Storm Water Pollution Prevention and Notice of Intent Process

24th Annual BIA Alaska Region Tribal Providers Conference
Transportation
December 3, 2014
The Dena’ina Center, Anchorage

Alaska Department of Environmental Conservation
Division of Water
Alaska Pollutant Discharge Elimination System
Jim Rypkema

http://biaprovidersconference.com
Mission Statement:
- Improve and protect water quality

How?
- Establishes standards for water cleanliness [18 AAC 70 Water Quality Standards]
  - Sec. 46.03.070 Pollution Standards
  - Sec. 46.03.080 Quality and Purity Standards
- **Regulates discharges to waters and wetlands**
  - 18 AAC 72 – Wastewater Disposal
  - 18 AAC 83 – Alaska Pollutant Discharge Elimination System
  - Clean Water Act Sections 402 NPDES Programs
- Provides financial assistance for water and wastewater facility construction and waterbody assessment and remediation
- Trains, certifies, and assists water and wastewater system operators
- Monitors and reports on water quality

Division of Water

Improving and Protecting Alaska's Water Quality
Storm Water In Alaska

- Unique characteristics
- Common problems
Sediments/Solids

- Harmful effects:
  - ▼ Visibility ▲ turbidity = difficult for aquatic organisms
  - ▼ light availability for photosynthetic organisms
  - Clogging of gills in fish and aquatic species
  - Reduction in fish spawning and general survival
  - Increase in the transportation of heavy metals, phosphorous and other pollutants
Topic Areas

- Transfer from EPA to ADEC
- Think Like Water
- Alaska Pollutant Discharge Elimination System (APDES)
  - CGP, MSGP, MS4, NSGP
  - Individual Permits
- ADEC Storm Water Webpage
  - CGP and eNOI
Schedule to Transfer NPDES Authority from EPA to ADEC

- Transfer of NPDES Program started October 31, 2008
- Phase 1
  - Domestic Wastewater, Seafood Processors, Log Transfer Facilities
- Phase 2 October 31, 2009
  - Storm Water, Federal Facilities, Pre-treatment, non-domestic
- Phase 3 October 31, 2010
  - Mining
- Phase 4 October 31, 2012
  - Oil and Gas Industry
Construction General Permit (AKR100000)
Influences on Erosion Process

- Climate
- Topography
- Soils
- Vegetative Cover
Erosion compared to Sedimentation

- **Erosion** – process by which land surface is worn away by the action of water or wind
- **Sedimentation** – movement and settling out of suspension of soil particles

Think like water
NPDES Storm Water Regulations

- Clean Water Act 1987 – Adds Storm Water
- Phase I – 1990s
  - Municipalities > 100,000
  - Construction sites > 5 acre disturbance
  - Industrial activities
- Phase II – 2002
  - More municipalities
  - Construction sites 1 – 5 acres
  - Some changes in requirements for industrial activities
APDES Storm Water Permits

- Construction General Permit (CGP)
- Multi-Sector General Permit (Industrial Activities) (MSGP)
- Municipal Separate Storm Sewer Systems (MS4s)
- General Permit for Oil & Gas on North Slope (NSGP)
- Individual Permits
Construction General Permit (CGP)

- ADEC Adopted EPA CGP on October 31, 2009
- ADEC reissued CGP on December 31, 2010, May 19, 2011
- Effective July 1, 2011 through January 31, 2016
- Large and medium (Phase I) construction projects
  - those disturbing => 5 acres
- Small (Phase II) construction projects
  - disturbing 1 to 5 acres
What do I have to do to comply with the CGP?

- Read the permit
- Develop a SWPPP
- Submit a Notice of Intent (NOI)
- Implement SWPPP as construction progresses
- Conduct inspections
- Modify control measures as needed
- Update SWPPP
- Submit Notice of Termination (NOT)
SWPPP Development

Every site is different
Every SWPPP is unique
Practices will vary

Ketchikan
Contents of Storm Water Pollution Prevention Plan (SWPPP)

- Name of operators
- Nature of construction activity
- Site map(s)
- Description of construction and waste materials
- Locations of other industrial storm water discharges
- Description of control measures (BMPs)
- Description temporary and permanent stabilization
Contents of Storm Water Pollution Prevention Plan (cont.)

- Post-authorization records (e.g., grading logs)
- Identify non-storm water discharges
- Document ESA considerations
- Document TMDL considerations
- Copy of permit and NOI
- Record of Inspections
- Updates to SWPPP
Developing Your Storm Water Pollution Prevention Plan


- Developed by EPA
- How-to Guide on Developing SWPPP
- Includes Steps for Implementing SWPPP
SWPPP Template


- Word Format
- Download and fill-in
Ten Keys to Effective Erosion and Sediment Control (ESC)

- **Erosion Controls** (primary protection)
  1. Minimize disturbed area and protect natural features
  2. Phase construction activities to limit exposure period
  3. Control storm water flowing onto and through the project
  4. Stabilize soils promptly with seed, mulch, etc.
  5. Protect slopes to prevent gullying

- **Sediment Controls** (the second line of defense)
  6. Protect storm drain inlets or creeks
  7. Establish perimeter controls
  8. Retain sediment on-site & control dewatering practices
  9. Establish stabilized construction exits
  10. Inspect and maintain controls
Control Measures (BMPs)

- Sediment controls
- Off-site sediment tracking and dust control
- Runoff management
- Erosive velocity control
- Post-construction management
- Management of construction and waste materials
- Management of non-construction wastes
- Erosion control and stabilization
- Spills/Release response and reporting
Inspections

- Frequency
- Frozen conditions
- Conducted by qualified personnel
- Scope of inspections
- Reductions for stabilized areas
- Inspection reports
Common Compliance Problems

- Soil stabilization – phase grading activities
- No sediment controls on-site – in place before grading
- No sediment control for temporary stockpiles
- No inlet protection
- No BMPs to minimize vehicle tracking onto the road
- Improper solid waste or hazardous waste management
- Dewatering and other pollutant discharges at site
- Poorly managed washouts (concrete, paint)
- Inadequate BMP maintenance
- Inadequate documentation or training
Sediment Controls w/o Erosion Controls
Which Erosion Control is Working?
Which Sediment Control is Working?
Silt Fence
Maintenance of Control Measures

- Must maintain all control measures in effective operating condition.
- If inspections find a need for additional control measures, implement them as soon as possible, and before the next storm when practicable.
- Perform maintenance on sediment traps or ponds, or silt fence.
Reporting and Recordkeeping

- Notice of Intent (NOI)
- Update SWPPP
- Notice of Termination (NOT)
- Maintain records for three years after NOT
Termination of Coverage

- Submit Notice of Termination (NOT) to ADEC after one or more of the following:
  - Final Stabilization on all portions of site
  - Another operator has assumed control
  - Coverage under individual or alternative permit
  - For residential, temporary stabilization completed and transferred to homeowner
- NOT must be submitted within 30 days of one of the above conditions
DEC Required Submittals

- Copy of NOI for all projects
- Permit Authorization Fee $490
- Submit SWPPP IF project disturbs => 5 acres and is either:
  - Outside the Municipality of Anchorage OR
  - Publicly funded within Anchorage OR
  - Outside MS4 in Fairbanks
- Copy of NOT for all projects
ADEC Storm Water Webpage

The goal of the Storm Water Program is to reduce or eliminate pollutants in storm water. Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops, during rainfall and snowmelt events. Storm water discharges often contain pollutants in quantities that could adversely affect water quality.

Expiration of the 2008 MSGP - NEW

The 2008 MSGP expired at midnight on September 29, 2013. A new permit to replace it has not been issued. Permittees who obtained coverage under the 2008 MSGP prior to its expiration are automatically granted an administrative continuance of permit coverage. The administrative continuance will remain in effect until a new permit is issued. Permittees already covered under the 2008 MSGP are not required to submit a new Notice of Intent (NOI) for permit coverage until the MSGP is reissued. Permittees must continue to comply with all requirements in the 2008 permit, including requirements for monitoring and reporting.

New facilities seeking to discharge stormwater associated with industrial activity are unable to apply for permit coverage until DEC reissues the MSGP to replace the administratively extended 2008 MSGP. DEC issued a “no action assurance” memorandum for newly-discharging facilities. The memo states that the Department will not pursue administrative or civil judicial enforcement actions for lack of permit coverage against a newly-discharging facility, provided that the operator meets the requirements established in the memorandum attached memo (PDF, 2 pp).


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Construction General Permit

On July 1, 2011, the Department of Environmental Conservation reissued the Construction General Permit (2011 ACGP) for Alaska. The 2011 ACGP that is now in effect for Alaska is the permit available in the "Of Interest" box to the right. This is the permit that should be included in the Storm Water Pollution Prevention Plan.

If you filed your NOI prior to July 1, 2011 you received coverage under the 2010 CGP. You may continue to work under that permit coverage until November 27, 2011. If your project will continue after November 27 then you must file for coverage under the 2011 ACGP.

What Are My Responsibilities As a Construction Operator?

If your project disturbs less than one acre and is not part of the planned disturbance of a larger common plan of development or sale, no permit is required. Otherwise, you must develop and follow a Storm Water Pollution Prevention Plan (SWPPP) to manage materials, equipment, and runoff from your construction site. (Note that this is only a partial list of your responsibilities and that you must consult the Construction General Permit for details.)

- Obtain and read the entire Construction General Permit prior to beginning your project.
- Develop a SWPPP. Development and implementation of a construction storm water pollution prevention plan is the key condition of the CGP.
- Submissions to DEC:

Qualified Person

<table>
<thead>
<tr>
<th>Storm Water Role</th>
<th>Total Project Disturbed Acreage</th>
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<tbody>
<tr>
<td></td>
<td>1 to &lt; 5 acres</td>
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<tr>
<td></td>
<td>5 acres to &lt; 20 acres</td>
</tr>
<tr>
<td></td>
<td>&gt; 20 acres</td>
</tr>
<tr>
<td>Storm Water Lead</td>
<td>Recommended AK-CESCL training, but not required</td>
</tr>
<tr>
<td></td>
<td>Be AK-CESCL trained by May 1, 2013</td>
</tr>
<tr>
<td></td>
<td>Be AK-CESCL trained by May 1, 2012</td>
</tr>
<tr>
<td>SWPPP Preparer</td>
<td>Be familiar with permit</td>
</tr>
<tr>
<td></td>
<td>Recommend taking a course in SWPPP preparation</td>
</tr>
<tr>
<td></td>
<td>Visited the site prior to writing the SWPPP or soon after project start and revised the SWPPP based on site conditions</td>
</tr>
<tr>
<td>Storm Water Inspector</td>
<td>Be familiar with permit and SWPPP</td>
</tr>
<tr>
<td></td>
<td>Be AK-CESCL trained by May 1, 2013</td>
</tr>
<tr>
<td></td>
<td>Be AK-CESCL trained by May 1, 2012</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Not Required</td>
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<tr>
<td></td>
<td>Not Required</td>
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<tr>
<td></td>
<td>Be AK-CECSL trained by May 1, 2012</td>
</tr>
<tr>
<td>Active Treatment System Operator</td>
<td>Be AKCECSL trained by May 1, 2012 and have general experience and knowledge of storm water control measures. Operational experience with the specific equipment used on-site.</td>
</tr>
<tr>
<td></td>
<td>Be AK-CECSL trained by May 1, 2012 and have general experience and knowledge of storm water control measures. Operational experience with the specific equipment used on-site.</td>
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http://ak-cescl.net/index.cfm
AK-CESCL
Alaska Certified Erosion & Sediment Control Lead

- Erosion and sedimentation processes
- Regulatory requirements
- SWPPP
- BMPs
- Inspection
- Recordkeeping
- Cold Climate challenges

http://ak-cescl.net/index.cfm

- Standardized training and certification
- Two-day course
- Valid for 3 years

SWPPP Development Resources to Assist with Development of the CGP SWPPP

SECTION 1- General Information

Mapping Website used to determine Lat and Long if no other resources are available

http://www.itouchmap.com/latlong.html

Alaska Department of Fish and Game Interactive Maps website can be used as a source for topographical information for the development of general location maps as well as drafting the project site specific conditions. The Anachronous Waters Catalog interactive map is useful for gathering this site information.


Precipitation data for Alaska weather-recording stations are available at the Western Regional Climate Center Internet website: http://www.wrcc.dri.edu/summary/Climsmak.html. This site is also used to determine the “Spring Thaw” and “Fall Freeze-up” dates for determination of the winter shutdown period. This information can be found by scrolling down to “Temperature” under the “Period of Record” and going to either “Spring Freeze Probabilities” or “Fall Freeze Probabilities”. Areas identified as “Arid (<10in)” and “Semi-Arid (10-20 in)” can also be identified on this website by reviewing the annual average precipitation.

The NRCS Soil Survey Information website can be viewed to obtain the STATSGO Soils Data for uploading to GIS or use the more general Web Soil Survey for general soil information of your project area.

http://www.ak.nrcs.usda.gov/soils/index.html

Alaska growing season periods are defined by Ecoregion on Page 51 in the US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Alaska Region (Version 2.0) found at:

Alaska Storm Water Guide

- Regulations
- Alaska Considerations
- Design Considerations
- Temporary Controls
- Permanent Controls


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Appendix B of the Alaska Storm Water Guide which includes BMP Specifications

APDES eNOI System

http://dec.alaska.gov/water/wnpspc/stormwater/APDESeNOI.html
CGP eNOI Step-by-Step Guide

Storm Water Construction General Permit eNOI
Step-by-Step Guide

The Construction General Permit (CGP) Notice of Intent (NOI) can now be filled out using the Division of Water’s Online Application System. This document will guide you through this online process.

Construction General Permit eNOI

1. Go to the Division of Water’s Wastewater Discharge Authorization home page at:
   http://www.dec.state.ak.us/water/wwdp/index.htm
   Select the Storm Water link under Program Links.

eNOI Frequently Asked Questions

- 43 Questions
  - eNOI System overall
  - CGP eNOI specific questions
  - MSGP eNOI specific questions
  - “myAlaska” specific questions

http://dec.alaska.gov/water/wnpssc/pdfs/eNOIFAQs.pdf
ADEC Water Permit Search

Search for Alaska DEC Wastewater Discharge permits, authorizations, and certifications.

For inquiries about permit documents, email DEC.water.WQpermit@alaska.gov.

For a list of Construction Storm Water Notices of Termination for ADEC issued NOIs, click here.
For a list of Large Cruise Ships Authorized to Discharge under the Wastewater General Permit 2006DB0026, click here.
Who You Going to Call?

http://dec.alaska.gov/water/wnpspc/stormwater/StaffContacts.htm
Questions?
Thank you for your time!

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http://dec.alaska.gov/water/wnpssc/stormwater