

2015 ANNUAL REPORT

Alaska Pollutant Discharge Elimination System Permit No. AKS-053414



January 2016

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This Annual Report documents the activities undertaken January through December 2015 to comply with the requirements of Alaska Pollutant Discharge Elimination System Permit No. AKS-053414 issued by the Alaska Department of Environmental Conservation to the Fairbanks North Star Borough. By signature below, this report is hereby certified in accordance with 18 AAC 83.385.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name	Title	Signature	Date
Karl Kassel	Mayor, Fairbanks North Star Borough		1/22/16
Dan Sloan	Director, Fairbanks North Star Borough, Department of Public Works		1/22/16

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STORM WATER PERMIT OVERVIEW

Storm Water Permit Overview

INTRODUCTION

This Annual Report documents the activities undertaken January through December 2015 to comply with the requirements of Alaska Pollutant Discharge Elimination System (APDES) Permit No. AKS-053414 issued by the Alaska Department of Environmental Conservation (ADEC) to the Fairbanks North Star Borough (FNSB). Annual Reports are required to be submitted to the ADEC in accordance with Section 4.3 of the permit. The last report documented activities undertaken June 2013 through December 2014. The ADEC subsequently changed the reporting period for Annual Report to a regular calendar year (January through December). This and all future reports are required to be annually submitted to the ADEC by February 1.

PERMIT HISTORY

The FNSB was originally issued a Phase II National Pollutant Discharge Elimination System (NPDES) Permit from the U.S. Environmental Protection Agency (EPA) on June 1, 2005 for a term of five years. The ADEC later assumed authority over the permit in October 2009 under the APDES Program and provided an administrative extension for the existing permit's requirements to remain effective and enforceable until a new permit could be developed and issued. The new permit, with new requirements, was issued to the FNSB in June 2013 with an effective five-year term beginning August 1, 2013. A copy of the permit can be found at: <http://fnsb.us/pw/StormWater/FNSBPermit.pdf>

COVERAGE AREA

The permit covers all areas within the boundary of the Fairbanks Urbanized Area that are served by the municipal separate storm sewer system (MS4) owned and operated by the FNSB. Urbanized area boundaries are established by U.S. Census Bureau and defined as the core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. The current boundary of the Fairbanks Urbanized Area was established using data from the 2010 Census. A map of this boundary can be found at: <http://fnsb.us/pw/StormWaterDocuments/MS4boundary.pdf>

AUTHORIZED DISCHARGE

With some limitations, the permit authorizes the FNSB to discharge storm water to waters of the U.S. from all portions of the MS4 owned and operated by the FNSB located within the boundary of the Fairbanks Urbanized Area. The limitations are outlined in Section 1.4 of the permit and include non-storm water discharges, discharges threatening water quality, snow disposal to receiving waters, and discharges to water quality impaired receiving waters.

STORM WATER PERMIT OVERVIEW

PERMIT REQUIREMENTS

The permit requires that the FNSB develop and implement a Storm Water Management Plan and meet the individual requirements of six minimum control measures, as follows:

1. Public Education & Outreach
2. Public Involvement & Participation
3. Illicit Discharge Detection & Elimination
4. Construction Site Storm Water Runoff Control
5. Post-construction Storm Water Management
6. Pollution Prevention & Good Housekeeping

The plan, which was written by the FNSB in July 2014, and can be found at:

<http://fnsb.us/pw/StormWater/FNSBMPlan.pdf>. The plan identifies best management practices (BMPs) and other strategies to meet the requirements of the minimum control measures and reduce the discharge of pollutants from the MS4 to the maximum extent practicable to protect the water quality of receiving waters. Documentation of the activities undertaken in accordance with the plan is included in the next section of this report and Appendices A through E.

ANNUAL REPORTS

In accordance with Section 4.3 of the permit, Annual Reports must include:

- An updated Storm Water Management Plan document.
- Description of the effectiveness of each plan component or activity.
- Planned activities and changes for the next reporting period for each plan component or activity.
- An evaluation of compliance with the requirements of this permit, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals of each minimum control measure.
- Results of any information collected and analyzed during the previous reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable.
- A summary of the activities the FNSB plans to undertake during the next reporting cycle (including an implementation schedule) for each minimum control measure.
- Proposed changes and completed changes to the plan, including changes to any BMPs or any identified measurable goals for any minimum control measure.
- Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards.
- Notice if the FSNB is relying on another entity to satisfy some of the permit obligations, if applicable.

MINIMUM CONTROL MEASURES

Minimum Control Measures

The following subsections list the individual requirements for each minimum control measure, a description of the activities undertaken by the FNSB to comply with those requirements, and measureable goals for the next reporting period.

PUBLIC EDUCATION & OUTREACH

Permit Requirements

To date, the FNSB has met all the requirements under Minimum Control Measure 1 – Public Education & Outreach. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>FNSB must maintain a public education program to educate the community about the impacts of storm water discharges on water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff.</i> [Section 3.1.1]	Annually	Complete, ongoing
<i>At least annually, the FNSB must distribute storm water educational materials to target audiences that encourage the public to improve water quality.</i> [Section 3.1.2]	Annually	Complete, ongoing
<i>At least annually, the FNSB must prepare and distribute appropriate information that encourages the public to improve water quality to local media outlets.</i> [Section 3.1.3]	Annually	Complete, ongoing

Compliance Activities

The City of Fairbanks, City of North Pole, University of Alaska Fairbanks, and Alaska Department of Transportation & Public Facilities – Northern Region (Fairbanks permittees) have a separate but similar APDES Permit (Fairbanks permit) as the FNSB. The FNSB and the Fairbanks permittees have worked together since 2005 to implement a unified public education program on local storm water issues. The program’s education and outreach activities are focused in the month of April of each year when snowmelt runoff is prevalent, parking lots and streets are flooded, and storm water concerns are easily identifiable to residents of the community. The program is focused on creating awareness and educating the public about the impacts of storm water discharges to the MS4 and local water bodies, and provides information on how citizens and businesses can take steps to reduce pollutants in storm water runoff. Program activities completed during the 2015 reporting year included the following:

- Updating and maintaining an informative storm water management program website
- Providing educational presentations on storm water at local schools
- Providing guest presentations on storm water to interested groups

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- Distributing educational material at local events and by mail

Fairbanks Storm Water Management Program Webpage

The website can be viewed at <http://fnsb.us/pw/Pages/Storm-Water.aspx>. It provides an overview of storm water and pollutants of concern in the Fairbanks area, program information for each of the six Minimum Control Measures, a list of ways the public can get involved (i.e. attending storm water committee meetings, participating in stream cleanup events, etc.), links to the Cities of Fairbanks and North Pole and FNSB storm water ordinances and corresponding site development plan review requirements, a link to access and view the comprehensive storm drain system map of the entire FNSB, links to local publications such as the Green Infrastructure Resource Guide for Fairbanks and Best Management Practice (BMP) Effectiveness Report for Fairbanks, directions on how to report illicit discharges, and contact information for the storm water coordinators for each of the Fairbanks Permittees and FNSB. The website also provides viewers links to the ADEC Storm Water Program webpage, ADEC Construction General Permit, ADEC Alaska Storm Water Guide, Cities of Fairbanks and North Pole Storm Water Management Program Guide, FNSB BMP Design Guide, and a map and storm water plan submittal flowchart for the Fairbanks Urbanized Area. In 2015 the website had 1,894 visitors.

Educational Presentations on Storm Water at Local Schools

As in previous reporting years, the Fairbanks Permittees and FNSB partnered to deliver storm water educational presentations to various FNSB elementary schools in Fairbanks and North Pole. The presentation consists of a 30-minute slide show on the types of pollutants carried in storm water, how those pollutants reach area water bodies, and what can be done to limit the effects, followed by a 20-minute watershed model demonstration using the EnviroScape® Nonpoint Source Model. The model helps children make the visual connection between what they learned during the slide show and what happens in their local watershed. The children watch storm water pick up pollutants (i.e. colored drink mixes) in a suburban area and carry them to a lake. After each presentation, promotional items such as bracelets, magnets, pencils, stickers, and education materials are also given out. In 2015, there were 16 presentations delivered to 409 elementary school children at four schools in March and April. A copy of the slide show presentation, spreadsheet outlining participation, and picture of the model and goodies given to students are included in Appendix A.

The Fairbanks Permittees also participated in an elementary school's STEM (Science, Technology, Engineering, & Mathematics) event held on February 5, and Fairbanks Outdoor Days event held May 12-14. At each event a storm water educational station was hosted with watershed model demonstrations and hands-on laboratory experiments. A total of 850 students visited the stations and participated in the demonstrations and experiments at the two events.

Guest Presentations on Storm Water

The Fairbanks permittees also provided the following guest presentations on storm water in 2015:

- 3rd Annual Chena River Summit (June 12, 2015) – "Fairbanks & North Pole Local Storm Water Regulations" – 50 people in attendance

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- UAF Community & Technical College, Fairbanks Pipeline Training Center, Process Technology 120 Guest Lecture (October 26, 2015) – "Fairbanks & North Pole Local Storm Water Regulations" – 20 people in attendance
- UAF Natural Resources Management 101 Guest Lecture (November 2, 2015) – "Watershed Management in Fairbanks, Alaska" – 30 students in attendance
- UAF Natural Resources Management 101 Guest Lecture (November 4, 2015) – "Storm Water Management in Fairbanks, Alaska" – 30 students in attendance

Copies of the slideshows for these presentations are included in Appendix A.

Educational Material Distribution

2015 [31st Annual] Northern Living Home Show – The Fairbanks permittees distributed educational materials at the Home Show in Fairbanks during the weekend of March 20-22, 2015, at the Fairbanks Soil & Water Conservation District's (FSWCD's) booth. The Home Show is an annual event held in Fairbanks each spring to kick off the construction season, and includes a wide variety of local vendors showcasing building materials, equipment, and services. Approximately 150 vendors participate each year with an average of 7,500 people attending over a 3-day weekend. At this year's event, the Fairbanks permittees distributed copies of the Green Infrastructure Resource Guide for Fairbanks and corresponding brochures. The brochures provided the step-by-step installation process, materials and tools needed, cost and time estimates for installation, and maintenance requirements for green infrastructure applications such as rain barrels, rain gardens, tree pits, infiltration planters, vegetated swales/retention gradings, dry wells, riparian buffers, green roofs, permeable pavers, and grass car parks. A copy of the guide, which includes copies of the brochures appended to the guide, can be found at <http://www.fairbanksgig.com/benefits/>.

In conjunction with the Home Show event, the FNSB also placed a storm water advertisement in a special section of the Fairbanks Daily News-Miner newspaper – the Spring Home & Garden section that was published on April 24. The advertisement targeted local developers/engineers/contractors to make them aware of the local storm water plan review and permitting requirements for the City of Fairbanks, City of North Pole, and FNSB. A copy of the advertisement is included in Appendix A.

2015 [4th Annual] Fort Wainwright Earth Day Fair – At the invitation of the U.S. Army Garrison, the Fairbanks permittees hosted a booth at the Earth Day Fair held on April 22, 2015. The booth showcased the educational materials used in classrooms, including the EnviroScape® Nonpoint Source Model and posters showing pictures of storm water conveyance systems and examples of illicit discharges. As giveaways, the people who stopped by the booth were given storm water bracelets, magnets, pencils, and stickers. Over 150 people visited the booth during the fair. A picture of the booth setup is included in Appendix A.

2015 [24th Annual] Fairbanks Outdoors Show – Similar to the effort for the Home Show event, the Fairbanks permittees distributed copies of the Green Infrastructure Resource Guide for Fairbanks and corresponding brochures at the Outdoors Show in Fairbanks during the weekend of April 24-26, 2015, via a booth jointly hosted by the Tanana Valley Watershed Association (TVWA), FSWCD, and the Fairbanks permittees. The Outdoors Show is an annual event held in Fairbanks each spring to kick off the summer

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recreation season, and includes a wide variety of local vendors showcasing camping gear, boats, all-terrain vehicles, hunting and fishing gear, and other outdoor equipment. Approximately 150 vendors participate each year with an average of 9,000 people attending over a 3-day weekend. A picture of the booth setup is included in Appendix A.

2015 [3rd Annual] Chena River Summit – At the invitation of the TVWA, the Fairbanks permittees hosted a booth for the Chena River Summit event held on June 12, 2015. The goal of the annual summit is to gather community members together to exchange information and stimulate conversations about the economy, recreation, and habitat of the Chena River to maximize its visibility and usability in the Fairbanks area. This year's summit included a day-long series of presentations and discussions with booths set up by various agencies and organizations focused on the Chena River. The Fairbanks permittees' booth contained all the same information and giveaways as the one assembled at the Earth Day Fair. Over 100 people attended the summit.

2015 [3rd Annual] Chena Riverwalk Event – The FNSB also hosted a booth for the Chena Riverwalk event held on June 13, 2015. The event is sponsored by the U.S. Fish & Wildlife Services (USFWS) and organized by the TVWA and takes place along a two-mile stretch of pedestrian/bicycle path along the Chena River through downtown Fairbanks with over 20 booths and activities for kids along the way. The booth contained all the same information and giveaways as the one assembled at the Fort Wainwright Earth Day Fair. Over 300 people attended this year's event.

Snow Disposal Brochure Mail-out – The Fairbanks permittees and FNSB previously developed a brochure on snow disposal practices that educates local contractors on the types of pollutants found in snow in urban areas, describes the effects on water bodies if improperly disposed, and provides some examples of best management practices to help keep the pollutants out of our local water bodies. The brochure was mailed in November 2014 to all listed snow removal contractors in Fairbanks and North Pole, and will be mailed out again in 2016. A copy of the brochure and mailing list are included in Appendix A.

Landscaping Brochure Mail-out – The Fairbanks permittees and FNSB also previously developed a brochure on landscaping practices such as proper disposal of grass/brush clippings, use of fertilizers and pesticides/herbicides, and water usage. The brochure was mailed in April 2015 as an annual mailing to all listed landscaping and lawn care contractors in Fairbanks and North Pole. A copy of the brochure and mailing list are included in Appendix A.

Other Public Education & Outreach Activities

Additional public education and outreach activities completed during the 2015 reporting year included hosting a stream cleanup day event, funding the local Adopt-A-Stream (AAS) Program, implementing a storm drain stenciling program, conducting a storm drain art contest, and convening monthly storm water advisory committee meetings open to the public; all of which are later discussed under Minimum Control Measure 2 – Public Involvement & Participation.

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Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the public education and outreach activities during the 2015 reporting period:

- FNSB – David Bredlie, Public Works Department Chief Civil Engineer
- City of Fairbanks – Jackson Fox, Planning & Permitting Manager
- City of North Pole – Bill Butler, Director of City Services
- UAF – Thadd Williamson, Environmental Health, Safety, & Risk Management Dept. Safety Officer
- ADOT&PF – Katrina LeMieux, Maintenance & Operations Environmental Impact Analyst

Measureable Goals

The following table details the measureable goals set forth in the FNSB July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Maintain the Storm Water Management Program website for the duration of the permit term	Yes	No
Annually provide a minimum of 15 educational presentations on storm water at local schools	Yes	No
Annually provide guest presentations on storm water to local interest groups, as requested	Yes	No
Annually distribute storm water educational brochures at a minimum of two local events	Yes	No
Annually mail educational brochures to landscaping, snow removal, and building contractors	Yes	No
Annually issue at least one PSA to local media outlets for broadcast	Yes	No

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PUBLIC INVOLVEMENT & PARTICIPATION

Permit Requirements

To date, the FNSB has met all of the requirements under Minimum Control Measure 2 – Public Involvement & Participation. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>FNSB must comply with applicable state and local public notice requirements when implementing a public involvement/participation program. [Section 3.2.1]</i>	Annually	Complete, ongoing
<i>FNSB must continue to make the Storm Water Management Plan and all Annual Reports available to the public through the municipal library system, a FNSB maintained website, or other easily accessible location. Public outreach should include location information whenever appropriate. [Section 3.2.2]</i>	Annually	Complete, ongoing
<i>FNSB must continue the Storm Water Advisory Committee. The Storm Water Advisory Committee meeting schedule must be made known to the public and ADEC through direct mail or e-mail notification, if possible, and other locally appropriate means. [Section 3.2.3]</i>	Annually	Complete, ongoing
<i>FNSB must continue to implement a storm drain stenciling program. [Section 3.2.4]</i>	Annually	Complete, ongoing
<i>At least annually, FNSB must continue to host a community Stream Cleanup Day. [Section 3.2.5]</i>	Annually	Complete, ongoing
<i>FNSB must maintain the means of providing relevant storm water information to and accepting input from the public through providing the public with internet access via a website, a telephone hotline, and/or other appropriate means. [Section 3.2.6]</i>	Annually	Complete

Compliance Activities

Public Notices

The FNSB follows the public notice requirements of the State of Alaska’s Administrative Procedures Act (AS 44.62), including but not limited to the Open Meetings Act (AS 44.62.310), as well as all internal policies.

Storm Water Management Plan & Annual Reports

Copies of both the FNSB’s and the Fairbanks permittees’ APDES permits, Storm Water Management Plans, and most recent Annual Reports submitted to ADEC are made available to the public through the Fairbanks Storm Water Management Program website at <http://fnsb.us/pw/Pages/Storm-Water.aspx>.

Fairbanks Storm Water Advisory Committee

In 2003 the FNSB and Fairbanks permittees formed the Fairbanks Storm Water Advisory Committee (FSWAC) to coordinate and carry out the development, implementation, and review of the Fairbanks Storm Water Management Program. The FSWAC is comprised of agency representatives from each of the Fairbanks permittees’ agencies, FNSB, and ADEC, as well as two citizen members from Fairbanks and North

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Pole serving as representatives of their respective communities. The FSWAC meets at Fairbanks City Hall on the second Thursday of each month from 10:30 to 11:30 a.m. All meetings are open and advertised to the public. The meeting schedule is posted on the Fairbanks Storm Water Management Program website, in the local newspaper at least one week in advance of each meeting, and via email to the FSWAC's email distribution list. Minutes are drafted and approved by the FSWAC for every meeting held. Copies of the minutes and meeting schedule for the 2015 reporting period are included in Appendix B.

Storm Drain Stenciling Program

The FNSB annually stencils storm drain inlets to bring attention to inlets, educate the public on where storm water drains empty to, and discourage illicit discharges. There is a common misconception that storm drains flow to a sewer treatment plant, and the stenciling program helps clear up this misconception. The FNSB and the Fairbanks permittees have two types of storm drain stencils – one with an outline of a salmon on it with the words “Dump No Waste, Drains to River” for those inlets draining to the Chena River, and another with an outline of an arctic grayling with the words “Dump No Waste, Drains to Slough” for those inlets draining to Noyes and Chena Sloughs. During the 2015 reporting year, the FNSB stenciled all 10 of the known inlets. A picture of the stencils and a table showing the location and number of all storm drains stenciled to date are included in Appendix B.

Storm Drain Art Contest (2nd Annual)

In coordination with the storm drain stenciling program, the Fairbanks permittees held a 2nd annual Storm Drain Art Contest in downtown with help from the TVWA. In total, 15 artists painted 12 storm drains on Noble Street from 1st to 10th Avenues on May 16, 2015. The art was themed to bring awareness to the public that our storm drains empty into the river (i.e. not the wastewater treatment plant). Pictures of the finished artwork, as well as advertisements for the contest, are included in Appendix B.

2015 Annual Stream Cleanup Day Event

The FNSB and the Fairbanks permittees held the 11th Annual Stream Cleanup Day event in Fairbanks on June 13, 2015. Volunteers were assigned to clean up the various sections of the 5.5-mile long Noyes slough and the 2.5-mile long section of the Chena River running through downtown Fairbanks. In total, 50 people volunteered for the event and removed 1,240 pounds of trash (including litter, bags, tires, vehicle parts, bicycles, and various other items) out of the waterways. Volunteers included residents who live or work along the waterways, as well as a number of other citizens and community groups who responded to the advertisements. Copies of the 2015 Stream Cleanup Day advertisements, Facebook posts, photos, maps, participants briefing sheet, and other associated materials are included in Appendix B.

Fairbanks Storm Water Management Program Website

The FNSB maintains and hosts the Fairbanks Storm Water Management Program website. As described in previous sections the website can be viewed at: <http://fnsb.us/pw/Pages/Storm-Water.aspx>. It provides an overview of storm water and pollutants of concern in the Fairbanks area, program information for each the six Minimum Control Measures, a list of ways the public can get involved (i.e. attending storm water committee meetings, participating in stream cleanup events, etc.), links to the FNSB, City of Fairbanks, and

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City of North Pole storm water ordinances and corresponding site development plan review requirements, a link to access and view the comprehensive storm drain system map of the entire FNSB, links to local publications such as the Green Infrastructure Resource Guide for Fairbanks and Best Management Practice (BMP) Effectiveness Report for Fairbanks, directions on how to report illicit discharges, and contact information for the storm water coordinators for each of the Fairbanks permittees and FNSB. The website also provides viewers links to the ADEC Storm Water Program webpage, ADEC Construction General Permit, ADEC Alaska Storm Water Guide, Cities of Fairbanks and North Pole Storm Water Management Program Guide, FNSB BMP Design Guide, and a map and storm water plan submittal flowchart for the Fairbanks Urbanized Area. The website address is printed on educational brochures distributed at local events and through the mail.

Public Comments Log

In addition to all of the activities listed above, the FNSB maintains a log of public comments related to storm water. Comments are accepted via telephone, electronic mail, postal mail, and in person; and directed to appropriate staff to be addressed. Public comments received during the 2015 reporting period, including documentation of their resolution (if needed), are included in Appendix B.

Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the public involvement and participation activities during the 2015 reporting period:

- FNSB – David Bredlie, Public Works Department Chief Civil Engineer

Measureable Goals

The following table details the measureable goals set forth in the FNSB's July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Continue holding monthly FSWAC meetings for the duration of the permit term	Yes	No
Annually stencil FNSB storm drain inlets	Yes	No
Annually host a Stream Cleanup Day event	Yes	No
Maintain the Storm Water Management Program Website for the duration of the permit term	Yes	No

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ILLICIT DISCHARGE DETECTION & ELIMINATION

Permit Requirements

To date, the FNSB has met some, but not all, of the requirements under Minimum Control Measure 3 – Illicit Discharge Detection & Elimination. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>The FNSB shall review and revise as necessary, the program to detect and eliminate illicit discharges. The FNSB must, as part of this activity, maintain an information management system to track illicit discharges. [Section 3.3.1]</i>	August 1, 2015	Complete, ongoing
<i>No later than three years from the effective date of this permit, the FNSB must review and update an inventory and map of industrial facilities and activities that are covered by the APDES Multi-Sector General Permit (MSGP) AKR050000, and that discharge directly to their MS4. At a minimum, the inventory must include the facility name and address, nature of the business or activity, Standard Industrial Classification code(s) or the newer North American Industry Classification System code(s) that best reflect the facility product or service, the receiving water body, and type of pollutants that may be discharged by the facility or activity. [Section 3.3.2]</i>	August 1, 2016	Not complete
<i>No later than four years from the effective date of this permit, FNSB must review the effectiveness and revise, as necessary, ordinances that effectively prohibit non-storm water discharges into their MS4s. FNSB must implement appropriate enforcement procedures and actions, including enforcement escalation procedures for recalcitrant or repeat offenders. [Section 3.3.3]</i>	August 1, 2017	Not complete
<i>FNSB must prohibit any of the non-storm water flows listed in Part 1.4.1.3 through ordinance if such flows are identified by DEC or the FNSB as a source of pollutants to the MS4. FNSB must document any existing local controls or conditions placed on such discharges. [Section 3.3.4]</i>	August 1, 2017	Complete, ongoing
<i>Annually the FNSB must inform users of the MS4 and the general public of hazards associated with illegal discharges and improper disposal of waste. [Section 3.3.5]</i>	Annually	Complete, ongoing
<i>No later than three years from the effective date of this permit, the FNSB must update, as necessary, the comprehensive MS4 map developed during the previous permit cycle. At a minimum, the map must show jurisdictional boundaries, the location of all inlets and outfalls, names and locations of all waters that receive discharges from those outfalls, and locations of all municipally-owned and operated facilities, including public snow disposal sites. If available, locations of all privately operated snow disposal sites must also be indicated on the comprehensive map. A copy of the completed map must be submitted to DEC as part of the Annual Report. [Section 3.3.6]</i>	August 1, 2016	Not complete

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<p><i>FNSB must continue dry weather field screening for non-storm water flows from all outfalls. By no later than the expiration date of this permit, all of the FNSB's outfalls within the permit area must be screened for dry weather flows. The screening should include field tests of selected chemical parameters as indicators of discharge sources where sufficient flow is found at an outfall to allow for monitoring. Screening level tests may utilize less expensive "field test kits" using test methods not approved by EPA under 40 CFR Part 136 (adopted by reference at 18 AAC 83.010), provided the manufacturer's published detection ranges are adequate for the illicit discharge detection purposes. The FNSB must investigate any illicit discharge within 15 days of its detection and must take action to eliminate the source of the discharge within 45 days of its detection. Raw data and narrative review of screening and mapping shall be included in the following year's Annual Report from the year the data was collected. [Section 3.3.7]</i></p>	<p>August 1, 2018</p>	<p>Not complete</p>
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Compliance Activities

Illicit Discharge Investigations

Illicit discharge investigations are initiated when the FNSB has been notified a discharge occurred. Most notifications come from the general public. Commonly the discharge is observed at its source and the responsible party is readily apparent.

Every illicit discharge detected is entered into the FNSBs Public Comment Log, which records the date, location, and nature of the discharge, as well as a written description of the follow-up investigations and resolutions. A copy of the log for the 2015 reporting year is included in Appendix C.

Industrial Facilities Map

The FNSB does not currently have an inventory or map of industrial facilities and activities that are covered by the APDES MSGP in the Fairbanks area, but will ensure the inventory and map are developed by August 1, 2016, in accordance with the requirement set forth in the permit.

Illicit Discharge Ordinances

On June 12, 2008, FNSB adopted Ordinance 2008-22 establishing Title 21 of the FNSB Code of Ordinances. Chapter 21.30 prohibits illicit discharges to the MS4 through storm water, direct dumping, or snow clearance operations and requires immediate notification upon identifying a violation. The FNSB illicit discharge enforcement policy is regulated in Title 1 by the fine schedule. The schedule was revised as part of Ordinance 2008-22 to include fines on an escalation basis for illicit discharges and failure to notify authorities of illicit discharges. Copies of the ordinances can be found at: <http://fnsb.us/pw/Pages/Storm-Water-Ordinances.aspx>. The FNSB will review and revise these ordinances, as necessary, by August 1, 2017, in accordance with the requirement set forth in the permit.

Public Awareness Efforts

As discussed under the "Public Education & Outreach" and "Public Involvement & Participation" subsections, efforts are made annually to inform the public about illicit discharges and improper disposal of waste. Efforts include (1) maintaining the Fairbanks Storm Water Management Program website, which outlines

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procedures for reporting illicit discharges to the FNSB and the Fairbanks Permittees; (2) incorporating information about the types and causes of illicit discharges into the educational/guest presentations on storm water; (3) implementing the Storm Drain Stenciling Program, which creates public awareness about where storm water goes after it enters a storm drain inlet; and (4) mailing brochures to local landscaping and snow removal contractors, which apprises them of the local illicit discharge ordinances.

Annual Employee Training

The FNSB conducts annual employee trainings using two storm water training DVD kits from Excal Visual. One training is titled “Storm Water Pollution Prevention for MS4 Operations” and includes a 30-minute employee training DVD, training acknowledgement forms, pocket guides, and quizzes covering the topics of good housekeeping and spill prevention/control/response, vehicle and equipment fueling/maintenance/washing, waste and materials management, facility maintenance, parking lot and street sweeping, storm drain cleaning, landscaping and grounds maintenance, and working over or near surface waters. The second training is titled “Illicit Discharge Detection & Elimination for MS4 Employees” and similarly includes a 15-minute employee training DVD and amenities covering the topics of spotting illicit discharges at their source and outfalls, as well as the employees’ role in illicit discharge detection and elimination. Annually the FNSB will gather up their public works/transportation/parks and recreation employees and have them watch the DVDs. Training acknowledgement forms from the 2015 reporting year are included in Appendix C.

Comprehensive MS4 Map Update

In 2008 the FNSB and the Fairbanks permittees combined their individual MS4 maps into a single comprehensive map showing all storm water conveyance systems within the Fairbanks Urbanized Area. The map currently resides within the FNSB’s Geographical Information System (GIS) database, and can be accessed by the public at <http://fnsb.us/pw/Pages/Storm-Drain-Map.aspx>. The map contains all jurisdictional boundaries, storm drain inlets and outfalls, outfall receiving waters, and FNSB and Fairbanks permittee owned and operated facilities, including snow disposal sites. Since 2008, however, some unmapped features have been discovered in the field such as inlets and segments of pipe not shown on the map. There have also been a number of road construction projects in the Fairbanks area since 2008 that have replaced, moved, and expanded some of the conveyance system components. The Fairbanks permittees and FNSB will work together to update the map with information on the unmapped and new features by August 1, 2016, in accordance with the requirement set forth in the permit. Effort will also be made to map the privately operated snow disposal sites, which are not currently shown on the map.

Dry-weather Outfall Screening

The FNSB began conducting dry-weather screening of outfalls in 2008. The FNSB screened all known MS4 outfalls in 2008, 2010, 2011, 2012, 2014, and 2015. FNSB has not detected flow at any of the outfalls therefore; testing for pollutant types has not been conducted. FNSB will monitor the known outfalls prior to the end of the permit’s term in 2018.

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Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the illicit discharge detection and elimination activities during the 2015 reporting period:

- FNSB – David Bredlie, Public Works Department Chief Civil Engineer

Measureable Goals

The following table details the measureable goals set forth in the FNSB's July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Develop an inventory map of MSGP-covered facilities and activities by August 1, 2016	No	Will satisfy requirement in next reporting period
Review and revise, as necessary, the illicit Discharge Ordinances by August 1, 2017	No	No
Review and update the comprehensive MS4 map by August 1, 2016	No	Will satisfy requirement in next reporting period
Screen 100% of the outfalls owned and operated by the FNSB by August 1, 2018	Yes	No

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CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Permit Requirements

To date, the FNSB has met all the requirements under Minimum Control Measure 4 – Construction Site Storm Water Runoff Control – except developing provisions for receipt and consideration of information submitted by the public on site plan reviews. These provisions will be developed and implemented by the end of the permit term – August 1, 2018. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>The FNSB must annually review and revise the development, implementation, and enforcement of their existing program that reduces pollutants in any storm water runoff to the MS4 from construction activities consistent with this permit and the current version of the APDES General Permit for Storm Water Discharges from Large and Small Construction Activities in Alaska Permit #: AKR100000 (Alaska Construction General Permit or ACGP). The FNSB must discuss revisions, planned improvements, and schedule in the Annual Report. [Section 3.4.1]</i>	Annually	Complete, ongoing
<i>If ADEC waives the permit requirements for storm water discharges associated with a specific small construction activity (i.e., a single project) in accordance with 40 CFR §122.26(b)(15)(i)(A) or (B), the FNSB is not required to develop, implement, or enforce the program to reduce pollutant discharges from that particular site. [Section 3.4.2]</i>	Annually	Complete, ongoing
<i>The FNSB must maintain and update as necessary, an ordinance or other regulatory mechanism to be consistent with this Permit and with the current version of the ACGP. This ordinance or regulatory mechanism must include sanctions to ensure compliance. [Section 3.4.3]</i>	Annually	Complete, ongoing
<i>FNSB must continue to publish and distribute requirements for construction site operators to implement appropriate erosion and sediment control BMPs and to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. [Section 3.4.4]</i>	Annually	Complete, ongoing
<i>FNSB must review, and revise as necessary procedures for reviewing all site plans as required in Part 3.4.1 for potential water quality impacts, including erosion and sediment control, control of other wastes, and any other impacts that must be examined according to the requirements of the law, ordinance, or other enforceable mechanism of Part 3.4.3. These procedures must include provisions for receipt and consideration of information submitted by the public. [Section 3.4.5]</i>	Annually	Complete, ongoing; except public info. req.
<i>FNSB must review and revise as necessary, procedures for site inspection and enforcement of control measures established as required in Parts 3.4.3 and 3.4.4, including enforcement escalation procedures for recalcitrant or repeat offenders. The FNSB shall inspect all construction activities as required in Part 3.4.1 in its jurisdictions for appropriate erosion, sediment, and waste control at least once per year. [Section 3.4.6]</i>	Annually	Complete, ongoing

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<i>FNSB must conduct a biennial training session for the local construction, design, and engineering audiences related to the construction ordinance and BMP requirements referenced in Parts 3.4.3 and 3.4.4. [Section 3.4.7]</i>	Biennially	Complete, ongoing
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Compliance Activities

The FNSB’s efforts to control construction site storm water runoff include codified ordinances, publication of a local BMP design guide, a plan review and site inspection program, and biennial trainings for local developers, engineers, and contractors. The FNSB annually reviews and updates these program elements for their appropriateness and consistency with permit requirements and the ACGP.

Construction Site Storm Water Runoff Control Ordinances

On June 12, 2008 FNSB adopted Ordinance 2008-22 establishing Title 21 of the FNSB Code of Ordinances. Chapter 21.40 addresses construction site storm water runoff control by establishing a permit process for all regulated construction sites. Through this process, FNSB will review storm water management plans and conduct site inspections for each site. Regulated construction sites may not operate prior to issuance of a FNSB permit and must follow appropriate permit closure procedures prior to facility occupancy. Copies of the ordinances can be found at: <http://fnsb.us/pw/Pages/Storm-Water-Ordinances.aspx>. The FNSB will review and revise these ordinances, as necessary, before the end of the new permit term – August 1, 2018.

BMP Design Guide

The FNSB, in coordination with the City of Fairbanks and the City of North Pole, has prepared a BMP Design Guide. The guide provides an overview of both construction and post-construction storm water management design and construction requirements for new development and redevelopment projects within the Fairbanks Urbanized Area. The focus of the guide is to educate developers, engineers, contractors, and the general public on local storm water pollution control laws, and provide resources for effective structural and non-structural BMPs for the Fairbanks area. Included in the manual is a brief overview of the local storm water management program, agency review requirements, general design considerations, and list of effective BMPs for the Fairbanks area, including discussion of the design and construction requirements for snow disposal sites, septic systems, and parking lots. A two-page handout was also created for local developers, engineers, and contractors which cover the different agencies’ jurisdictions and plan submittal requirements for storm water within the Fairbanks Urbanized Area. Both the guide and handout are posted on the Fairbanks Storm Water Management Program website at: <http://fnsb.us/pw/Pages/SiteRequirements.aspx>. In addition to reviewing and revising the aforementioned ordinances, the FNSB will review and revise the guide, as necessary, before the end of the new permit term – August 1, 2018.

Plan Reviews & Site Inspections

The site development plan review and inspection program is part of FNSB Planning and Construction Permitting, which directs all contractors/owners to submit storm water plans in accordance with the requirements of the ordinances and all applicable review fees before a permit will be issued. The program also apprises contractors/owners their construction site(s) will be inspected at least once per year for

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proper erosion and sediment controls. In the event that any person holding a permit pursuant to these ordinances violates the terms of the permit, the FNSB may issue a notice of violation, suspend, or revoke the permit. The procedures currently do not have provisions for receipt and consideration of information submitted by the public; however, such provisions will be developed and added to the procedures before the end of the new permit term – August 1, 2018.

The FNSB did not review any construction site plans during the 2015 reporting period. Site plan reviews are required for each regulated construction site and will be conducted upon receipt of a Site Development Permit Application as outlined in Chapter 21.40 of FNSB Code of Ordinances Title 21.

FNSB conducted one site inspections during the 2015 reporting period. Inspection requirements are outlined in Chapter 21.40 of FNSB Code of Ordinances Title 21. Procedures focus on a review of construction access points; soil and slope stabilization; MS4 inlet protection; sediment, flow rate, channel, and outlet controls; pollutant controls; and de-watering practices. The review is primarily to ensure that appropriate BMPs have been installed and maintained correctly. Sites are scheduled for inspection based on construction start and end dates and prioritized based on site size and location. Inspections are required once per year with additional follow-up inspections scheduled as necessary to ensure compliance.

No sanctions or enforcement actions were taken during the 2015 reporting period.

Training for Local Developers/Engineers/Contractors

The Cities of Fairbanks and North Pole, FNSB, and ADEC jointly conducted a three-hour storm water training on April 7, 2015, to educate developers, engineers, and contractors about the local construction site storm water runoff and post-construction storm water management requirements within the Fairbanks Urbanized Area. In total, 27 people attended the training. Copies of the training presentation slideshow and participant sign-in sheet are included in Appendix D. This training is scheduled to be offered again in April 2017 to meet the biennial training session requirement of the permit.

Annually the ADOT&PF, ADEC, and Associated General Contractors of Alaska also host “Alaska Certified Erosion & Sediment Control Lead [AK-CESCL]” trainings in Fairbanks. The training is a two-day course that covers erosion and sedimentation processes, ACGP regulatory requirements, BMPs, site inspections, record-keeping, and cold climate challenges. A summary of all of the AK-CESCL trainings held during the 2015 reporting period is included in Appendix D.

Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the construction site storm water runoff control activities during the 2015 reporting period:

- FNSB – David Bredlie, Public Works Department Chief Civil Engineer

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Measureable Goals

The following table details the measureable goals set forth in the FNSB's July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Review and revise, as necessary, the Construction Site Storm Water Runoff Control Ordinances by August 1, 2018	No	No
Review and revise, as necessary, the Storm Water BMP Design Guide by August 1, 2018	No	No
Conduct a training/workshop for local developers, engineers, and contractors in April 2015 and April 2017	Yes (2015)	No

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POST-CONSTRUCTION STORM WATER MANAGEMENT

Permit Requirements

To date the FNSB has met some, but not all, of the requirements under Minimum Control Measure 5 – Post-construction Storm Water Management. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>FNSB must continue the implementation and enforcement of a program to address post-construction storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that disturb one acre or more, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. [Section 3.5.1]</i>	Annually	Complete, ongoing
<i>FNSB must review the effectiveness and revise, as necessary, ordinances or other regulatory mechanisms to the extent allowable under state or local law to address post-construction runoff from new development and redevelopment projects. FNSB must implement appropriate enforcement procedures and actions, including enforcement escalation procedures for recalcitrant or repeat offenders. [Section 3.5.2]</i>	August 1, 2018	Not complete
<i>FNSB must review and revise, as necessary, the publishing and distribution of a BMP design manual for post-construction storm water management, which includes a list of strategies reflecting a combination of structural and non-structural BMPs appropriate to the MS4s. [Section 3.5.3]</i>	August 1, 2018	Not complete
<i>FNSB must ensure proper long-term operation and maintenance of post-construction BMPs. [Section 3.5.4]</i>	Annually	Complete, ongoing
<i>FNSB must continue to conduct biennial training for local construction, design, and engineering audiences. [Section 3.5.5]</i>	Biennially	Complete, ongoing
<i>Green Infrastructure/Low Impact Development (LID) [Section 3.5.6]</i>	Annually	Complete, ongoing

Compliance Activities

The FNSB's existing efforts to manage post-construction storm water include codified ordinances; a plan review program for permanent storm water controls for sites disturbing greater than or equal to one acre; publication of a local BMP design guide; biennial training/workshops for local developers, engineers, and contractors. The FNSB annually reviews and update these program elements for their appropriateness and consistency with permit requirements.

Post-construction Storm Water Management Ordinances

On July 16, 2009 FNSB adopted Ordinance 2009-27 adding a new chapter to FNSB Code of Ordinances Title 21. Chapter 21.50 addresses post-construction storm water management by establishing a submittal process for Permanent Storm Water Control Plans (PSWCP) for regulated sites. The FNSB post-

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construction storm water management policy is regulated in Title 1 by the fine schedule. Copies of the ordinances can be found at: <http://fnsb.us/pw/Pages/Storm-Water-Ordinances.aspx>. The FNSB will review and revise these ordinances, as necessary, before the end of the permit term – August 1, 2018.

Long-term Operation & Maintenance of BMPs – Long term operation and maintenance of permanent storm water controls must be identified in the PSWCP and are ensured through maintenance agreements. These agreements must be executed by the owner of a regulated site, be recorded with the State of Alaska, and be binding upon all subsequent owners of the property. Each maintenance agreement must specify the items listed below.

- The persons responsible for the maintenance of permanent storm water controls.
- That the persons responsible shall maintain permanent storm water controls in accordance with the PSWCP and will correct any deficiencies in the system including repair or replacement of the controls if needed.
- That the FNSB is authorized to enter the property at reasonable times to conduct on-site inspections of the controls.

BMP Design Guide

As stated previously, the FNSB published the Storm Water BMP Design Guide in September 2009. The guide provides an overview of both construction and post-construction storm water management design and construction requirements for new development and redevelopment projects within the Fairbanks Urbanized Area. The focus of the guide is to educate developers, engineers, contractors, and the general public on local storm water pollution control laws, and provide resources for effective structural and non-structural BMPs for the Fairbanks area. Included in the manual is a brief overview of the local storm water management program, agency review requirements, general design considerations, and list of effective BMPs for the Fairbanks area, including discussion of the design and construction requirements for snow disposal sites, septic systems, and parking lots. The guide is posted on the Fairbanks Storm Water Management Program website at: <http://fnsb.us/pw/Pages/SiteRequirements.aspx>. The FNSB will review and revise the guide, as necessary, before the end of the permit term – August 1, 2018.

Design Criteria & Performance Goals – The design criteria and performance goals for post-construction (permanent) BMPs are outlined in Section 4.3 of the guide. For runoff volume, post-construction peak runoff is required to be limited to 5% over pre-construction peak runoff using the 10-year, 1-hour duration storm event. For runoff quality, the initial 1/2-inch of runoff must be treated, and after this first flush, treatment must be provided at a minimum rate of 0.005 inches per minute. These design criteria and performance goals were developed by City of Fairbanks and FNSB engineers in close coordination with ADEC and in consideration of Fairbanks's rainfall intensity data and design standards used by the Municipality of Anchorage.

Training for Local Developers/Engineers/Contractors

As stated previously, the Cities of Fairbanks and North Pole, FNSB, and ADEC jointly conducted a three-hour storm water training on April 7, 2015, to educate developers, engineers, and contractors about the local construction site storm water runoff and post-construction storm water management requirements within

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the Fairbanks Urbanized Area. This workshop is scheduled to be offered again in April 2017 to meet the biennial training session requirement of the permit.

Green Infrastructure / Low Impact Development (LID)

The FNSB participates in the Fairbanks Area Green Infrastructure group that developed the Green Infrastructure Resource Guide for Fairbanks, AK. This guide is available on the Fairbanks Storm Water Management Program website which is hosted by FNSB. The FNSB has been implementing BMP's that reduce the discharge of pollutants, and the volume and velocity of storm water for several years in projects. Many Borough facilities utilize dry wells to dispose of roof runoff. The Borough Solid Waste Facility employs infiltration planters, bioswales, dry wells, and detention basins to manage storm water. FNSB projects will continue to be evaluated for implementing these types of BMP's.

Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the post-construction storm water management activities during the 2015 reporting period:

- FNSB – David Bredlie, Public Works Department Chief Civil Engineer

Measureable Goals

The following table details the measureable goals set forth in the FNSB's July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Review and revise, as necessary, the Post-construction Storm Water Management Ordinances by August 1, 2018	No	No
Review and revise, as necessary, the Storm BMP Design Guide by August 1, 2018	No	No
Conduct a training/workshop for local developers, engineers, and contractors in April 2015 and April 2017	Yes (2015)	No
Review and revise, as necessary, strategies that reduce the discharge of pollutants for new development and redevelopment by August, 2018	No	No

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POLLUTION PREVENTION & GOOD HOUSEKEEPING

Permit Requirements

To date the FNSB has met all the requirements under Minimum Control Measure 6 – Pollution Prevention & Good Housekeeping. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2015.

Permit Requirements	Compliance Date	Status
<i>FNSB must continue to maintain and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal activities. [Section 3.6.1]</i>	Annually	Complete, ongoing
<i>Annually, FNSB must continue appropriate training for municipal personnel related to optimum maintenance practices for the protection of water quality. [Section 3.6.2]</i>	Annually	Complete, ongoing
<i>FNSB must continue to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices. [Section 3.6.3]</i>	Annually	Complete, ongoing

Compliance Activities

Operation & Maintenance Program

FNSB has 105 Road Service Areas. Each area was established through an election process by area specific residents to provide road powers to FNSB for area specific roads. The FNSB Rural Services Division supports and provides training to the Road Service Area Commissioners, who were granted road maintenance responsibilities through the aforementioned election process. Fifty-one of these service areas are located within the Fairbanks Urbanized Area. The storm water conveyance systems within these 51 service areas make up the FNSB MS4. The MS4 is maintained by various Road Service Area contractors. The FNSB Rural Services Division has developed a set of standard specifications for maintenance. The specifications include standards for replacing or repairing damaged culverts, furnishing and placing ditch lining material, cleaning and restoring the capacity of the ditches, cleaning culverts and catch basins, thawing frozen culverts and catch basins, and snow removal. Each Road Service Area is responsible for maintenance schedules and inspection of controls.

In addition, appropriate controls for reducing the discharge of pollutants are addressed on a per-department or division basis. A table that identifies specific controls being utilized is included in Appendix E.

Industrial Facilities – The FNSB does not own or operate any industrial facilities that discharge to the MS4.

Annual Employee Training

As stated previously, the FNSB conducts annual employee trainings using two storm water training DVD kits from Excal Visual. One training is titled “Storm Water Pollution Prevention for MS4 Operations” and includes a 30-minute employee training DVD, training acknowledgement forms, pocket guides, and quizzes

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covering the topics of good housekeeping and spill prevention/control/response, vehicle and equipment fueling/maintenance/ washing, waste and materials management, facility maintenance, parking lot and street sweeping, storm drain cleaning, landscaping and grounds maintenance, and working over or near surface waters. The second training is titled “Illicit Discharge Detection & Elimination for MS4 Employees” and similarly includes a 15-minute employee training DVD and amenities covering the topics of spotting illicit discharges at their source and outfalls, as well as the employees’ role in illicit discharge detection and elimination. Annually the FNSB will gather up the appropriate public works/transportation/parks and recreation employees and have them watch the DVD’s. Training acknowledgement forms for the 2015 reporting year are included in Appendix C.

Flood Management Projects

Flood management projects generally result in dredge or fill in wetlands and other water bodies, which fall under the purview of the U.S. Army Corps of Engineers (USACE) and ADEC. The USACE requires a Department of the Army Permit for all dredge and fill activities regulated under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. The ADEC also requires a Certificate of Reasonable Assurance be issued for the project(s) in accordance with Section 401 of the CWA before the Department of the Army Permit can be issued. The Certificate of Reasonable Assurance is the state’s proclamation the project(s) will meet Alaska Water Quality Standards and the requirements of the CWA; and retains conditioning authority therein, under the Federal Power Act, to require implementation of erosion and sediment control BMPs to ensure the project(s) will not violate Alaska Water Quality Standards or the CWA.

All flood management projects within the Fairbanks Urbanized Area, regardless of whether or not they result in dredge or fill in wetlands and other water bodies, additionally require a Title 15 Floodplain Permit from the FNSB. The Floodplain Permit is required for any new or substantially improved structure, alteration of a watercourse, or other development within the flood hazard area, Flood Zone A, inundated by the 100-year flood event. The goal of this permitting process is to ensure the cumulative effect of the proposed development would not create an obstruction in the floodplain, increase water surface elevation of the base flood more than one foot at any point within the Fairbanks area, or increase flood heights or velocities.

For smaller flood management projects within the Fairbanks area, such as bank stabilization projects, a multi-agency permitting process has also been established to streamline the permit application process. The permit application is collectively reviewed by the USACE, ADEC, Alaska Department of Fish & Game, Alaska Department of Natural Resources, USFWS, U.S. Department of Agriculture Natural Resources Conservation Service, and FNSB; and subsequently approved by the Alaska Department of Fish & Game in accordance with prevention of stream bank erosion, protection of fish and wildlife habitats, and adherence to Alaska Water Quality Standards and the CWA.

Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the pollution prevention and good housekeeping activities during the 2015 reporting period:

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- FNSB – David Bredlie, Public Works Department Chief Civil Engineer

Measureable Goals

The following table details the measureable goals set forth in the FNSB's July 2014 Storm Water Management Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measureable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Continue current operation and maintenance efforts intended to prevent and reduce pollutant runoff from municipal activities for the duration of the permit term	Yes	No
Annually provide employee training on storm water pollution prevention for MS4 operations	Yes	No

Outfall Monitoring

The FNSB does not conduct water quality monitoring. If there becomes a need for water quality monitoring, the Fairbanks permittees and the FNSB drafted a Quality Assurance Project Plan (QAPP) in January 2014 to meet the requirements of the permit. A copy of the QAPP was included in the 2014 Annual Report.

Evaluation of Program Effectiveness

Each year the FNSB is required to evaluate the program's effectiveness and address any needed improvements/modifications. Overall, it is the opinion of the FNSB that the program has been very effective in reducing the discharge of pollutants from the MS4 through implementation of the compliance activities under each minimum control measure. This is evidenced by the water quality data collected by the Fairbanks permittees and ADEC since the original permit was issued in 2005. Over time the data has shown improvement in water quality in both the Chena River and Chena Slough – the two primary water bodies in Fairbanks and North Pole to which the MS4 discharges. Both were previously listed as impaired by petroleum products and sediment from urban runoff, and in 2010 the ADEC determined both water bodies met state water quality standards for petroleum products. In December 2013 the ADEC announced the Chena River was also meeting state water quality standards for sediment. The Chena River is therefore expected to be removed from state's impaired waters list entirely.