

Alaska Department of Transportation and Public Facilities

Alaska Storm Water Pollution Prevention Plan Guide

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1. Introduction

- 1.1. Purpose of Guide
- 1.2. Summary of Applicable Water Quality Laws and Regulations
- 1.3. Clean Water Act Consent Decree

1.1. Purpose of Guide

The Alaska Department of Transportation and Public Facilities (DOT&PF) prepared this guide to help contractors, consultants, and the public understand and comply with the requirements of the Storm Water Construction General Permit (CGP) for small and large construction sites as well as the DOT&PF Clean Water Act Consent Decree. Specifically this guide focuses on the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) required for coverage under the CGP and compliance with the Consent Decree. Any reference to "you" or "the contractor" in this guide refers to the contractor or contractor's designee.

Construction activities may disturb the earth and allow soil particles (sediment) to easily wash away during a storm. A SWPPP is a document describing the nature and extent of a construction activity and the measures used to minimize sediment and other pollutants are not carried into the storm water discharges from the construction site. To control these pollutants, the contractor can use a variety of control measures referred to as Best Management Practices (BMPs). The BMPs form the basis of the SWPPP, and the contractor must select them based on the conditions at the construction location. For a SWPPP to be effective, the contractor must properly design, construct, and maintain the BMPs during the life of the project. See Section 2.2.3 of this guide for types of BMPs and their applications.

1.2. Summary of Applicable Water Quality Laws and Regulations

The federal and state governments have passed numerous laws to minimize environmental harm from storm water discharge at construction sites. Some of these laws and subsequent regulations require the implementation of erosion and sediment control measures while others mandate that construction activities maintain water quality. The two most important water quality related laws and regulations are the Federal Clean Water Act and the State of Alaska Water Quality Standards, as defined in the Alaska Administrative Code (18 AAC 70).

1.2.1 Clean Water Act

The purpose of the Clean Water Act is to restore and maintain the chemical, physical and biological integrity of the Nation's waters. The three sections relevant to construction storm water regulation are described below. Most of the Act is implemented by the U.S. Environmental Protection Agency (EPA).

Section 401. This section authorizes states to comment on any federal permit when it has the potential to affect water quality. The State (DEC) can add conditions that become part of the federal permit. These conditions are in the "401 Certification". When the CGP was a federal permit, DEC added Alaskaspecific conditions through Section 401, but now that the permit is written by DEC that is no longer done.

Section 402. This section authorizes the National Pollutant Discharge Elimination System (NPDES), which is a waste water discharge program managed by EPA. Storm water regulation is included in this program. Most states have been delegated the authority to manage the NPDES. The Alaska Legislature initiated Alaska's delegation with a bill that passed in 2002. DEC then applied to gain authorization from EPA to manage the NPDES. EPA approved the transfer in 2008 and DEC is phasing in the transition. DEC renamed the system to the Alaska Pollutant Discharge Elimination System (APDES) and the APDES statute is at AS 46.03 and the regulations are at 18 AAC 83. DEC became the regulator of the storm water part of NPDES on October 31, 2009.

The DEC now issues the CGP. For complete regulatory information on the Storm Water General Permit for Large and Small Construction Activities, visit the following website:

http://www.dec.state.ak.us/water/wnpspc/stormwater/I ndex.htm

Section 404. This section authorizes the Army Corps of Engineers to issue permits for dredged or fill material to be placed in waters of the United States. Waters of the U.S. are defined to include rivers, streams, lakes, ponds, tidelands and wetlands. Section 404 also directs the EPA to produce guidelines for the permitting criteria.

1.2.2 Water Quality Standards

The DEC develops water quality standards, which are published in 18 AAC 70. These regulations set the standards based on the use of the waterbody. The use categories are: water supply, recreation, fish propagation and growth. The standards may differ between fresh and marine water. The CGP requires that erosion, sediment and pollution control measures are selected so that pollutant discharges are minimized as necessary to meet the applicable water quality standards.

Other federal and state laws and regulations applicable to storm water discharges from construction activities are in the next sections.

1.2.3 The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

Section 1057 of this act requires the U.S. Department of Transportation to develop erosion control guidelines for the construction of all federally funded highway projects. To satisfy the provisions of Section 1057, the Federal Highway Administration (FHWA) has adopted the American Association of State Highway and Transportation Officials' (AASHTO) "Highway Drainage Guidelines" to address erosion and sediment control. Every state highway agency must comply with these AASHTO guidelines for projects that use federal highway funds.

Chapter 16 of the Alaska Highway Drainage Manual describes DOT&PF's adoption of the AASHTO guidelines. The Alaska Aviation Preconstruction Manual references this chapter, making it applicable to aviation as well as highway projects. Chapter 16 requires a SWPPP for all projects that disturb earth, regardless of project size. However, the detail needed in a SWPPP for small (<1 acre) projects needs to be commensurate with the complexity and water quality risk of the project. Water quality standards must be met at all sizes of projects.

1.2.4 The Coastal Zone Act Reauthorization Amendments of 1990

This act requires every state participating in the federal coastal management program to use erosion and sediment control management measures. Alaska's Coastal Management Program (ACMP) requires the management of estuaries, wetlands, tide flats, lagoons, rivers, streams, and lakes to protect natural vegetation, water quality, important fish and wildlife habitat, and natural water flow. The ACMP states in part that contractors for projects within the coastal zone must use "all feasible and prudent steps to maximize conformance" with this requirement. State and federal resource agencies that issue permits often require erosion control measures to ensure that a project will be consistent with the ACMP.

1.2.5 Alaska Statutes 16.05.841 and 16.05.871, Fish Passage and Anadromous Fishes

The Alaska Department of Fish and Game (ADF&G) regulates construction and other activities in specified streams that are important for the spawning, rearing or migration of anadromous fish or that block fish passage in streams with resident fish. A fish habitat permit may be required for any activity that either (1) involves a dam or obstruction in water bodies containing resident fish, or (2) equipment use or construction activities that would disturb the natural flow of specified streams. This includes crossing of anadromous streams by vehicles. Title 16 generally does not apply to activities in a marine environment. However, if a project will affect the mouth of a stream, defined by a line drawn between the seaward extremities of the exposed tideland banks at MLLW, a fish habitat permit is needed.

1.3. Clean Water Act Consent Decree

The United States Department of Justice (USDOJ) lodged a complaint in the U.S. District Court alleging the DOT&PF was in violation of the CGP. A courtordered Consent Decree (CD) is a result of the enforcement settlement between the state of Alaska and USDOJ. The CD requires DOT&PF to complete new tasks, designates specific formats for existing tasks under the CGP and provides stipulated penalties for non-compliance. The CD became effective on September 21, 2010. The DOT&PF must be in compliance with the CD conditions for three years and meet other conditions before DOT&PF can request CD termination. The CD is available on the DOT&PF's website at:

http://www.dot.state.ak.us/stwddes/desenviron/assets/ pdf/swppp/consent_decree_060210.pdf

2. SWPPP Process and Plan Requirements

2.1. Introduction

2.2. General Process

2.1. Introduction

Figure 1 is a flow chart of the storm water permitting process for DOT&PF projects. This chapter describes the planning process for projects that disturb one or more acres of land or smaller parcels that are part of a larger plan of development and that drain to waters of the United States.

The Storm Water Pollution Prevention Plan (SWPPP) is an important part of this process. The SWPPP is a site-specific written storm water management plan to demonstrate compliance with the CGP by minimizing or eliminating the pollutants in the storm water discharges from construction activities. The SWPPP must include how the applicant intends to comply with each of the requirements of the CGP. The CGP requires the preparation of a SWPPP before submitting a Notice of Intent for permit coverage (see part 2.2.5 below).

Federal and state laws, regulations, and water quality standards require that any DOT&PF earth-disturbing construction activities (highway, airport, ferry terminal, or building) address erosion and sediment control measures. Earth-disturbing activities are defined as clearing, grubbing, excavating, filling, or stockpiling that disturbs the ground surface and results in the potential for erosion from precipitation, snow melt runoff or wind.

For projects requiring CGP coverage, DOT&PF requires that the SWPPP preparer use the EPA's SWPPP template for Authorized States that is published in Appendix A of "Developing Your Stormwater Pollution Prevention Plan, A Guide for Construction Sites." The EPA SWPPP template is available in WORD format at

www.epa.gov/npdes/swppguide. This template will be replaced by the DEC SWPPP Template. However, additional information may need to be added, as these templates may not address all requirements outlined in the DOT&PF specifications.

The requirement to use a template ensures completeness as SWPPPs are prepared in a consistent order and format. However, you are cautioned to start every SWPPP with a blank template rather than one that was completed for a different project in order to avoid errors of mixing projects.

Information about Alaskan and cold climate design considerations and temporary and permanent BMPs are found in DEC's Alaska Storm Water Guide, available at:

http://www.dec.state.ak.us/water/wnpspc/stormwater/i ndex.htm

The SWPPP preparer should use the SWPPP Checklist in Appendix A of this Guide to review the draft SWPPP and ensure all requirements are met.

All SWPPP related forms mentioned in this Guide are found in Appendix C and at

http://www.dot.state.ak.us/stwddes/dcsconst/pop_cons tforms.shtml

2.2. General Process

The success of a SWPPP requires a cooperative effort between DOT&PF and the contractor. Both parties have responsibilities during the process to ensure that the SWPPP is effective. The contractor and the DOT&PF are co-permittees as both meet the definition of operator on a DOT&PF construction project. The process of developing and implementing a SWPPP for construction activities is outlined in the EPA guidance document "Developing Your Stormwater Pollution Prevention Plan, A Guide for Construction Sites" and consists of the following steps:

- 1. Site assessment and planning
- 2. Selecting erosion and sediment control and good housekeeping BMPs
- 3. Inspections, Maintenance and Recordkeeping
- 4. Certification and Notification
- 5. SWPPP Implementation
- 6. Final Stabilization and Permit Termination

The EPA SWPPP Guide is available at www.epa.gov/npdes/swpppguide.

2.2.1 Site Assessment and Planning

Gather information regarding resources at the site such as impaired water bodies, critical habitat, and historic sites. Much of this information will be contained in the DOT&PF documents. Then, the

contractor's SWPPP preparer needs to conduct a visit to assess the existing site conditions, and identify storm water systems, receiving waters, pollutant sources, and non-storm water discharges. The SWPPP needs to describe the construction project as well as the permanent storm water controls and contain site maps. During project design, DOT&PF develops an Erosion and Sediment Control Plan (ESCP) for all earth-disturbing projects for inclusion in the Plans, Specifications, and Estimate (PS&E) package. An ESCP explains site conditions and illustrates measures to control erosion and pollution. It provides a workable plan while giving the contractor enough latitude to develop a sequence of operations based on season, site conditions, personnel, and equipment. The ESCP gives bidders a basis for estimating cost and ultimately provides the contractor information and guidance for developing an acceptable SWPPP.

After contract award, the contractor reviews the ESCP for its suitability with the contractor's proposed construction plan, schedule, and equipment. Using the information provided in the ESCP and their own construction sequence, the contractor provides a SWPPP to the project engineer at least 21 calendar days before the planned start of construction activities. The SWPPP must address all sections of the SWPPP template, with careful attention to the sequence of major earth-disturbing activities and the sequence of installation of all controls specified for the project. Note that a typical project schedule does not contain enough detail about the erosion and control measures to meet this SWPPP requirement. The SWPPP must also describe the planned stabilization (both interim and permanent) measures that will be used while performing excavation and embankment construction.

The DOT&PF requires documentation of a preconstruction site visit on DOT&PF Form 25D-106. If the preconstruction site visit was conducted prior to writing the SWPPP, which is preferable, then the form needs to document that the following were identified and will be included in the SWPPP:

(1) the opportunities to phase construction (to minimize exposed ground and erosion potential);

(2) the appropriate BMPs and BMP sequencing and

(3) the sediment controls that must be installed prior to starting earth-disturbing work.

In some cases, the SWPPP might be prepared when the ground is snow-covered and if so, the site visit can be postponed and conducted after the SWPPP is written. In this situation, the visit is needed to verify that the three considerations listed above are adequately addressed in the SWPPP and if not, amend the SWPPP accordingly.

The SWPPP must be completed, approved and certified by the contractor and DOT&PF prior to seeking coverage under the CGP. After approval by the DOT&PF, the document becomes the project's SWPPP of record.

2.2.2 Plan Contents

For projects disturbing one acre or more of land, the contractor includes the following information, as required by the CGP. Note: As part of the ESCP, DOT&PF will typically supply information for items followed by an asterisk (*).

Site Description

- * Describe the construction activity including the nature and extent of all new construction and/or reconstruction earth-disturbing activities for buildings, airport runways or taxiways, highways (including shoulders), bridges, curb and gutter, sidewalks, utilities, and drainage systems.
- 2. Identify all potential sources of pollution that might affect the quality of storm water from the site and name the pollutant of concern (usually sediment and others).
- 3. Describe the intended sequence of major activities that disturb soils on major portions of the site within the project including grubbing, excavation, and grading.
- 4. Estimate to the nearest quarter acre both the sum of areas likely to be disturbed by excavation, grading, or other earth moving or stockpiling activities and the total area of the project. For project areas, include the area of any off-site disturbed areas supplied as stockpile sites, disposal sites, staging areas and borrow/quarry sites. List the off-site areas separately when there are different permittees (* The DOT&PF's estimate will include project area and statedesignated material sources and disposal sites).
- 5. * Include a general area location map and a site map indicating

- a. * Drainage patterns and approximate slopes anticipated after major grading activities
- b. * On the general location map, the construction site and names (if known) and locations of Waters of the United States within one mile of the site
- c. * On the site map, names (if known) and locations of all Waters of the United States including wetlands
- * Locations of structural and nonstructural controls identified in the plan (the contractor may modify the DOT&PF's proposed temporary controls)
- e. * Areas to be disturbed and those not disturbed
- f. * Locations where stabilization activities are expected to occur (the contractor may modify the DOT&PF's proposed locations)
- g. Locations of off-site material, waste, borrow, equipment and material storage areas
- h. The location and description of any discharge associated with industrial activity other than construction, including asphalt and concrete plants dedicated solely to the project. Do not include commercial plants and sources (i.e., those pre-established plants and sources that serve other projects and remain in place after the project is completed)
- 6. * Indicate the locations where storm water flows to a surface water or a municipal storm system that enters into any Waters of the U.S.
- 7. * Indicate the location of any impaired waters.
- 8. * Indicate the location of any waters with approved and final Total Maximum Daily Loads (TMDLs) for Alaska.
- 9. Review and the documentation obtained by the DOT&PF on endangered and threatened species (as defined by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). The SWPPP must evaluate whether storm water discharges will affect listed species. Use the DOT&PF information for the DOT&PF-supplied areas to avoid any duplication of effort. In the case of contractor-supplied support areas (such as material sources, staging yards and disposal areas) or contractor expansion of footprint of DOT&PF-supplied areas, consult either the USFWS website at

http://endangered.fws.gov or http://alaska.fws.gov/fisheries/endangered/index.h

<u>tm</u> or the NMFS website at <u>http://www.fakr.noaa.gov/protectedresources/defa</u> <u>ult.htm</u>, or one of their field offices listed in Appendix D. If endangered species are not present, check criterion A on the *Notice of Intent Form.* If endangered species are present in areas you must meet the permit eligibility requirements by checking the appropriate criterion box or boxes on the *Notice of Intent Form.* Consult with the project engineer and regional environmental analyst to fill out this section of the form.

10. Review the documentation and agreements with SHPO (if any) obtained by the DOT&PF on historic sites. The SWPPP must evaluate whether storm water discharges will affect any properties listed on the National Register of Historic Places (NRHP). Use the DOT&PF information for DOT&PF-supplied areas to avoid any duplication of effort. In the case of contractor-supplied support areas or contractor expansion of DOT&PF supplied areas, consult with SHPO. If you find historic or archeological resources at any of your proposed support area, notify the project engineer and consult with the SHPO. Section 106 processing could take from one to six months. If an historic or archaeological resource is eligible for the NRHP, you must use an alternative material or disposal site if practical.

Control Measures

Describe the appropriate control measures (BMPs) you will implement at the construction site and the off-site areas. Include erosion control BMPs, sediment control BMPs, storm water management measures and good housekeeping practices, . Both erosion control and sediment control measures are required. An effective erosion (source) control program will reduce the expense and maintenance of the sediment control program.

The CGP requires temporary or permanent sediment basins for projects that have a common drainage area of 10 or more disturbed acres where practicable. The SWPPP must show the calculations used for determining the size of the basin.

In addition, the permit requires the use of velocity dissipation devices at discharge locations and along outfall channels to provide non-erosive flow and protect the physical and biological characteristics of the receiving waters.

If there are any identified discharges into a water body with an EPA approved or established TMDL, review the TMDL and incorporate control measures into the SWPPP to ensure discharges of pollutants from construction activities are consistent with the TMDL's provisions.

Describe the installation schedule for all identified BMPs to be implemented at the construction site and the off-site areas where the DOT&PF is a copermittee. The narrative should describe the installation in relation to the intended sequence of major activities that disturb soils (excavating, grading, filling). Do not provide dates in the narrative, but tie the installation to the earth disturbing activity; for example, use language such as "installation will occur prior to..." or "...will occur concurrent with..." or "...will occur upon completion of..." The sequencing must minimize the amount of soil exposed at any one time.

2.2.3 Selecting Erosion and Sediment BMPs

There are a variety of control measures (BMPs) that can be used on a construction project.

All selected BMPs must be described in the SWPPP, including their design and installation. See Appendix B of this guide for a list of some commonly used BMPs along with application, design, construction, inspection, maintenance, and removal guidelines. Appendix B is a limited set of BMPs, and SWPPP preparers are encouraged to use other sources of information. The manual(s) or publication(s) used to select and/or design BMPs described in the SWPPP must be referenced in the SWPPP. Include the author's name, title of the publication, publisher, and date of publication in the citation. However, in the instance that a BMP was selected and designed for a project specific situation and no published source was used, then it must be stated that "No published BMP manual was used for this design". The following websites provide current BMP information:

- Alaska Storm Water Guide by DEC at <u>http://www.dec.state.ak.us/water/wnpspc/stor</u> <u>mwater/index.htm</u>
- National Menu of Storm Water Best Management Practices by EPA at www.epa.gov/npdes/stormwater/menuofbmps
- International Erosion Control Association at www.ieca.org/Resources/Resources.asp

 Construction Industry Compliance Assistance Center at <u>www.CICAcenter.org/bmps.html</u>

The SWPPP must include a description and location of the BMPs to be implemented at the construction site as well as the contractor, subcontractor, utility company, etc. responsible for implementing each BMP.

Types of BMPs

The first step is to ensure existing vegetation is preserved wherever possible. The second step is to minimize the amount of disturbed land at any one time. The sooner stabilization can be achieved in areas where work has stopped, the less disturbed ground there will be.

There are four primary types of BMPs. There are stabilization (erosion control) BMPs for disturbed areas to control erosion at the source. There are sediment control measures to trap, filter and/or remove sediment before it leaves the site. There are storm water management BMPs that divert water around a site or manage water within the site. And there are pollution prevention BMPs, known as "good housekeeping" that deal with chemicals, sanitary wastes, fuels and other pollutants. There can also be BMPs that consist of an administrative action, practice or procedure, such as scheduling or training.

The contractor bases the selection of a BMP on the soil properties, terrain characteristics, intensity and duration of rainfall, volume and characteristics of the storm water flow at the location and the duration that the BMP is required to function. The next section presents a brief description of the types of BMPs and examples of each.

Erosion Control BMPs are measures to prevent or minimize the loss of soil from land surfaces. Initiate stabilization measures as soon as practicable after temporarily or permanently ceasing construction activity on that portion of the site. The CGP sets the maximum number of days allowed before initiating stabilization .

Erosion control examples are as follows:

- Temporary or permanent seeding with mulch
- Mulching
- Applying tackifier
- Installing rolled erosion control products
- Applying compost blanket

- Preserving existing grass, trees, or other vegetation
- Compost blanket

While temporary or permanent seeding and surface roughening are erosion controls, neither of these BMPs will be considered sufficient when implemented alone. In order to be effective at preventing or minimizing erosion, these measures must be implemented in conjunction with other compatible stabilization BMPs.

Erosion control devices such as mulches or Rolled Erosion Control Products (ie. RECP's or blankets) are rated for longevity. Whether the BMP will be require to last days or months dictates product selection. Multiyear projects and over wintering projects are required to stabilize sites in the fall in a manner that will minimize pollution during spring thaw. For more information about seeding methods and species, see "A Revegetation Manual for Alaska" and "Alaska Coastal Revegetation and Erosion Control Guide", both at http://www.plants.alaska.gov/

Sediment Control BMPs are temporary measures used to minimize the amount of sediment that travels in runoff and discharges from the project. If sediment controls fill up quickly with sediment, it is an indication that the erosion controls are not functioning adequately. Sediment control examples include:

- Check dam
- Temporary sediment trap
- Brush barrier
- Fiber rolls
- Silt fence
- Tracking control at exits and entrances
- Drain inlet protection
- Temporary Sediment Traps, Ponds and Basins

Storm water management BMPs are installed to handle the storm water in a way that avoids or minimizes erosion. The storm water that would enter a project site can be diverted around the project in order to decrease the runoff and thus, erosion potential. Water within the project can be carried so that it doesn't come in contact with the disturbed ground. Storm water management BMPs include:

- Velocity control
- Interception /diversion ditch

- Slope drain
- Storm water conveyance channel

Good Housekeeping BMPs address potential pollutants other than sediment. They are also called Pollution Prevention BMPs. Examples include:

- Ensuring proper disposal of construction site waste materials
- Preventing exposure of construction site materials, debris, and chemicals to storm water so these materials do not become pollutant sources (enclosed storage)
- Treating or disposing of sanitary wastes that are generated on-site, in accordance with state or local requirements
- Designating contained concrete washout areas
- Fueling and maintaining vehicles without polluting
- Developing spill prevention and response practices

Some of the CGP required SWPPP elements are contained in the DOT&PF-required Hazardous Material Control Plan (HMCP). Therefore, the HMCP must be incorporated into the SWPPP in an appendix.

Release of Reportable Quantities of Oil or Hazardous Substances

Because construction personnel may handle oil and certain hazardous substances, spills in amounts that reach Reportable Quantity (RQ) levels are possible. If a spill of oil reaches any surface waters or a certain hazardous substances spill exceeds the RQ level, the contractor must notify the project engineer, the National Response Center, and the DEC. A spill of any amount of certain hazardous substances or of 1 gallon or more of oil to land requires the contractor to notify the project engineer and the DEC. See Appendix E of this guide for reporting requirements.

Non-Storm Water Discharges

The CGP allows a limited number of non-storm water discharges. Identify, in the SWPPP, any allowable sources of non-storm water that will be combined with storm water discharges from the construction activity, except for flows from fire-fighting activities. Examples:

- A water truck that is used to control dust at the construction site
- Water from uncontaminated water line flushings
- Water used to wash vehicles and equipment (no detergents permitted)
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred and no detergents used)
- Water from uncontaminated excavation dewatering activities
- Landscape irrigation

Identify and implement pollution prevention measures for the allowable non-storm water discharges and eliminate or reduce them to the extent feasible. Also describe prevention efforts for non-storm water discharges not allowed by the CGP for release to Waters of the United States.

2.2.4 Permanent Storm Water Management Practices

The DOT&PF project design will include measures to control pollutants in storm water after construction is completed. These permanent controls must be discussed in the SWPPP and the SWPPP must describe how they will be protected during the construction phase. Some examples are:

- Retention pond
- Detention pond
- Infiltration measures
- Vegetated swales
- Natural depressions

2.2.5 Certification and Notification

The contractor and DOT&PF must receive coverage under the CGP as co-permittees. To receive coverage, both must submit an electronic Notice of Intent (eNOI) form to the DEC. For a copy of the form, complete instructions on filing and to file the eNOI online, go to

http://www.dec.state.ak.us/water/wnpspc/stormwater/ APDESeNOI.html.

The eNOI form requires the following information:

- 1. Applicable permit number for which you are requesting coverage (the permit number is AKR100000).
- 2. Operator name, address, telephone number, and Employer Identification Number (EIN) as established by the Internal Revenue Service
- 3. Project/site name, address, and latitude/longitude
- 4. Whether it is located in Indian country, which in Alaska is only Metlakatla.
- 5. Whether the SWPPP precedes the filing of the eNOI (required by the permit), and location for viewing the applicable SWPPP
- 6. Name of the water(s) of the U.S. into which your site discharges (see NOI instructions for further explanation)
- 7. Whether the discharge is consistent with the assumptions and requirements of applicable EPA approved or established TMDLs.
- 8. Estimated dates of commencement of construction activity and final stabilization (i.e., project start and completion dates)
- 9. Total acreage (to the nearest quarter acre) to be disturbed for which you are requesting coverage
- 10. Whether any federally-listed threatened and endangered species or federally-designated critical habitat are in the project area to be covered by the permit and the basis for eligibility of permit coverage based on instruction in the CGP
- A certifying statement signed and dated by both a corporate officer including name and title (as defined by the Standard Permit Conditions of the CGP) and the DOT&PF regional director

DEC established the use of the eNOI to avoid the delay involved in mailed paper NOIs .

To use the eNOI system, the corporate officer must have a myAlaska account or create one. The eNOI requires the same information as the standard NOI. Staff should prepare a hardcopy NOI for the certifying official's use in submitting the eNOI. The corporate officer should sign the hardcopy NOI and place it in the SWPPP. The DEC requires that only one of the co-permittees pay the required NOI fee. DOT&PF contracts require that the contractor pay the fee.

Use of the eNOI requires close coordination between the contractor and DOT&PF so both eNOIs are submitted as close as possible to the same time. Construction activities cannot begin until the DEC activates both eNOIs. The CGP definition of construction activities relates to land disturbance. For example, mobilizing equipment may disturb land if moved over unstable soils, but would not disturb land if moved over paved areas. Clearing may disturb land if displacing tree roots, using vehicles, or removing trees. Clearing would not likely disturb land if done on frozen ground without disturbance of the vegetative mat.

The contractor must certify the SWPPP on DOT&PF Form 25D-111. The DOT&PF also certifies the SWPPP. Certification of the SWPPP must be completed prior to submission of the Notice of Intent (NOI). Unlike the eNOI certification, the SWPPP certification can be signed by a representative of the corporate officer. For the DOT&PF, the regional director delegates signature authority to the position of project engineer (delegation to a position rather than an individual allows another person to sign in the case of changes of personnel during vacation or turnover). DOT&PF requires the contractor's corporate officer to delegate signature authority for the SWPPP certification to the Superintendent, using DOT&PF Form 25D-108. Either the contractor's corporate officer or the Superintendent can certify the SWPPP.

The contractor compiles and retains the following records with the SWPPP:

- 1. SWPPP Certification, original copies, one for each operator
- 2. Delegation of Signature Authority, original copies, one for each operator
- 3. The DOT&PF requires that the contractor have each sub-contractor sign a different certification, stating they have read, understood and will comply with the SWPPP. This is DOT&PF Form 25D-105.

eNOI

Include the signed and certified eNOI forms that were submitted to DEC. Include both DOT&PF's and the contractor's eNOIs. Upon receipt, also include a copy of the e-mail message from DEC, which notifies you of their receiving your administratively completed eNOI and gives the date it becomes active.

Alaska Department of Environmental Conservation and Local Requirements

For all projects disturbing five acres or more of ground outside the area of a MS4 permit (current MS4 permitted municipalities in Alaska include Anchorage, Fairbanks and North Pole), the contractor must submit the SWPPP certified by DOT&PF and the contractor to DEC at the same time the eNOI is filed using the address below.

Alaska Department of Environmental Conservation Wastewater Discharge Authorization Program Storm Water 555 Cordova Street Anchorage, AK 99501

For projects that disturb one acre or more (or in some locations, 10,000 square feet for more) and are within the MS4, the SWPPP must be submitted to the appropriate MS4 entity *prior* to filing the eNOI. However, the MS4 SWPPP review requirements vary by permit and municipality, so the contractor will need to identify the requirements specific to the MS4 permit for that project location.

Local governments may have ordinances regarding storm water and your SWPPP should demonstrate its compliance with applicable local requirements.

Post a Notice

Post the following in a publicly accessible, noticeable location near the construction site's main entrance:

- APDES permit numbers and copies of the eNOIs
- Name and phone number of contractor's local contact (if different from the eNOI)
- Location of the SWPPP for viewing (if different from the eNOI)

2.2.6 SWPPP Implementation (Modifications, Inspections, Maintenance and Recordkeeping)

The SWPPP is a dynamic document, and the contractor is responsible for modifying it as conditions dictate (i.e., changes in design, construction, site conditions, or BMPs).

During construction, the contractor must inspect and maintain the storm water controls and management practices. The SWPPP describes the inspection procedures and frequency. Based on these inspections, the contractor may need to amend the SWPPP if there are any changes in the construction or if the plan is ineffective in controlling pollutants. The CGP requires that SWPPP amendments must be completed within seven calendar days of the day a problem was identified.

Erosion and sediment control measures require maintenance to remain effective.

Routine maintenance is an activity that is described and expected in the SWPPP. Therefore, routine maintenance does not require a SWPPP Amendment. SWPPP Records are legal documents and need to be prepared and kept with care. When a regulatory inspector (could be local government, DEC, or EPA) visits a site, the contractor's SWPPP is the SWPPP of Record that will be examined.

SWPPP Modifications

SWPPP Amendments

For a construction activity to comply fully with the storm water CGP and the SWPPP to be effective, the plan must accurately reflect current site features and operations. When it does not, amend the plan. The contractor must complete a SWPPP amendment within seven calendar days of the inspection that identified the need for a change in the plan.

The following actions require amendments to the SWPPP:

- Addition of a structural BMP not shown on the original SWPPP
- Deletion of a structural BMP that is shown on the original SWPPP
- Addition of different manufactured BMP
- Change in named personnel (SWPPP Manager, Superintendent)
- Change in inspection frequency
- Addition of support facility site

Amendments may be done by adding new pages of text or drawings, or by markups in the margins of text or on the plan sheets. However, the DOT&PF consent decree requires that every amendment must be dated, easy-to-read, approved by an AK-CESCL (or equivalently) certified individual, and listed in the SWPPP Amendment Log (DOT&PF Form 25D-114). The AK-CESCL who approves a SWPPP Amendment could be either a contractor or DOT&PF employee.

To signify approval of a SWPPP Amendment, the AK-CESCL can sign the Amendment Log and/or the

actual page that the amendment is on. The certification number and expiration date of the approving individual must also be included in the SWPPP.

SWPPP Updates

In addition to Amendments, the SWPPP is modified with updated information, such as the installation or removal date of BMPs. These notes are typically hand-drawn on the plan sheets, with each entry dated and signed or initialed. These types of notes are not SWPPP Amendments, because they are simply recording actions that were planned for in the SWPPP, not changing the SWPPP. When a plan sheet becomes too full to be read easily, fold and date it, transfer the current conditions to a new sheet and continue to document amendments and the new sheet. Place the new page after the old page in the SWPPP binder.

In addition, the permit and DOT&PF contract require continually recording updates on logs, such as the rainfall, grading and stabilization activities and corrective actions.

Plan Location

You must keep a copy of the SWPPP at the construction site from the time construction begins until final stabilization. The contractor's copy will be the project's SWPPP.

Inspections

The permit and consent decree require inspectors be qualified in the field of erosion and sediment control and storm water quality protection. For DOT&PF projects, inspectors meet both requirements if they hold a current Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) certification. This certification is obtained by attending a two-day training, passing a written exam, and recertifying at least every three years. There are two other certifications that meet the decree requirement and that is the Certified Professional in Erosion and Sediment Control (CPESC) and Certified Inspector of Sediment and Erosion Control (CISEC). These certifications require having experience that meets the pre-qualifications and passing a written exam. The inspector's certification type, number and expiration date must be provided on the Inspection Report (Form 25D-100) and copies of the certifications are also placed in an appendix of the SWPPP.

Describe the plan and frequency for inspection of the project's BMPs in accordance with the CGP and contract. When planning inspections, be sure the scope of the inspection is thorough enough to meet the CGP requirements.

Inspections must include

- all project areas disturbed by construction activities
- observation of all of the discharge points (where collected and concentrated storm water exits the project, such as a drain inlet, ditch, stream, gully, swale, etc.)
- all of the installed control measures (BMPs)
- areas where temporary stabilization measures have been placed
- areas where permanent stabilization measures have been initiated but not yet reached "final stabilization"
- locations where vehicles enter and exit
- locations where vehicles are stored, fueled or maintained to check for leaks or spills
- locations where materials are stored and exposed to precipitation.

Identify the personnel responsible for these inspections and describe their qualifications. In addition, the inspection must be performed as a collaborative effort between the contractor and the DOT&PF, with representatives of each entity participating.

If the site is eligible for reduced inspection frequency or waiver, indicate why it is eligible and provide the beginning and ending dates.

Use the inspection report form 25D-100 Parts 1 and 2 provided in Appendix A of this guide and in WORD format on the DOT&PF Construction Forms website. This form requires you to list your BMPs. It is advisable to list them by location grouping, so that when the inspector walks the site, the BMPs on the report form are in a logical order.

Some BMPs can be grouped on the form, such as a series of ditch check dams. However, only group BMPs when it makes sense and can be easily understood by someone else. For example, a common sense place to separate silt fence into separate BMPs would be when there is a break in a continuous fence line. If needed, expand the form to list additional BMPs on the continuation sheets (Part 2 of the form). When an inspector observes a problem, such as a new BMP is needed, one needs to be fixed or maintained, or a leak needs to be fixed and cleaned up, then the action needed must be described on the report form and the date it will be done entered as the "Complete-by-Date". Each of these action items must also be transferred to the Corrective Action Log (DOT&PF From 25D-112). The Corrective Action Log is where the contractor documents that the action was completed before or on the "Complete by Date."

A duly authorized representative from DOT&PF and the primary contractor must certify the inspection reports. For DOT&PF, this would be the project engineer. For the contractor, this would be the Superintendent. Both certifying representatives are required to have current AK-CESCL (or an approved equivalent) certification.

Maintenance

Describe the procedures that you will use to maintain the vegetation, the erosion and sediment control measures, and other protective measures. Such practices may include removing sediment from structural controls (such as sediment ponds/traps, silt fences, or check dams), reinforcing and repairing silt fences or wattles, or reseeding areas as needed. For sediment control BMPs, the permit requires maintenance when accumulation reaches 50% of design capacity. Maintenance procedures for other BMPs should be described in the SWPPP and may be specified in the contract.

If control measures are not working effectively, take immediate action if water quality is threatened. Make all other repairs and modifications as soon as possible and before the next storm whenever practicable. Describe in the SWPPP winter shutdown maintenance procedures to ensure all control measures will remain functional during that time. It is particularly important for the control measures to be effective at the time of spring thaw.

Recordkeeping

Include a copy of the CGP that is current at the time the NOI is filed in the SWPPP.

Also keep all of the forms that are included in Appendix A of this Guide in the SWPPP and keep the forms up to date on preferably a daily basis but at least on a weekly basis.

Other records to keep with the SWPPP include

- A copy of the signed Notice of Intent from every permittee (usually the contractor and the DOT&PF, but there could be others)
- Copies of the DEC acknowledgement of receipt of each eNOI
- Correspondence related to storm water with regulatory authorities
- Records of non-storm water discharges
- Documentation of the SWPPP Preparer's Storm Water Inspector's, Superintendent's and Project Engineer's erosion and sediment control certification(s). Be careful to update these records anytime there is either personnel turnover or someone goes on leave and is replaced with a temporary "acting." In the latter case, include in the SWPPP a memo that delegates the position responsibilities and gives the dates.
- Copy of the DOT&PF Letter of Non-Objection from DEC regarding the permanent storm water management (when it is required)

Retention of Records

Retain the following for three years after filing the NOT or until one year after the termination of the consent decree, whichever is longer. Note that the consent decree may continue for an unknown number of years beyond three.

- 1. A copy of the SWPPP
- 2. Inspection records detailing dates of earthdisturbing activities, BMP corrective action dates, end of construction, and stabilization dates
- 3. A copy of the eNOI and eNOT

2.2.7 Contractor and Subcontractor

The SWPPP needs to describe the roles and responsibilities of the various entities that are active at a project. Identify the personnel of the prime contractor (and subcontractor, if applicable) responsible for implementing the SWPPP. List all contractors (prime or sub) who perform earthdisturbing activities or install and maintain erosion and sediment control measures. If applicable, include a description of the utility company's role and responsibilities unless they have developed their own SWPPP (in which case, your SWPPP must reference theirs). If the contractor has provided support activities, such as disposal or material sites, that are covered in a separate SWPPP, then the project SWPPP must reference the other plans.

2.2.8 Final Stabilization and Permit Termination

The SWPPP remains in effect until the completion of construction activities and stabilization of disturbed areas occur to prevent further erosion of the soil. Final stabilization means all earth-disturbing activities at the project site are complete and all disturbed land is stabilized through mechanical or vegetative means.

Mechanical stabilization includes

- Paving
- Riprap
- Retaining structures
- Clean gravel
- Any naturally non-erodible surfaces such as bedrock and porous parent material

Vegetative stabilization means planting a uniform perennial vegetative cover with a density of 70 percent of the native background cover. In arid and semi-arid areas, temporary erosion control measures (e.g. degradable rolled erosion control product) should be selected, installed and designed to provide erosion control for at least three years without active maintenance, and establish 70 percent vegetative cover within those 3 years. When background cover is less than 100 percent (such as beaches or arid areas), the stabilization requirement is adjusted (see the Definitions of the CGP).

The project engineer will verify final stabilization. Even if less than one acre remains in the disturbed area, an operator cannot file for termination of permit coverage until there is stabilization for all disturbed areas and the removal of all temporary BMPs.

If the contractor or subcontractor's responsibility for final stabilization is complete or another subcontractor or DOT&PF has assumed responsibility for all areas of the site for final stabilization, submit an electronic Notice of Termination (eNOT) to the DEC. The NOT must be submitted within 30 days of the Engineer confirming final stabilization.

The eNOT must include

- 1. The APDES tracking number
- 2. The basis for submitting the eNOT (e.g., completed final stabilization or permittee no longer has responsibility over the site)

- 3. Your name, address, telephone number, and organization Employer Identification Number (EIN)
- 4. Name of project, address, and location
- 5. A certification statement signed and dated by the corporate officer.

Submit eNOTs to DEC in the same manner as the eNOI (see 2.2.5). Provide a copy of the eNOT to the DOT&PF project engineer. For a stabilized project, the DOT&PF regional director will submit an eNOT, terminating the DOT&PF's coverage under the CGP.

Provide a complete and true copy of the contractor's SWPPP and all associated records to the DOT&PF when the eNOTs are filed.

Storm Water Permitting Process for DOT&PF Projects



Figure 1