppress dust, determine whether the chemical is biodegradable or water-soluble and what effect its application could have on the surrounding environment, including water bodies and wildlife.
- **Vehicle Trackout.** To reduce vehicle tracking of materials, the operator should keep stored or spilled materials away from all roads within the site. Specific measures such as setting up a wash site or separate pad to clean vehicles prior to their leaving the site may be effective as well.

#### **4.4.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines**

This requirement holds permittees responsible for complying with any applicable Federal effluent limitation guidelines eligible and authorized for coverage under this permit. Table 4-1 in the permit describes where the limits can be found.

#### **4.4.4 Plan Approval for Nondomestic Wastewater Treatment Works**

The Part 4.4 review of nondomestic wastewater treatment review only applies to treatment systems not covered by SMCRA regulations or not covered by a separate APDES Permit, so there is no duplication of review requirements.

### **4.5 Storm Water Pollution Prevention Plan**

#### **4.5.1 Storm Water Pollution Prevention Plan**

The SWPPP must contain the following sections: storm water pollution prevention team; description of the facility; summary of potential pollutant sources; description of control measures; schedules and

procedures; and documentation to support eligibility considerations under other laws. The SWPPP must be signed in accordance with Appendix A, Section 1.12 of the permit.

#### **4.5.2 Contents of the SWPPP**

**Permittee.** Identify the permittee for the facility.

**Pollution Prevention Team.** Developing a SWPPP requires that a qualified individual or team of individuals be identified as responsible for developing and revising the facility's SWPPP. Additionally, this team is responsible for implementing and maintaining the control measures to meet effluent limits, and taking corrective action where necessary. Team members should be chosen for their expertise in the relevant departments at the facility to ensure that all aspects of facility operations are considered in developing the plan. The SWPPP must clearly describe the responsibilities of each team member to ensure that each aspect of the plan is addressed. DEC expects most permittees will have more than one individual on the team, except for small facilities with relatively simple plans and/or staff limitations. The permit requires that team members have ready access to all applicable portions of the SWPPP and the permit.

Identification of a storm water pollution prevention team ensures that appropriate persons (or positions) are identified as necessary for developing and implementing the plan. Inclusion of the team in the plan provides notice to facility staff and management (i.e., those responsible for signing and certifying the plan) of the responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

**Site Description.** The SWPPP must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to storm water runoff or, during periods of dry weather, result in pollutant discharges through the municipal separate storm sewers or storm water drainage systems that drain the facility. The SWPPP must also contain both a general location map of the site that shows the location of the facility in relationship to receiving waters and other geographical features, and a more detailed site map that contains information on facility/site characteristics that affect storm water runoff quality and quantity. For areas of the facility that generate storm water discharges with a reasonable potential to contain significant amounts of pollutants, the map must indicate the probable direction of storm water flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion also must be identified. The site map must also include locations of: existing structural control measures; receiving waters; storm water conveyances, inlets and outfalls; potential pollutant sources; past significant spills or leaks; storm water monitoring points; municipal separate storm sewer systems; and locations and sources of run-on to the permittee's site (see permit for complete list of required items). To improve readability of the map, some detailed information may be kept as an attachment to the site map and pictures may be included as deemed appropriate. A detailed site description assists permittees in subsequent efforts to identify and set priorities for the selection, design, and implementation of measures taken to meet effluent limits and in identifying necessary changes in materials, materials management practices, or site features.

**Summary of Potential Pollutant Sources.** This permit requires permittees to identify potential sources of pollutants in storm water resulting from exposure of industrial activities to storm water. In addition,

permittees must document in their SWPPP any authorized non-storm water discharges that are released. The permit and the APDES regulations at 40 CFR 122.26(b)(14) define “storm water discharges associated with industrial activities” to include, but not be limited to: storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. The term “storm water discharges associated with industrial activity” excludes areas located on plant lands separate from the plant’s industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas.

Additionally, the term “material handling activities” is defined in the permit to include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product.

Part 5.2.4 of the permit is only applicable to those parts of the site for which the permittee is covered under the permit. For example, a site that discharges storm water to an area of the site covered by a different APDES permit, is not required to identify the specific activities occurring in that area. DEC does expect permittees to clearly identify those areas of the site and describe why they do not require coverage under this permit.

When identifying potential pollutant sources at the site, permittees must consider industrial storm water from the following sources: activities in the area; pollutants; spills and leaks; non-storm water discharges; salt storage; and sampling data.

**Description of Control Measures.** A permittee must describe in its SWPPP the control measures it has implemented at its site to achieve each of the effluent limits in Permit Parts 4.1, 4.2, and 4.3, and to address any storm water run-on that commingles with discharges covered under the permit. The description of the control measures implemented to meet the effluent limits must include a brief explanation of the measures implemented at the site, including how the Permit Part 4.1.1 selection and design considerations were followed. The description in the SWPPP must describe how the operator specifically plans to meet the applicable technology-based or water quality-based effluent limits.

**Schedules and Procedures.** The permit identifies specific information that must be documented in the SWPPP. DEC emphasizes that ALL control measures implemented to meet the Permit Part 4 limits must be documented in the SWPPP. In addition to the description to the on-the-ground control measures implemented to meet the effluent limits, the permit requires certain schedules and procedures to be documented in the SWPPP.

The permit requires permittees to document in the SWPPP monitoring and inspection procedures that will be followed. For monitoring activities, the permittee must document in the SWPPP information

such as locations where samples are to be collected, person(s) or position(s) responsible for collecting those samples, the frequency of sampling and the parameters to be sampled, applicable control values at each sample location, and procedures that will be followed to gather storm event data.

If a permittee chooses to use the substantially identical outfall exception in Permit Part 6.2 for quarterly visual assessments or Permit Part 7.2 for benchmark monitoring, he/she is required to describe in the SWPPP: the locations of each of these outfalls, the general industrial activities conducted in the drainage area of each outfall, the control measures being implemented for each outfall, the exposed materials that are likely to be a significant contributor of pollutants to the storm water discharge, an estimate of the runoff coefficient of the drainage area, and why the outfalls are expected to discharge substantially identical effluents.

Runoff coefficients can be found in Table 3-2 of the Alaska Storm Water Guide located on DEC's Storm Water Website <http://dec.alaska.gov/water/wnpspc/stormwater/Guidance.html>.

For inspection activities, permittees must document procedures for performing the three types of inspections specified in the permit, namely, routine facility inspections (Permit Part 6.1), quarterly visual assessments (Permit Part 6.2), and Comprehensive Site Inspections (Permit Part 6.3). For each of these types of inspections, the SWPPP must include information such as person(s) or position(s) performing inspections, the inspection schedule, and specific items to be covered by the inspection.

DEC is requiring these documentation provisions to help ensure that appropriate monitoring and inspection procedures consistent with permit requirements are implemented. DEC believes documenting these activities will help to improve facility compliance with the requirements.

**Signature Requirements.** The permittee must sign and date the SWPPP in accordance with Permit Appendix A Subsection 1.12, including the date of the signature.

#### **4.5.3 Inspections**

The permit requires that the SWPPP document the procedures for performing facility inspections and include copies of the inspection reports.

#### **4.5.4 Monitoring**

The permit requires that the SWPPP document the procedures for performing facility monitoring and include copies of the monitoring reports.

#### **4.5.5 Documentation of Permit Eligibility Related to a Total Maximum Daily Load**

The permit requires that the SWPPP include documentation supporting determination of permit eligibility with regards to waters that have an approved TMDL. See Permit Part 3.2 for additional information to determine eligibility related to a TMDL.

#### **4.5.6 Maintaining and Updated SWPPP**

This permit requires that the SWPPP be updated whenever any of the triggering conditions for corrective action in Permit Part 8.1 occur, or when a review following the triggering conditions in Permit Part 8.2 indicates that changes to the permittee's control measures are necessary to meet the effluent limits in this permit. The permit requires that the SWPPP be signed and dated by an authorized

representative each time it is modified. Changes to the SWPPP must be made in accordance with Permit Part 5.6.

It is important to note that failure to update the SWPPP in accordance with Permit Part 5.6 is a recordkeeping violation, not a violation of an effluent limit. For example, if the permittee changes its maintenance procedures, but fails to update its SWPPP to reflect these changes, a recordkeeping violation will result. The permittee must revise its SWPPP to reflect the new maintenance procedures and include documentation of the corrective action (in accordance with Part 8) to return to full compliance.

#### **4.5.7 SWPPP Availability**

This permit requires that a copy of the SWPPP be kept at the facility and be immediately available to representatives of DEC, EPA, or a local storm water agency (e.g., MS4 operator), at the time of an on-site inspection or upon request. Permit Part 5.3 indicates that DEC may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from DEC or EPA. The purpose of Part 5.3 is to require permittees to retain copies of their SWPPP on site, and to make the document available to DEC or EPA immediately upon request. If a member of the public wishes to have access to the non-CBI portions of the permittee's SWPPP, they must first contact DEC. DEC may require that a copy be sent to the Agency so that it can be provided to the requestor. The mechanism for providing DEC with a copy of the SWPPP is at the discretion of the permittee (e.g., web-based, hard copy), though DEC strongly encourages that SWPPPs be provided electronically. For Sector J facilities, the SWPPP can be either kept on-site if there is an office, or at the permittee's office.

Copies of the SWPPP, inspections, or supporting documentation must be on-site and available for DEC inspectors to review. The permit does not exclude electronic copies. In fact, electronic storage of documents can be used as long as they are accessible when a DEC inspector conducts an on-site inspection. In other words, the documents must be available at the facility (either paper or electronically).

#### **4.5.8 Additional Documentation Requirements**

DEC requires documentation of various implementation activities, such as reports of routine facility inspections and descriptions of corrective actions, after facilities are authorized to discharge. This documentation is useful both for facility personnel and DEC inspectors to assess overall performance of the control measures selected to meet the technology-based and water quality-based effluent limits in the permit.

### **4.6 Inspections**

#### **4.6.1 Routine Facility Inspections**

The 2008 EPA-issued MSGP included routine facility inspections as a component of the SWPPP. However, to clarify inspection requirements for permittees in this issuance of the MSGP, DEC moved the routine facility inspections to Permit Part 6 along with the other types of site inspections required under the permit (i.e., quarterly visual assessments and comprehensive site inspections).

Permittees are required to conduct routine inspections, at least quarterly, of all areas of the facility where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with the effluent limits required by the 2015 MSGP. Qualified personnel must conduct the routine facility inspections with at least one member of the Pollution Prevention Team participating. One person can fulfill both roles – being a qualified person and a member of the pollution prevention team. Because some equipment, processes, and procedures may require more frequent inspections, the relevant inspection schedules must be documented in the SWPPP. For example, inspection of outdoor areas associated with regular industrial activity may require more frequent inspections to ensure that the site is swept, garbage picked up, drips and spills cleaned, etc., on a regular basis.

Permit Part 6.1 of the 2015 MSGP elaborates on the specific information to be documented for each routine inspection. Most importantly, this documentation must include when the inspection took place, who conducted the inspection, and any indication that controls may not be adequate or are not functioning properly. The findings of these routine inspections must be maintained on-site with the SWPPP. The inspection forms under the 2008 MSGP required the name and signature of the inspector. It is clearly stated in Part 6.1.2 that the inspection form be signed and certified in accordance with Permit Appendix A Part 1.12. The permit allows the signatory identified in Appendix A, Subsection 1.12 to delegate responsibility to sign inspection reports to either a person or a position, such as pollution prevention team lead or the environmental manager. A copy of the delegation memo or letter must be included in the SWPPP.

Some industry sectors have more specific routine inspection requirements, which are described in more detail in Permit Part 11 for the relevant sectors.

At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring. As permittees are already required to perform visual monitoring, benchmark monitoring, and effluent limitations monitoring during storm events, DEC does not believe this imposes significant additional burden on permittees. Rather, DEC maintains this permit requirement is a potentially important tool for the permittee to be able to better identify sources of pollutants discharged in storm water runoff from the facility and to actively observe the effectiveness of control measures.

#### **4.6.2 Quarterly Visual Assessment of Storm Water Discharges**

This permit retains the requirement from the three previous MSGPs to conduct quarterly visual examinations of storm water discharges. All industrial sectors covered by this permit are required to conduct these examinations. To ensure that all inspection and assessment requirements were described in the same part of the permit, DEC retains the requirement to conduct quarterly visual assessments from the monitoring section of the permit in Permit Part 6.2 addressing inspections.

This permit requires that grab samples of storm water discharges be taken and examined visually for the presence of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. No analytical tests are required to be performed on these samples. The grab samples must be taken within the first 30 minutes or as soon as practicable after the occurrence of an actual discharge from the site (including documentation of why sampling was not



practicable within the first 30 minutes). The trigger for visual monitoring is the precipitation event causes an actual discharge to occur. The permit includes conditions specific to the monitoring of snowmelt. Specifically, in areas subject to snow, the 2015 MSGP requires that at least one of the quarterly samples be collected from snowmelt. For practical purposes, the permit does not require that these snowmelt samples be collected within the first 30 minutes of discharge as is the case for samples collected during rain events.

The storm/snowmelt event must create an actual discharge from the site (“measurable storm event”). This storm event will vary based on numerous factors at the facility, the most obvious being the actual size and duration of the storm event. However, the amount of impervious surface at the facility will impact this as well. If the facility is covered mostly by grass or another type of vegetation with only a small amount of paved surfaces or roofs, it will take a larger storm to create a discharge from the site than it would at a facility that is entirely paved. Another factor affecting whether and how frequently there will be a measurable storm event will be how frequently rain occurs at the facility and the size of the most recent storms. Saturated soil will generate a storm water discharge more quickly than dry soil; however, very dry soil can also become compacted and become nearly impervious to rain, thereby converting precipitation to runoff quickly as well. Each facility will need to pay attention to the facility’s particular characteristics to develop an understanding of what type of rain events or snowmelt results in a discharge.

Permittees must document the results of their visual assessments in a report that includes the sample location, date and time, personnel collecting the sample and performing visual assessments, results of the observations, and probable sources of any observed storm water contamination. The visual examination reports must be maintained with the SWPPP. The inspection forms under the 2008 MSGP required the name and signature of the inspector. However, it was not clearly specified that the inspection form had to be signed and certified according to Permit Appendix A Part 1.12 whereas this requirement is clearly stated in 2015 MSGP Permit Part 6.2.2.

When conducting a storm water visual examination, the pollution prevention team, or individual team member, should attempt to relate the results of the examination to potential sources of storm water contamination on the site. For example, should an oil sheen be observed, facility personnel (preferably members of the pollution prevention team) should conduct an inspection of the area of the site draining to the examined discharge to look for obvious sources of spilled oil, leaks, etc. If a source can be located, then this information would allow the facility operator to immediately conduct a clean-up of the pollutant source, and/or to revise control measures to minimize the contaminant source.

The permit includes exceptions to these requirements in order to account for circumstances during which conducting quarterly visual assessments may not be infeasible, namely during adverse (e.g., dangerous) weather conditions, or in parts of the state subject to climates with irregular storm water runoff or to large amounts of snowfall. Where these types of conditions prevent a facility from performing these assessments quarterly, permittees have the ability to modify their assessment schedule such that the four assessments are conducted over the course of the year during periods when discharges, be it from rain or snow, actually occur and can be safely observed.

Operators of inactive and unstaffed sites may invoke a visual monitoring exception if they eliminate all exposure of industrial activities and materials to storm water, and document this in the SWPPP. This waiver is available to all sectors covered under this permit. In addition, inactive and unstaffed mines covered under Sectors G, H, and J are eligible for this waiver even if all exposure has not been eliminated, due to the unique issues affecting such facilities, such as the remoteness of many mining sites. Facilities that make use of this waiver must still implement any necessary control measures and comply with other applicable permit requirements. Inactive and unstaffed sites must still conduct annual inspections.

Operators with two or more essentially identical outfalls may also elect to conduct a visual assessment at just one of these outfalls each quarter, but must perform their quarterly assessments on a rotating basis to ensure that each substantially identical outfall is periodically observed throughout the period of permit coverage. If storm water contamination is identified through visual monitoring performed at a substantially identical outfall, the operator must assess and modify his/her control measures as appropriate for each outfall represented by the monitored outfall. This approach ensures that operators will assess discharges from the entire site over the term of the permit, and will address any identified problems at all substantially identical outfalls where the problem may be occurring.

#### **4.6.3 Comprehensive Site Inspections**

This permit requires that permittees conduct comprehensive site inspections at least once a year for the entire permit term. Since facilities will obtain coverage at different times over the course of the permit, DEC added clarifying language identifying the inspection periods for the duration of the permit, based on the issuance date of the permit, including language clarifying that should the permit be administratively extended (i.e., DEC fails to reissue the general permit on-time), these inspection requirements continue to apply. Also, the permit provides a one-time waiver for facilities that obtain permit coverage less than three months before the end of one of these inspection periods to allow new permittees more time to fully assess the adequacy of their storm water control measures.

Comprehensive site inspections may be conducted simultaneously with other site inspections (such as with the routine facility inspection described in Permit Part 6.1), provided the scope is sufficient to address the minimum requirements of the comprehensive site inspection. Qualified personnel must conduct inspections, and the inspection team must include at least one member of the Pollution Prevention Team. Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of controls selected. Permittees may hire outside contractors to perform these inspections; however, signature and certification of inspection reports must be by a duly authorized representative of the facility, as defined in Permit Appendix A Subsection 1.12.

Note that the comprehensive site inspections are not the same as routine facility inspections. Routine facility inspections (Permit Part 6.1) are required more frequently and are meant to be less formal evaluations of the facility's exposed industrial activities so that permittees have a mechanism for ensuring that problems are not developing. Comprehensive site inspections, as the term implies, include a much more in-depth review of the site and all operations, as they relate to storm water management and the requirements of this permit.

The comprehensive site inspection must cover all areas of the facility affected by the requirements in the permit including areas where industrial materials or activities are exposed to storm water, storm water control measures used to comply with the effluent limits, and areas where any leaks, spills, or other accidental discharge may have occurred in the last three years. DEC developed an Annual Report Form, included as Permit Appendix I, which is recommended for use when performing these inspections. Appendix I focuses on assessments at each outfall and the areas of the facility that may contribute storm water discharges associated with industrial activity to that outfall. The permit identifies the specific activities that may occur at the facility that are to be inspected. Also, the comprehensive site inspection must include observation of storm water control measures used to meet permit requirements to assess the adequacy of these control measures, including any measures in need of maintenance, repair, or replacement or where additional controls are needed.

The results of each comprehensive site inspection must be documented in a report signed and certified by an authorized company official in accordance with Appendix A Subsection 1.12 of the permit. In addition to documenting findings of the assessment and observations described above, the report must also include basic inspection information (e.g., inspectors, date, and APDES permit number), must certify if the facility is in compliance with the permit, and must describe any corrective action initiated or completed during the reporting period or required as a result of the inspection. The comprehensive site inspection is to be submitted to DEC with the annual report.

## **4.7 Monitoring**

### **4.7.1 Monitoring Procedures**

This permit requires certain permittees to sample and analyze their storm water discharges as a way to assess the effectiveness of control measures in meeting the effluent limitations. Analytical monitoring is a means by which to measure the concentration of a pollutant in a storm water discharge. Analytical results are quantitative and therefore can be used to compare discharge results and to quantify the effectiveness of storm water control measures, including identifying pollutants that are not being successfully controlled. Permit Part 7.1 of the permit identifies procedures for collecting samples and identifies where to sample, when to sample, and what to sample. These requirements are similar to those in the 2008 EPA-issued MSGP. These requirements are in addition to the standard permit conditions described in Permit Appendix A, Subsection 3.0.

***Monitored Outfalls.*** The monitoring requirements in the permit apply to each outfall discharging storm water associated with industrial activity, unless the permittee qualifies for the substantially identical outfalls exemption as described in this section. To be considered substantially identical, outfalls must have generally similar industrial activities, control measures, exposed materials that may significantly contribute pollutants to storm water, and runoff coefficients of their drainage areas. When a permittee believes its facility has two or more outfalls that qualify as substantially identical, the permittee may monitor one of these outfalls and report that the quantitative data also apply to the other substantially identical outfalls. The permittee must also document the location of each of the outfalls and explain why the outfalls are expected to discharge substantially identical effluent, addressing each of the factors to be considered in this determination (industrial activities, control measures, exposed materials and runoff

coefficients). Operators do not need advance DEC approval for this determination, however, DEC may subsequently determine that outfalls are not substantially identical and require sampling of additional outfalls. DEC clarifies in Permit Part 7.1.1 that the allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with the numeric effluent limitations. The permittee is required to monitor each outfall covered by a numeric effluent limit as identified in Permit Part 7.2.2. This substantially identical outfall provision provides facilities that have multiple storm water outfalls with a means to reduce the number of outfalls that must be sampled and analyzed while still providing monitoring data that are indicative of discharges from each outfall. This may result in a substantial reduction of the resources required for a facility to comply with analytical monitoring requirements.

***Commingled Discharges.*** If storm water discharges associated with industrial activity commingle with discharges not authorized by this permit (e.g., unregulated storm water or other permitted wastewater), then permittees must sample the storm water discharge before it mixes with the other discharges when practicable. The commingled discharge provision is intended to ensure that monitoring results are representative of discharges covered under this permit and not indicative of other discharges from the site. DEC acknowledges that in certain instances, such as when authorized discharges are commingled with other waste streams prior to on-site treatment, sampling only authorized waste streams may be infeasible.

***Measurable Storm Events.*** This permit specifies the characteristics of a measurable storm event as an event that results in a discharge from the permitted facility. This permit retains the same requirements as the 2008 MSGP regarding the interval between qualified rain events and does not include a requirement for a specific storm magnitude (i.e., 0.1 inches or greater). Samples must be collected from the discharge resulting from a storm event that occurs at least 72 hours (3 days) after a previous measurable storm event. The 72-hour (3-day) requirement may be waived by the permittee where the permittee documents that less than a 72-hour (3-day) interval is representative for local storm events during the season when sampling is being conducted. This permit includes a provision that allows for sampling of snowmelt in addition to storm water runoff. The 72-hour (3-day) requirement does not apply to snowmelt as the actual discharge is not clearly tied to a specific snow event (i.e., may be the accumulation from multiple events). The permit also specifies the type of documentation required to show consistency with this requirement.

The measurable storm event provision in the permit requires only that a storm event results in a discharge from the permitted facility, and that it follows a period of greater than or equal to 72-hours (3-days) when no storm water discharge occurred. The 72-hour (3-day) period is included in an attempt to eliminate monitoring discharges soon after a previous storm event washed away residual pollutants. By defining a storm event as one that results in discharge, rather than prescribing a minimum magnitude, affords the permittee flexibility to sample during any storm event that produces a discharge, rather than having to ensure that minimum magnitude is reached. The purpose of defining the measurable event is to capture and characterize actual storm water discharge. The provision also provides flexibility to address snowmelt discharges when they occur, rather than based on when the storm producing the snowfall occurred.

**Sample Type.** The permit specifies that a minimum of one grab sample must be taken from the measurable storm event being monitored. The grab sample must be taken during the first 30 minutes of the discharge, except for snowmelt monitoring which has no 30 minute requirement. If more than one grab sample or a composite sample is collected, only those samples collected during the first 30 minutes of discharge are to be used for performing any necessary analyses. If the collection of a grab sample during the first 30 minutes is impractical, a grab sample can be taken during the first hour of the discharge, but the permittee must document and keep with the SWPPP an explanation of why a grab sample during the first 30 minutes was impractical.

DEC is requiring a sample during the first 30 minutes to account for any first flush effects that may result from a precipitation event. The highest pollutant concentrations generally occur during these first flush events. The first 30 minutes of the discharge is also the time when receiving stream flows are the lowest during wet weather events and thereby presents the greatest potential pollutant impacts to aquatic species.

This permit identifies the type of samples and when these samples are to be collected. This will allow facilities to make accurate comparisons of monitoring results to the corresponding benchmark or effluent limitations to determine whether additional action may be needed to reduce concentrations of pollutants detected in storm water discharges. Grab samples of discharges resulting from snowmelt that have been exposed to industrial activities, materials storage, or materials handling areas are to be collected from each outfall for characterization, but they do not have to be collected within 30 minutes of discharge since (1) runoff typically does not occur during a snow event (2) collecting a snowmelt sample within 30 minutes of commencement of discharge is impractical, and (3) the “first flush” effects of snowmelt are not as well defined.

**Adverse Weather Conditions.** When adverse weather conditions make sampling dangerous, storm event monitoring may be postponed until the next runoff event. This provision applies to serious weather conditions such as: lightning, flash flooding, and high winds. This provision should not be used as an excuse for not conducting sampling under conditions associated with more typical storm events. Adverse weather conditions do not exempt the permittee from having to file a benchmark monitoring report in accordance with the corresponding reporting period. In many cases, sampling during a subsequent non-hazardous storm event may still be possible during the reporting period. Where this is not possible, permittees are still required to report the inability to monitor indicating the basis for not sampling during the reporting period. This provision applies to all monitoring requirements of this permit. As with the 2008 MSGP, this permit allows the permittee to postpone sampling under conditions immediately hazardous to the life and health of monitoring staff, and offers examples of adverse conditions. If postponement is required, the permittee is afforded the flexibility to collect samples during the next qualifying storm event to ensure the safety of facility personnel.

**Climates with Irregular Storm Water Runoff.** This permit provides for development of alternative monitoring schedules for facilities located in arid and semi-arid climates, or in areas subject to snow or prolonged freezing. In this case, the permittee is responsible for identifying those periods during which discharges are most likely to occur and establish a schedule distributing the required monitoring events during those periods. Alternate monitoring schedules allow facilities the flexibility to allocate their

resources effectively to capture the required number of storm water discharge events during the permit term. This flexibility will provide a more accurate characterization of pollutant concentrations in facility storm water discharges during times of the year when precipitation is actually occurring, and during snowmelt discharges in areas subject to extended winter seasons and prolonged freezing. This special exception should reduce the number of times permittees report that there was no discharge due to lack of precipitation during a particular quarter during the dry or extremely cold weather season, which in turn will provide DEC with more data, which can be used to evaluate facility pollutant levels, than in previous permit terms. The flexibility in the monitoring periods for climatic conditions and the revised definition of a measurable event (Permit Part 7.1.3) together are more readily adapted to capturing and characterizing storm water discharges and snowmelt events.

**Monitoring Periods.** Certain monitoring must be conducted quarterly (e.g., benchmark monitoring). For such monitoring, DEC is defining the permit quarters during which monitoring must occur and also describing when the first monitoring quarter is to commence based on the date of permit coverage. This section specifies that the monitoring requirements commence during the first full permit quarter following six months after the publication date of this permit, or following the date of the authorization to discharge, whichever date comes later. Note that permittees in climates with irregular storm water runoff may define alternate monitoring periods, as described above, provided documentation of the revised schedule is kept with the SWPPP and the new schedule is provided to DEC on the first monitoring report.

**Monitoring for Allowable Non-Storm Water Discharges.** This provision clarifies that permittees are only required to monitor allowable non-storm water discharges when they are commingled with storm water discharges associated with industrial activity.

#### **4.7.2 Required Monitoring**

This permit contains four general types of monitoring requirement:

1. Benchmark monitoring;
2. Effluent limitations monitoring;
3. Discharges to impaired waters monitoring; and
4. Additional monitoring required by DEC.

**Derivation of the Benchmark Levels.** For the proposed 2015 MSGP, DEC has retained the same benchmark values from the 2008 MSGP, but has added 10 benchmark values (arsenic, cadmium, copper, cyanide, lead, mercury, nickel, selenium, silver, and zinc) for facilities that are required to sample for metals and that discharge into saline waters (saltwater). For a full discussion of DEC's approach for the derivation of the benchmarks, see the fact sheet for the 1995 MSGP, 2008 MSGP, and the proposed draft EPA 2013 MSGP. Saline waters have a salinity equal or exceed 0.5 parts per thousand (by mass), adopted from EPA's 316(b) Rule for cooling water intakes. These benchmarks represent the available acute ambient water quality criteria for priority toxic and non-priority pollutants in saltwater. These benchmark values reflect the toxicity of these metals in saline waters and replace the freshwater-based criteria in the 2008 MSGP. In some cases, the saltwater represent significant changes in the benchmarks for facilities discharging into saline waters. The values for arsenic, copper, cyanide, and nickel are

lowered by an order of magnitude. The values for cadmium and lead are increased by an order of magnitude, while the value for selenium is increased two orders of magnitude. Benchmark values for the other metals increase (mercury) or decrease (silver, and zinc) by smaller amounts.

The following table presents the proposed permit's benchmark values, and the source of those values.

*(Table 4-3: MSGP Benchmark Values and Sources available on the following page.)*

**Table 4-3: MSGP Benchmark Values and Sources**

Pollutant	MSGP Benchmark	MSGP Source	Different
Ammonia*	2.14 mg/L	14	No
Biochemical Oxygen Demand (5 day)	30 mg/L	4	No
Chemical Oxygen Demand	120 mg/L	5	No
Total Suspended Solids	100 mg/L	7	No
Turbidity	See Note a	9	No
Nitrate + Nitrite Nitrogen	0.68 mg/L	7	No
Total Phosphorus	2.0 mg/L	6	No
pH	6.5 – 8.5 s.u.	4	No
Aluminum (T) (pH 6.5 – 9)	0.75 mg/L	1	No
Antimony (T)	0.64 mg/L	12	No
Arsenic (T) (Freshwater)	0.15 mg/L	3	Yes
(Saltwater)	0.069 mg/L	15	NA
Beryllium (T)	0.13 mg/L	2	No
Cadmium (T) (Freshwater)†	0.0021 mg/L	1	Yes
(Saltwater)	0.04 mg/L	15	
Copper (T)* (Freshwater)†	0.014 mg/L	1	Yes
(Saltwater)	0.0048 mg/L	15	NA
Cyanide (Freshwater)	0.022 mg/L	1	Yes
(Saltwater)	0.001 mg/L	15	
Iron (T)	1.0 mg/L	3	No
Lead (T)* (Freshwater)†	0.082 mg/L	3	No
(Saltwater)	0.21 mg/L	15	
Magnesium (T)	0.064 mg/L	8	No
Mercury (T) (Freshwater)	0.0014 mg/L	1	No; criteria updated^
(Saltwater)	0.0018 mg/L	15	
Nickel (T) (Freshwater)†	0.47 mg/L	1	No; criteria updated^
(Saltwater)	0.074 mg/L	15	
Selenium (T)* (Freshwater)	0.005 mg/L	3	Yes
(Saltwater)	0.29 mg/L	15	
Silver (T)* (Freshwater)†	0.0038 mg/L	1	Yes
(Saltwater)	0.0019 mg/L	15	
Zinc (T) (Freshwater)†	0.12 mg/L	1	No; criteria updated^
(Saltwater)	0.09 mg/L	15	

## Notes:

(T) Total Recoverable

\* New criteria are currently under development, but values are based on existing criteria.

† These pollutants are dependent on water hardness where discharged into freshwaters. The freshwater benchmark value listed is based on a hardness of 100 mg/L. When a facility analyzes receiving water samples for hardness, the permittee must use the hardness ranges provided in Table 1 in Appendix J of this permit and in the appropriate tables in Part 11 of this permit to determine applicable benchmark values for that facility. Benchmark values for discharges of these pollutants into saline waters are not dependent on receiving water hardness and do not need to be adjusted.

^ The values for these pollutants do not have a new basis. They are still based on the water quality criteria, but the “National Recommended Water Quality Criteria” was updated in 2002.

a. Turbidity in fresh water may not exceed 5 nephelometric turbidity units (NTU) above natural conditions when the natural turbidity is 50 NTU or less, and may not have more than 10% increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU. See 18 AAC 70.020(b)(12)(A)(i)

## Sources:

1. “National Recommended Water Quality Criteria.” Acute Aquatic Life Freshwater (EPA-822-F-04-010-2006-CMC)
2. “EPA Recommended Ambient Water Quality Criteria for Beryllium.” LOEL Acute Freshwater (EPA-440-5-80-024 October 1980)



3. "National Recommended Water Quality Criteria." Chronic Aquatic Life Freshwater (EPA-822-F-04-010-2006-CCC)
4. 18 AAC 70.020(b)(6) Alaska Water Quality Standards
5. Factor of 4 times BOD5 (5 day biochemical oxygen demand) concentration – North Carolina Benchmark
6. North Carolina stormwater benchmark derived from NC Water Quality Standards
7. National Urban Runoff Program (NURP) median concentration
8. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18
9. 18 AAC 70.020(b)(12)(A)(i) – Alaska Water Quality Standards
10. "National Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater. This is an earlier version of the criteria document that has subsequently been updated. (See source #1)
11. "National Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater. This is an earlier version of the criteria document that has subsequently been updated. (See source #3)
12. "National Ambient Water Quality Criteria." Human Health for the Consumption of Organism Only (EPA-822-F-01-0102006)
13. Consistent with many state numeric Water Quality Criteria. This benchmark was agreed to in negotiations for the 1998 modification to the 1995 MSGP.
14. "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses." USEPA Office of Water (PB85-227049 January 1985).
15. "National Recommended Water Quality Criteria." Acute Aquatic Life Saltwater (CMC) available at <http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm#altable>

### 4.7.3 Follow-up Actions if Discharge Exceeds Numeric Effluent Limit

This permit includes follow-up monitoring provisions for pollutants that exceed any effluent limit contained in the permit. This requirement is to ensure that existing control measures are modified as necessary to bring a facility back into compliance with the effluent limitations contained in the permit. DEC emphasizes in the permit that failure to complete follow-up monitoring and reporting within the stipulated time frames constitutes an additional violation of the permit, in addition to the initial effluent limit violation.

## 4.8 Corrective Actions

### 4.8.1 Conditions Requiring Review and Revision to Eliminate Problem

Permittees are required to review and revise the selection, design, installation, and implementation of their control measures in response to any of the following conditions:

- an unauthorized release or discharge occurs at the facility;
- a discharge violates a numeric effluent limit;
- the permittee becomes aware, or DEC determines, that control measures are not stringent enough for the discharge to meet applicable WQS;
- an inspection or evaluation of the facility by an DEC official, or local, state, federal, or Tribal entity, determines that modifications are necessary to meet the non-numeric effluent limits in Permit Part 4.1; or
- a routine facility inspection, quarterly visual assessment, or comprehensive site inspection finds that control measures are not being properly operated and maintained.

The corrective action must ensure that any of the above conditions are eliminated and will not be repeated in the future.

#### **4.8.2 Conditions Requiring Review to Determine if Modifications are Necessary**

Permittees are required to review the selection, design, installation, and implementation of their control measures to determine if modifications are necessary to meet the Part 4 control measures if any of the following conditions occur:

- construction or a change in design, operation or maintenance at the permittee's facility significantly changes the nature of pollutants discharged in storm water from the facility, or increases the quantity of pollutants discharged; or
- the average of quarterly sampling results exceeds an applicable benchmark.

If less than four benchmark samples have been taken, but the results are such that an exceedance by the quarterly average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedance, triggering this review.

#### **4.8.3 Corrective Action Deadlines**

The permit includes specific deadlines for permittees to take corrective actions. Permit Part 8.3 requires that within 24 hours following identification or discovery of any of the conditions listed in Permit Parts 8.1 or 8.2, the permittee must document such discovery. Subsequently, within 14 days of the discovery, the permittee must document corrective actions taken or to be taken to eliminate the condition and any additional review necessary to further investigate the condition. If the permittee determines that changes are necessary following the review, any modifications to the control measures must be made before the next storm event if possible, or as soon as practicable following that storm event.

#### **4.8.4 Corrective Action Report**

For any event described in Permit Parts 8.1 or 8.2 of the permit, permittees must document basic information describing the event and the permittee's response to that event. As described above, the permit establishes conditions for both 24-hour and 14-day response periods. The Annual Report Form includes a section for Corrective Actions (Permit Appendix I) for use by permittees to clarify expectations for documentation of conditions triggering a response and the details of the response taken. For triggering events in Permit Part 8.2, where the permittee determines that revision to control measures is not necessary, the permittee must still document the review and the basis for this determination. As described elsewhere in the permit, permittees are required to maintain a copy of this documentation with their SWPPP as well as submit this information in an annual report.

#### **4.8.5 Effect of Corrective Action**

The permit clarifies that if the condition triggering the corrective action review is a permit violation (e.g., exceedance of an effluent limit), correcting it does not remove the original violation. Additionally, failure to take corrective action in accordance with Part 8 is a separate, additional permit violation. DEC will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

#### **4.8.6 Substantially Identical Outfalls**

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the permittee's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

### **4.9 Reporting and Recordkeeping**

#### **4.9.1 Reporting Monitoring Data to DEC**

All monitoring data must be submitted to DEC on paper using the 2015 MSGP discharge monitoring report (MDMR) form no later than 30 days after a permittee has received their complete laboratory results for all monitored outfalls for the reporting period.

#### **4.9.2 Annual Report**

The permit requires all permittees to submit an annual report to DEC that contains the results of the required comprehensive site inspection and a discussion of corrective actions required and/or taken at any time since the previous comprehensive site inspection or, for the first comprehensive inspection required under this permit, since permit authorization. These annual reports must be submitted (i.e., postmarked) to the DEC Address (Permit Part 9.6) by February 15<sup>th</sup> of the year following the reporting year for each year of permit coverage. In addition to the information required in the corrective action report (Permit Part 8.4) and comprehensive site inspection report (Permit Part 6.3.2), the permittee is required to include the facility name, the APDES permit tracking number, the facility physical address, and the contact person's name, title, and phone number. To simplify this reporting requirement, as well as to help clarify DEC's expectations for these inspections, DEC developed an annual report form, a copy of which is included as Appendix H in this permit. Permittees are strongly encouraged to use this form to conduct these inspections and report results of those inspections to DEC.

#### **4.9.3 Exceedance Report for Numeric Effluent Limits**

As described in Permit Part 7.3, permittees must conduct follow-up monitoring any time a monitoring event identifies an exceedance of a numeric effluent limit, such as a limited based on an effluent limitation guideline. Permit Part 9.3 specifies that this data must be submitted to DEC no later than 30 days after receiving lab results. Part 9.3 also identifies the specific information to be included in this report, which is necessary for DEC to assess the potential impact of this discharge on water quality and the adequacy of the permittees response in addressing the exceedance. DEC is requiring submission of exceedance reporting information as a way to assess the potential impact of these discharges on water quality and also as a way to assess the adequacy of the permittees response to the exceedance.

#### **4.9.4 Additional Reporting**

Permittees must comply with a number of different reporting requirements described throughout this permit. Specific reporting requirements are included in Permit Part 9; however, additional reporting requirements are described in Permit Appendix A, Subsection 1.12. Permit Part 9.4 includes a summary

of all of the required reports from Appendix A, Subsection 1.12, and specifies which reports are to be submitted to the Department. This section provides notice to the permittee of applicable reporting requirements not elsewhere described in Part 9.

#### **4.9.5 Recordkeeping**

Permit Part 9.5 describes recordkeeping requirements associated with activities covered under this permit. These include the original SWPPP and any modifications, so as to provide a traceable historical record of the SWPPP and its evolution, additional documentation, all reports and certifications required by the permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit. Permittees must retain copies of these documents for a period of at least 3 years from the date that the permittee's coverage under this permit expires or is terminated. The recordkeeping requirements in Permit Appendix A, Subsection 1.11 include a more general statement of the APDES standard condition for records retention, but does not impose additional requirements on the permittee above what is required in Part 9.5. This permit requires permittees to maintain certain records to help them assess performance of control measures and as a way to document compliance with permit conditions. These requirements are consistent with Federal regulations at 40 CFR 122.41(j), but have been tailored to more closely reflect requirements of the 2015 MSGP.

#### **4.9.6 Address for Reports**

Notices of Intent, Notices of Termination, NOI Modification, and No Exposure Certificates should be submitted using DEC's eNOI system, where available, (<http://dec.alaska.gov/water/wnpspc/stormwater/APDESeNOI.html>) or sent to the address specified in Permit Appendix A Part 1.1.1.

Paper copies of any reports required in Permit Parts 7 through 9, not otherwise submitted electronically via DEC's eNOI system (<http://dec.alaska.gov/water/wnpspc/stormwater/APDESeNOI.html>) must be sent to the address specified in Permit Appendix A Part 1.1.2

### **4.10 Terminating Coverage**

#### **4.10.1 Submitting a Notice of Termination**

Permit Part 10.1 indicates that permittees should use either the eNOI system or the paper form to file Notices of Termination. To terminate coverage under this permit, the permittee is required under the permit to submit a Notice of Termination in accordance with Appendix G. The permittee's authorization to discharge under the permit terminates at midnight of the day that a complete Notice of Termination is signed (<http://dec.alaska.gov/water/wnpspc/stormwater/APDESeNOI.html>). DEC requires permittees to file a Notice of Termination to notify DEC that its obligation to manage industrial storm water no longer is necessary for one of the DEC-approved reasons (as described in Permit Part 10.2). Once a valid Notice of Termination is submitted, this permit no longer applies to storm water discharges associated with industrial activities at the site. If DEC determines that the Notice of Termination is incomplete or the permittee has not satisfied one of the conditions in Part 10.2 for being able to submit a Notice of Termination, then the notice is not valid; the permittee must continue to comply with the conditions of the permit.

#### **4.10.2 When to Submit a Notice of Termination**

Once a storm water discharge associated with industrial activity is eliminated from a facility, the permittee must submit a Notice of Termination, as described in Permit Part 10.1, within 30 days after one or more of the following conditions have been met: (1) a new owner or operator has assumed responsibility for the facility; (2) operations have ceased at the facility and there are no longer discharges of storm water associated with industrial activity, and necessary sediment and erosion controls have already been implemented at the facility as required by Permit Part 4.3; (3) the permittee is covered under one of the three mining-related sectors in the permit (i.e., Sectors G, H, and J) and has met the specific termination requirements described in the specific sector under which they are covered; or (4) permit coverage has been obtained under an individual or alternative general permit for all discharges requiring APDES permit coverage, either because DEC required the permittee to obtain such coverage or the permittee petitioned DEC requesting coverage under an alternative permit.

#### **4.11 Sector-Specific Requirements for Industrial Activity**

Permit Part 11 follows the general format and requirements of Permit Part 8 of the 2008 MSGP. The changes to multiple sectors consist of changing the pH range to match Alaska WQS. Any other minor changes made in the permit are noted in the Summary of Changes in Part 2.3 of this fact sheet. Where major changes are made to individual sectors, they are described in the following:

##### **4.11.1 Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing)**

Sectors G, H, and J each contain mining operations with different phases of operation including exploration and construction. Storm water and sediment controls were clarified in regards to “Additional Technology-Based Effluent Limits” for Clearing, Grading and Excavation activities, and additional requirements have been added that are consistent with DEC’s issued 2011 Alaska CGP. This makes the construction requirements for Sectors G, H, and J the same as the construction general permit, which are based on federal requirements (40 CFR Part 450). For Sector H these requirements complement the Surface Mining Control and Reclamation Act (SMCRA) requirements but do not apply to areas covered by the SMCRA requirements.

Due to the long winters in Alaska some exploration and construction areas, which are subject to snow or freezing conditions may undergo a period of winter shutdown, a reduced inspection frequency was introduced. The reduction of inspections for those areas which have been temporarily stabilized or are under winter shutdown conditions, coincides with similar requirements as specified in the 2011 Alaska CGP.

Inspections may be reduced in areas undergoing clearing, grading, and excavation activities as part of the exploration and construction phase which have been temporarily stabilized. If the entire site is temporarily stabilized, inspection frequency may be reduced to at least once every month and within two business days of a measurable storm event at actively staffed sites which result in a discharge from the site.

In the Exploration Phase, a permit authorization and SWPPP are required if the exploration disturbs the vegetative mat through clearing and grubbing (for an access road or to construct a drill pad). There are some exploration projects that use helicopters and air-lift laydown mats for the drill pad to operate without disturbing the vegetative mat. These types of project do not need to obtain a permit authorization or development of a SWPPP.

In the Exploration Phase projects may consist State or Federal mineral claims, patented lands, and other private or public properties. Subsurface mineral rights are granted in many of these ownership situations, but exclude the surface rights needed to preclude or control access by non-project personnel. The SWPPP map (Sections 5.2.3.3 and 11.G.6.2) may include these diverse land holdings to identify the areas covered by the SWPPP and the areas not covered by the SWPPP.

A reduced inspection schedule to address winter shutdown was introduced:

- **Winter Shutdown.** If the exploration and construction phase is undergoing winter shutdown, the permittee may stop inspections 14 calendar days after the anticipated fall freeze-up and must resume inspections at least 21 calendar days prior to the anticipated spring thaw. The permittee shall identify the winter shutdown period in their SWPPP based upon the definitions of fall freeze-up and spring thaw.

To address winter shutdown, the following condition was added to describe the time frame when facilities could claim the reduced winter shutdown inspection frequency for temporary stabilization of disturbed areas:

- The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Permit Appendix C) for the site and use those dates to plan for winter shutdown. For the purpose of planning ahead, frozen ground by itself is not considered an acceptable control measure for stabilization. Where temporary stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable following the actual spring thaw.

Since new conditions were added to allow for an inspection reduction for those areas which have been temporarily stabilized or are under winter shutdown the following definitions of temporary stabilization, winter shutdown, fall freeze-up and spring thaw were added to the definitions in Permit Appendix C.

- **Temporary Stabilization** – measures taken to protect soils from erosion by rainfall, snow melt, runoff, or wind with surface roughening or a surface cover, including but not limited to, establishment of ground vegetation, application of mulch, surface tackifiers, rolled erosion control products, gravel or paving.
- **Winter Shutdown** – the cessation of soil disturbing or soil stabilizing construction activity for the winter. Typically this period is from October/November to April/May and is approximately from fall freeze-up to spring thaw.

- **Fall Freeze-up** – the date in the fall that has an 80% probability that a minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date. This date can be found by looking up the “Fall ‘Freeze’ Probabilities” for the weather station closest to the site on the website [www.wrcc.dri.edu/summary/Climsmak.html](http://www.wrcc.dri.edu/summary/Climsmak.html).
- **Spring Thaw** – the date in the spring that has a 20% probability that a minimum temperature below a threshold of 32.5 degree Fahrenheit will occur on or after a given date. This date can be found by looking up the “Spring ‘Freeze’ Probabilities” for the weather station closest to the project on the website [www.wrcc.dri.edu/summary/Climsmak.html](http://www.wrcc.dri.edu/summary/Climsmak.html).

The following multiple additional control measures were added as “Additional Technology- Based Effluent Limits” for Sectors G, H, and J since similar land disturbance activities take place at all three of these sectors. The additional control measures were added to provide additional erosion and sediment controls to reduce the storm water pollutant potential from industrial areas where practicable.

The following additional storm water controls were added:

- **Velocity Dissipation Devices.** Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
- **Down-Slope Sediment Controls.** Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.
- **Stabilized Construction Vehicle Access and Exit Points.** Establish stabilized vehicle access and exit points. Off-site accumulations of sediment beyond exit points must be removed at a frequency sufficient to minimize off-site impacts.

The following additional storm water control was added for Sector H (Coal Mining) to make the “Additional Technology-Based Effluent Limits” consistent with Sectors G and J.

- **Storm Water Diversions.** Diverting storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

Since Sectors G, H, and J all consist of various phases of mining often times which involves the placement of overburden material the following “Additional Technology-Based Effluent Limit” was added to these sectors.

- **Overburden, Waste Rock, and Raw Material Piles.** Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles, shall be located away from surface water, other sources of water and from geologically unstable areas as practicable.

Due to the fact that multiple facilities operating under Sector J may conduct pit dewatering an explanation of the DEC Excavation Dewatering General Permit was added to the Additional SWPPP Requirements section. The following additional item to note in the SWPPP was added.

- **Dewatering.** Mine dewatering discharges composed entirely of storm water or ground water seepage from mines located within 1,500 feet of a DEC-identified contaminated site are required to have additional discharge authorization under the DEC Excavation Dewatering General Permit (AKG002000), or most current version. The Notice of Intent, NOI, application for authorization to discharge mine dewatering which may influence a contaminated area can be completed through the DEC's online application system at <http://dec.alaska.gov/water/oasys/index.html>.

With the 2015 MSGP the Department is allowing the use of treatment chemicals. There are conditions on the selection, application and disposal of treatment chemicals. Anionic polymers are generally allowed due to their minimal effect on fish. Cationic polymers, while allowed, are controlled in their application to limit their potential effect on fish. The permittee's who wish to use cationic polymers must receive approval from the Department prior to use. The permittee must submit the relevant information described in Part 11.H.4.5. The Department will be reviewing the type of polymer used, toxicity data provided by the supplier/provider of the cationic polymer to be used, method of application, proximity to anadromous fish streams, potential effect on fish, and other information that will assist DEC in evaluating the use of these chemicals.

For the 2008 MSGP the Department in its 401 certificate of the EPA permit inserted the requirements for developing and submitting the SWPPP prior to the start of construction and a pre-construction conference. These requirements are now incorporated into the permit.

In Permit Part 11.J.3.9 the Department describes a temporarily inactive mineral mining facility. Specifically, the amount of material that may be stockpiled and used while considering the facility inactive. More than 250 cubic yards/year would be considered an active material facility.

#### **4.11.2 Sector I (Oil and Gas Extraction)**

Oil and gas facilities located in the North Slope Borough shall receive industrial storm water coverage under the AKG 33-1000 general permit, which covers various discharges associated with oil and gas facilities in the North Slope Borough including industrial storm water. AKG 33-1000 authorizes the discharge from six unique discharges associated with oil and gas facilities operating in the North Slope Borough including industrial storm water. AKG 33-1000 designates Outfall 006 as an authorized industrial storm water discharge and defines specific monitoring requirements which are more stringent than the current MSGP. Facilities not otherwise located in the North Slope Borough which don't meet the oil and gas storm water exemption [40 CFR § 122.26(a)(2)(ii)] and require industrial storm water coverage may receive coverage under the 2015 MSGP.

Multiple control measures were added as "Additional Technology-Based Effluent Limits" to provide additional erosion and sediment controls to reduce the storm water pollutant potential from industrial storm water discharges from oil and gas activities. The following control measures were added:



- **Storm Water Diversions.** Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.
- **Velocity Dissipation Devices.** Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) as practicable, along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
- **Down-Slope Sediment Controls.** Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.
- **Stabilized Vehicle Access and Exit Points.** Establish stabilized vehicle access and exit points. Off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

#### 4.11.3 Sector J (Non-Metallic Mineral Mining and Dressing)

New permit conditions were added to define non-traditional facilities which conduct operations similar to traditional industrial activities which are covered under Sector J. Non-traditional facilities do not need to have a permanent industrial activity at the site, but simply need to be conducting a field activity where services or operations are performed.

If the field activity at these sites consists of Non-Metallic Mineral mining which is described in the SIC codes found in Appendix D of Sector J, they meet eligibility to be covered under the 2015 MSGP. The added definition (Part 11.J.3.6) for a *Non-Traditional Non-Metallic Mineral Mining Facility* provides clarification that these sites are operating with the same intent of commercial establishments covered under Sector J and thus be permitted the same. The clarification to the definition of **Operator** was added to make it clear as to who should obtain the permit since the intent of covering these non-traditional sites is not to have multiple permits from all the parties removing material from the site. A majority of these sites are typically used for the excavation of stone, sand, gravel, or general fill to support area construction projects, but can't be covered under the 2011 Alaska CGP as a "Support Activity" since the non-traditional mining site is not directly related to a single project. Covering these sites under the CGP is not practical since the sites are to remain open or temporarily inactive.

Based upon this description if these non-traditional mining operations are considered an industrial activity they would fall within this SIC code(s).

As further documentation that these non-traditional non-metallic mineral mining operations were never waived from being required to obtain industrial storm water discharge authorization through the 2015 MSGP, a Frequently Asked Question (FAQ) explaining the proper permitting was presented in the US

EPA-Region 10 FAQs dated August 14, 2009, [http://www.epa.gov/region10/pdf/npdes/stormwater/msgp\\_Q&A\\_aug2009.pdf](http://www.epa.gov/region10/pdf/npdes/stormwater/msgp_Q&A_aug2009.pdf)

**Q45:** What if I operate a gravel pit that I am leasing from a state or federal land agency? Am I responsible as the operator to get MSGP coverage? I am a regional tribal corporation in Alaska, and I own a gravel pit but I don't operate it. Do I have to get coverage? What if a state agency operates a gravel pit with a private company? Who is responsible for MSGP coverage?

**A45:** The operator as defined in the MSGP is the one who must comply with the permit requirements.

Any entity with a storm water discharge associated with industrial activity that meets either of the two criteria:

- The entity has operational control over industrial activities, including the ability to modify those activities, or ...
- The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

The above answer to the FAQ makes it clear that the EPA intended for these Non-traditional mining facilities to be covered under the 2008 MSGP, but with the current definition of "Operator" there could realistically be multiple concurrent operators for the same site with overlapping mining areas.

The best option to provide clarity in the permitting of these sites is to use a modified definition of "Operator" which clearly states who should obtain the permit for these sites (See Appendix C).

#### **4.11.4 Sector S (Air Transportation)**

On May 16, 2012 EPA promulgated Effluent Limitations Guidelines (ELGs) including new source performance standards for the airport deicing point source category (FR Vol. 77, No. 95 pp. 29168-29205). In accordance to 40 CFR Part 449, a new federal Effluent Limitation Guideline (ELG) representing the best available technology economically achievable (BAT) has been established for ammonia for Sector S facilities. The new ELG applies to existing and new airports with at least 1,000 annual non-propeller aircraft departures and requires the implementation of appropriate BMPs to reduce the storm water pollutant potential impact from deicing agents containing urea (ex: Ted Stevens International Airport, Fairbanks International Airport, Juneau International Airport, etc.). The new ELG prohibits all airfield pavement deicing discharges which contain urea unless ammonia monitoring is conducted. Airports which fall under this new ELG must certify annually that all airfield point source discharges do not contain urea or alternatively, all discharges must meet the ELG listed in Permit Part 11.S.8.

In accordance with Permit Part 11.S.8, there shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, any existing point source must certify annually that it does not use airfield deicing products that contain urea or alternatively, airfield pavement discharges at every discharge point must achieve the numeric limitations for ammonia in Permit Table 11.S.8-1, prior to any dilution with other wastewaters or commingling with any non-deicing discharge. The certification

statement shall be maintained in the SWPPP and signed in accordance with Permit Appendix A, Part 1.12. The annual effluent limitation guideline monitoring requirement for those airports required to monitor for ammonia will be to sample twice a year during the deicing season.

A new section was added to detail the relation of airport authorities and airport tenants – 11.S.3 Multiple Operators at Air Transportation Facilities. This section describes some flexibility on how the airport authority and airport tenant organize and coordinate their SWPPP, monitoring, sampling, and reporting. For those airports that choose to develop a comprehensive SWPPP, the SWPPP must clearly describe the roles and responsibilities of the airport authority and the tenants for all aspects of the MSGP. For example, the SWPPP must clearly specify the MSGP requirements to be complied with: (1) the airport authority for itself; (2) the airport authority on behalf of its tenants; and (3) tenants for themselves. The Pollution Prevention Team (Part 5.2.2) must include a representative cross-section of signatories to the comprehensive SWPPP.

Airlines, fixed-base operators, and sometimes, even the airport often have control over specific areas and infrastructure on airport sites where other permittees exercise no control. When developing and implementing a comprehensive SWPPP, it is important to clearly define the roles and responsibilities between permittees. When a permittee fails to uphold its obligations under the comprehensive SWPPP, the Department's response will be dependent on the event, permit conditions, comprehensive SWPPP, corrective action taken, and other factors. Each situation is unique, but in general, under a comprehensive SWPPP, the permittees would be jointly responsible for those permit obligations that they hold jointly (e.g.; sampling or reporting), they would not necessarily be jointly responsible for activities in areas or with respect to infrastructure over which they have no right to operate.

### **Definitions**

A definition for the word “practicable” was added. The definition provides descriptors to consider for the project purpose. Cost refers to total cost and cost-effectiveness, existing technology is industry specific (for Sector S for example it includes considerations of safety, space, operational constraints and flight considerations), and site conditions refers to the industry specific considerations.

## **5.0 ANTIBACKSLIDING**

18 AAC 83.480 requires that “effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.” 18 AAC 83.480(c) also states that a permit may not be reissued “to contain an effluent limitation that is less stringent than required by effluent guidelines in effect at the time the permit is renewed or reissued.” The effluent limitations in this permit reissuance are consistent with 18 AAC 83.430. The permit effluent limitations, standards, and conditions are as stringent as in the previous permit.

## 6.0 ANTIDEGRADATION

Section 303(d)(4) of the CWA states that, for water bodies where the water quality meets or exceeds the level necessary to support the water body's designated uses, Water Quality-Based Effluent Limits (WQBELs) may be revised as long as the revision is consistent with the State's antidegradation policy. The Antidegradation Policy of the WQS (18 AAC 70.015) states that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. This section analyzes and provides rationale for the Department's decisions in the permit issuance with respect to the Antidegradation Policy.

The Department's approach to implementing the Antidegradation Policy, found in 18 AAC 70.015, is based on the requirements in 18 AAC 70 and the Department's *Policy and Procedure Guidance for Interim Antidegradation Implementation Methods*, dated July 14, 2010. Using these requirements and policies, the Department determines whether a water body, or portion of a water body, is classified as Tier 1, Tier 2, or Tier 3, where a higher numbered tier indicates a greater level of water quality protection. At this time, no Tier 3 waters have been designated in Alaska.

For the purpose of this analysis, the Department classifies the impaired water bodies as Tier 1 for the parameters causing the impairment. Compliance with permit conditions will limit storm water discharges to those water bodies listed as impaired. As a result, water quality in those water bodies is expected to improve subject to compliance with permit conditions. Accordingly, DEC finds that the existing uses in those water bodies designated as Tier 1 for the parameters they are impaired for will be maintained and protected. The remainder of this antidegradation analysis conservatively assumes that all other waters are Tier 2 waters, which provides for the next highest level of protection. The Tier 2 analysis for these waters follows.

The State's Antidegradation Policy in 18 AAC 70.015(a)(2) states that if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (i.e., Tier 2 waters), that quality must be maintained and protected. The Department may allow a reduction of water quality only after making five specific regulatory findings (18 AAC 70.015(a)(2)(A-E)). The Department's findings are as follows:

1. *18 AAC 70.015(a)(2)(A) Lowering water quality is necessary to accommodate important economic or social development in the area where the water is located.*

Most industrial storm water discharges are covered under general permits, as opposed to individual permits, although authorized states (and EPA) can and do issue individual permits to some facilities based on site-specific or industry-specific concerns. General permits are used primarily because they avoid the need to issue multiple permits, and instead only require a single permit to cover a large number of industrial facilities performing similar types of activities. To be covered under a general permit, an eligible operator of an industry must read the general permit, develop a SWPPP, comply with any special eligibility provisions, and submit a NOI to the permitting authority.

Federal regulations require APDES permit coverage for storm water discharges from the following categories of industrial activity:

- Category One (i): Facilities subject to federal storm water effluent discharge standards in 40 CFR Parts 405-471
- Category Two (ii): Heavy manufacturing (for example, paper mills, chemical plants, petroleum refineries, and steel mills and foundries)
- Category Three (iii): Coal and mineral mining and oil and gas exploration and processing
- Category Four (iv): Hazardous waste treatment, storage, or disposal facilities
- Category Five (v): Landfills, land application sites, and open dumps with industrial wastes
- Category Six (vi): Metal scrapyards, salvage yards, automobile junkyards, and battery reclaimers
- Category Seven (vii): Steam electric power generating plants
- Category Eight (viii): Transportation facilities that have vehicle maintenance, equipment cleaning, or airport deicing operations
- Category Nine (ix): Treatment works treating domestic sewage with a design flow of 1 million gallons a day or more
- Category Eleven (xi): Light manufacturing (For example, food processing, printing and publishing, electronic and other electrical equipment manufacturing, and public warehousing and storage).

There are approximately 280 facilities permitted under the 2008 MSGP in Alaska. These facilities provide services to Alaskans such as: airports, trucking companies, harbors, ship repair, sand and gravel mines and coal mines. These facilities provide economic and social benefit to Alaskans through the creation of jobs, generation of tax revenue, and the transmission and delivery of goods.

The Department has determined that the lowering of water quality is necessary to accommodate important economic and social development in the area where the waters are located and that the finding is satisfied.

2. *18 AAC 70.015(a)(2)(B) Reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.235 or the whole effluent toxicity limit in 18 AAC 70.030.*

The 2015 MSGP states that a permittees discharge must be controlled as necessary to meet applicable WQS (Part 3.2.1), thereby prohibiting a violation of the water criteria in 18 AAC 70.020.

Discharges authorized under this permit will not violate applicable water quality criteria, as allowed under 18 AAC 70.235. Under this regulation, the Department may establish a site-specific water quality criteria that modifies a water quality criterion set for a water body. Since there are no site-specific criteria established for any receiving waters applicable to this permit, no further evaluation is required.

Discharges authorized under this permit will not violate applicable water quality criteria, as allowed under 18 AAC 70.030. This permit does not require the use of the whole effluent toxicity testing, but rather implements measures found to adequately control discharges from causing excursions of WQS, which includes a chronic whole effluent toxicity limit, so no further evaluation is required.

The Department has determined that reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.235 or the whole effluent toxicity limit in 18 AAC 70.030 and that the finding is satisfied.

3. *18 AAC 70.015 (a)(2)(C) The resulting water quality will be adequate to fully protect existing uses of the water.*

As previously discussed and listed in the Fact Sheet, the permit authorizes discharges to impaired water bodies; however, permit conditions (e.g., control measures) have been developed to maintain and protect WQS, which include the preservation of existing uses are preserved. Further, compliance with permit conditions will result in a reduction of pollutant loading to those water bodies listed as impaired. As a result, water quality in those water bodies as well as applicable Tier 2 water bodies should improve subject to compliance with permit conditions.

The Department has determined that the resulting water quality will be adequate to fully protect existing uses of the water and that the finding is satisfied.

4. *18 AAC 70.015(a)(2)(D) The methods of pollution prevention, control, and treatment found by the Department to be the most effective and reasonable will be applied to all wastes and other substances to be discharged.*

Common requirements for coverage under an industrial storm water permit include development of a written SWPPP, implementation of control measures, and submittal of a request for permit coverage via an NOI. The SWPPP is a written assessment of potential sources of pollutants in storm water runoff and control measures implemented at the facility to minimize the discharge of these pollutants in runoff from the site. These control measures include site-specific BMPs, maintenance plans, inspections, employee training, and reporting. The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the SWPPP kept on-site. The industrial storm water permit also requires collection of visual, analytical, and/or compliance monitoring data to determine the effectiveness of implemented BMPs.

A variety of BMP options may be applicable to eliminate or minimize the presence of pollutants in storm water discharges, likely an implementation of a combination or suite of BMPs. The first consideration should be for pollution prevention BMPs, which are designed to prevent or minimize pollutants from entering storm water runoff and/or reduce the volume of storm water requiring management. Prevention BMPs can include regular cleanup, collection and containment of debris in storage areas, and other housekeeping practices, spill control, and employee training. It may also be necessary to implement treatment BMPs, which are engineered structures intended to treat storm water runoff and/or mitigate the effects of increased storm water runoff peak rate, volume, and velocity. Treatment BMPs are generally more expensive to install and maintain and may include oil-water separators, wet ponds, and proprietary filter devices.

The site-specific, activity-specific process of developing, implementing, and adjusting the pollution control practices contained in the SWPPP constitutes the type of alternatives analysis and use of “the most effective and reasonable” . . . “methods of pollution, prevention, control, and treatment” cited as requirements under Alaska’s antidegradation policy for activities that would degrade water quality.

Control measures that prevent or minimize water quality impacts from facilities and construction activities are in Chapters 4 and 5 of the *Alaska Storm Water Guide* (DEC, 2009). The *Guide* provides detailed information on temporary storm water controls for active construction sites. The storm water management process outlined in the *Guide* consists of the development of a SWPPP which provides the basis for all pollutant discharge prevention/minimization activities. Development of the SWPPP requires a comprehensive evaluation of the facility, the proposed construction activities, and possible pollutant discharges. This information is used to create the SWPPP, which contains structural and non-structural management practices; specifications for selecting, sizing, siting, operating, and maintaining them; and procedures for inspecting the management practices and repairing or replacing them as needed.

A permittee is required to implement erosion, sediment, and other storm water management practices to avoid or minimize pollutant discharges, as detailed in Part 4.0 of the permit. Alternative control measures that may provide equal or better water quality protection are also allowable, and encouraged, especially where those alternatives would provide better water quality and environmental protection at a lesser cost.

The Department uses an integrated approach in the permit for developing and implementing “methods of pollution, prevention, control, and treatment” required by Alaska’s antidegradation policy. This integrated approach includes requirements for:

- Erosion and sediment control, pollution prevention measures and prohibiting certain discharges (Part 4),
- Revised and expanded training requirements (Part 4), and
- Monitoring of storm water discharges (Part 7).

Most pollution controls at facilities are not installed in isolation, but instead are part of a suite of control measures that are all designed to work together. Designers use the treatment train approach to design a series of practices that minimize storm water pollution and achieve compliance with general permit requirements. For example, a designer may use as a series of control measures to prevent sediment discharges from a site – a diversion ditch at the top of a disturbed slope (to minimize storm water flowing down the slope), mulching on the slope (to minimize erosion), and silt fence at the bottom of the slope (to capture sediment). This treatment train would help protect the slope better than relying on a single control measure, such as silt fence.

The site-specific nature of the SWPPP, the requirement that it be implemented in a manner that addresses storm water impacts to meet water quality criteria, and provisions that the approach be adjusted to ensure ongoing storm water management effectiveness provide the implementation methods needed to appropriately support the antidegradation policy.

The Department has determined the methods of pollution prevention, control, and treatment in the permit to be the most effective and reasonable, which will be applied to all wastes and other substances to be discharged, and the finding is satisfied.

5. *18 AAC 70.015(a)(2)(E) All wastes and other substances discharged will be treated and controlled to achieve*

- (i) for new and existing point sources, the highest statutory and regulatory requirements; and
- (ii) for nonpoint sources, all cost-effective and reasonable best management practices.

Industrial facilities typically perform a portion of their activities in outdoor areas exposed to the elements. This may include activities such as material storage and handling, vehicle fueling and maintenance, shipping and receiving, and salt storage, all of which can result in pollutants being exposed to precipitation and capable of being carried off in storm water runoff. Facilities may have performed industrial activities outdoors in the past and materials from those activities may still remain exposed to precipitation. In addition, accidental spills and leaks, and improper waste disposal may lead to exposure of pollutants to storm water.

The requirements contained in the SWPPP development process (Part 5 of the permit), implementation of the SWPPP to include industrial site storm water runoff control measures (Part 4 of this permit), and BMP's provided in the *Alaska Storm Water Guide* (Chapter 4) comprise a comprehensive, integrated approach for developing and implementing "methods of pollution, prevention, control, and treatment" required by Alaska's antidegradation policy.

The Department has determined that the permit complies with the highest statutory and regulatory requirements for the industry and types of pollutants expected from this industry. The department concludes that this finding is satisfied.

## **7.0 OTHER LEGAL REQUIREMENTS**

### **7.1 Endangered Species Act**

The National Marine Fisheries Service (NMFS) is responsible for administration of the Endangered Species Act (ESA) for listed cetaceans, seals, sea lions, sea turtles, anadromous fish, marine fish, marine plants, and corals. All other species (including polar bears, walrus, and sea otters) are administered by the U.S. Fish and Wildlife Service (USFWS).

Section 7 of the ESA requires a federal agency to consult with the USFWS and NMFS to determine whether their authorized actions may harm threatened and endangered species or their habitats. As a state agency, DEC is not required to consult with USFWS or NMFS regarding permitting actions; however, DEC interacts voluntarily with these federal agencies to obtain listings of threatened and endangered species and critical habitat.

The general permit covers industrial facilities that discharge storm water into all potential marine and freshwater surface water bodies in the State of Alaska. The Department reviews the listings periodically for updates. The USFWS and NMFS Endangered, Threatened, Proposed, Candidate, and Delisted



Species in Alaska table, which was last updated May 24, 2013, may be accessed through the following link: <http://alaskafisheries.noaa.gov/protectedresources/esa/>

## **7.2 Essential Fish Habitat**

The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) designates Essential Fish Habitat (EFH) in waters used by anadromous salmon and various life stages of marine fish under NMFS jurisdiction. EFH refers to those waters and associated river bottom substrates necessary for fish spawning, breeding, feeding, or growth to maturity – including aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish. Spawning, breeding, feeding, or growth to maturity covers a species' full life cycle necessary for fish from commercially-fished species to spawn, breed, feed, or grow to maturity.

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Section 305(b) of the Magnuson-Stevens Act 916 USC 1855(b)) requires federal agencies to consult the NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have an adverse effect on designated EFH as defined by the Act. As a state agency, DEC is not required to consult with NMFS regarding permitting actions, but interacts voluntarily with NMFS to identify EFH. EFH for Alaska marine waters may be accessed at <http://www.alaskafisheries.noaa.gov/habitat>. Alaska Department of Fish and Game also maintains regulatory and interactive maps that identify anadromous streams, fish passage, and fish inventory at: <http://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=maps.maps>.

## **7.3 Permit Expiration**

The permit will expire five years from the effective date of the permit.