

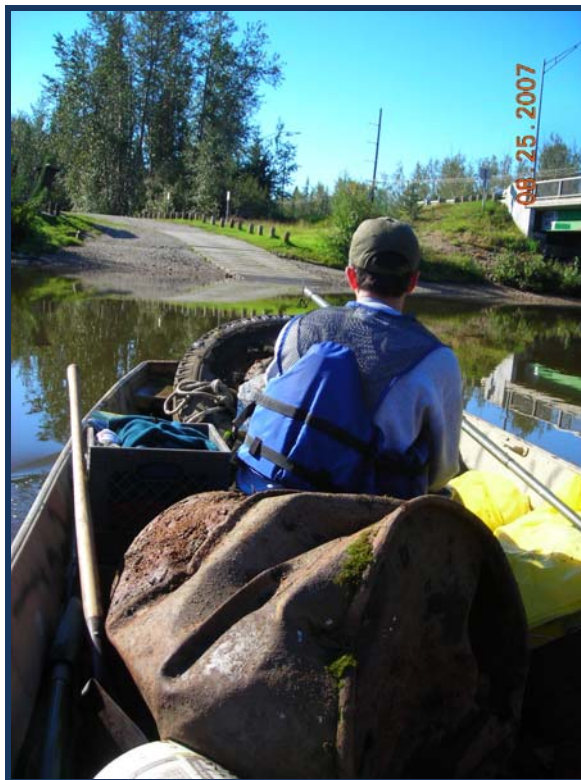
# 2008 ANNUAL REPORT

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**Phase II Municipal Separate Storm Sewer System  
National Pollutant Discharge Elimination System  
Permit No. AKS-053406**

**City of Fairbanks  
City of North Pole  
University of Alaska Fairbanks  
Alaska Department of Transportation & Public Facilities - Northern Region**

**~ May 2008 ~**




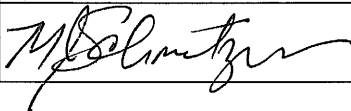
*Prepared by:*

**City of Fairbanks  
Department of Public Works  
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800 Cushman Street  
Fairbanks, Alaska 99701**

**CERTIFICATION**

The technical material and data contained in this Annual Report was prepared under the supervision and direction of the undersigned qualified professionals.

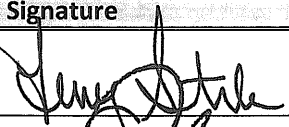

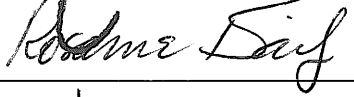

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| Name                       | Title  | Signature   | Date      |
|----------------------------|--|---|-----------|
| Jackson Fox                | Environmental Manager,<br>City of Fairbanks                    |   | 5/27/2008 |
| Michael<br>Schmetzer, P.E. | Director of Public Works & City<br>Engineer, City of Fairbanks |  | 5/28/2008 |

### APPROVAL SIGNATURES

Any person executing the approval signature of the Annual Report is making the following certification:

*"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    |
|------------------|---|--|---------|
| Terry Strle      | Mayor, City of Fairbanks  |    | 5-28-08 |
| Douglas Isaacson | Mayor, City of North Pole   |   | 5-29-08 |
| Rosanne Bailey   | Vice Chancellor of<br>Administrative Services,<br>University of Alaska Fairbanks                                      |  | 5/29/08 |
| Howard Thies     | Maintenance & Operations<br>Director, Alaska Department of<br>Transportation & Public<br>Facilities – Northern Region |  | 5/28/08 |

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**ACRONYMS**

|        |   |
|--------|---|
| AAS    | Adopt-A-Stream Program  |
| ADEC   | Alaska Department of Environmental Conservation                           |
| BMP    | Best Management Practice  |
| COF    | City of Fairbanks   |
| CONP   | City of North Pole  |
| CWA    | Clean Water Act   |
| DOT&PF | Alaska Department of Transportation & Public Facilities – Northern Region |
| EPA    | U.S. Environmental Protection Agency                                      |
| FNSB   | Fairbanks North Star Borough  |
| FSWAC  | Fairbanks Storm Water Advisory Committee                                  |
| MOA    | Memorandum of Agreement   |
| MS4    | Municipal Separate Storm Sewer System                                     |
| NPDES  | National Pollutant Discharge Elimination System                           |
| PSA    | Public Service Announcement   |
| ROW    | Right-of-way  |
| SWMP   | Storm Water Management Program  |
| TMDL   | Total Maximum Daily Load  |
| TVWA   | Tanana Valley Watershed Association                                       |
| UAF    | University of Alaska Fairbanks  |
| USACE  | U.S. Army Corp of Engineers   |

## I BACKGROUND INFORMATION

### I.A NPDES Permit

#### I.A.1 Permittee Information & Reporting Period

Permit Number: AKS-053406

Co-permittees:

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Mr. Howard Thies  
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Annexation: Have any areas been added to the municipal separate storm sewer system (MS4) due to Annexation or other legal means?

YES ☒

NO ☐

In May 2008, the City of Fairbanks (COF) accepted ownership and operation of Hunter Street and Harold Bentley Avenue in northeast Fairbanks under a Development Agreement with Bentley Beneficiaries Trust for the Bentley Trust North Development. Additions to the MS4 included approximately 2,800 linear feet of paved streets, two 18-inch diameter cross culverts, and a continuous flat-bottom ditch along the north side of Harold Bentley Avenue. The culverts convey drainage from Hunter Street and the south side of Harold Bentley Avenue to the roadside ditch on the north side of Harold Bentley Avenue. All drainage from the development is contained within this localized MS4 and does not migrate beyond the development or discharge to Waters of the U.S.

Reporting Period: June 1, 2007 to May 31, 2008

*I.A.2 Permit Overview*

The COF, City of North Pole (CONP), University of Alaska Fairbanks (UAF), and Alaska Department of Transportation and Public Facilities (DOT&PF) received a Phase II National Pollutant Discharge Elimination System (NPDES) Permit from the U.S. Environmental Protection Agency (EPA) on June 1, 2005. The four entities, collectively known as the Co-permittees, are authorized to discharge storm water to Beaver Springs, Chena River, Chena Slough, Noyes Slough, and other associated Waters of the U.S. from: (1) all portions of the MS4 owned and operated by the COF, CONP, and UAF; and (2) the portions of the MS4 with State of Alaska right-of-ways (ROWS) located within the boundaries of the Fairbanks Urbanized Area which are owned or operated by the DOT&PF. The Fairbanks Urbanized Area is defined by the U.S. Census Bureau as the area of the Fairbanks North Star Borough consisting of contiguous, densely settled census block groups and census block that meet minimum population density requirements, along with adjacent densely settled census blocks that together encompass a population of 50,000 people. A map of the Fairbanks Urbanized Area, including City Limit boundaries for the COF and CONP, is included in Appendix A.

**I.B Storm Water Management Program Overview**

Section II.A.I of the Permit requires that the Co-permittees develop, implement, and enforce a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, protect water quality, and satisfy water quality requirements of the Clean Water Act (CWA). The SWMP includes best management practices (BMPs), control techniques, system design, engineering methods, and other provisions the Co-permittees or EPA determines appropriate for the control of pollutants in discharges from the MS4. The SWMP serves as a tool to help the Co-permittees fulfill the requirements of the Permit and provisions of the CWA. The following subsections include the definition, purpose and goals, and key performance characteristics of the SWMP.

*I.B.1 Definition of the Storm Water Management Program*

The following documents define the SWMP:

- *Storm Water Management Plan – Fairbanks Urbanized Area* (COF – May 2003)
- *Fact Sheet, Permit No. AKS-053406* (EPA – October 18, 2004)
- *Permit No. AKS-053406, effective June 1, 2005* (EPA – April 19, 2005)
- *Monitoring Program Plan Including Quality Assurance Requirements*, (COF – February 2006)

The Co-permittees submitted the Storm Water Management Plan with the original Permit application. Subsequently, the EPA issued the Fact Sheet during the permitting process for public comment, which concluded on December 2, 2004. Comments responses were published in April 2005, with final Permit issuance on April 19, 2005. The Co-permittees then submitted the Monitoring Program Plan in February 2006, as required by Section IV.A.2.d of the Permit. The

final Permit adopted the Storm Water Management Plan by reference, and expanded on the Permit requirements to include six Minimum Control Measures, as follows:

1. Public Education and Outreach
2. Public Involvement / Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping for Municipal Operations

Pursuant to Section II.A.4.b and in accordance with the timelines set within the Permit, the Co-permittees expect full implementation of the SWMP no later than five years from the effective date of the Permit.

*I.B.2 Purpose and Goals of the Storm Water Management Program*

The purpose of the SWMP is to guide the Co-permittees' collective efforts to satisfy the requirements of the Permit and water quality requirements of the CWA. Through institution of BMPs, control techniques, system design, engineering methods, and other provisions, the Co-permittees will ensure all applicable federal and state storm water quality requirements are attained. Appropriate goals identified for the SWMP include, but are not limited to:

- Compliance with Permit No. AKS-053406
- Adherence to Alaska's Category 5 / Section 303(d) Impaired Waters and future Total Maximum Daily Load (TMDL) Waterbody Recovery Plan Provisions
- Meeting State of Alaska Water Quality Standards (18 AAC 70) and Wastewater Disposal Regulations (18 AAC 72), including compliance with Alaska's Anti-Degradation Policy

*I.B.3 Storm Water Management Program Key Performance Characteristics*

To successfully meet the purpose and goals of the SWMP and CWA objectives, the SWMP must possess key performance characteristics. Key performance characteristics identified in the SWMP include, but are not limited to: compliance with the requirements of the Permit; intergovernmental coordination and cooperation; appropriateness of BMPs for the local population, pollution sources, climactic and soils conditions, and waterbody recovery plans; monitoring data used to assess the success of the SWMP at reducing the discharge of pollutants to the maximum extent practicable; and proposed and completed changes to the SWMP to remediate ineffective, infeasible, or cost prohibitive SWMP control measures or goals.



## II ANNUAL REPORT

### II.A Annual Report Overview

At least once annually, the Co-permittees are required to submit an Annual Report to the EPA and the Alaska Department of Environmental Conservation (ADEC). This Annual Report must include, at a minimum:

- a. An evaluation of compliance with the requirements of the permit, the appropriateness of identified BMPs, and progress towards achieving identified measurable goals of the SWMP for each Minimum Control Measure;
- b. Results of any information collected and analyzed during the previous 12-month reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable;
- c. A summary of the activities the Co-permittees plan to undertake during the next reporting cycle (including an implementation schedule) for each Minimum Control Measure;
- d. Proposed changes and completed changes to the SWMP, including any changes to BMPs or identified measurable goals under the Minimum Control Measures;
- e. A description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards; and
- f. Notice if the Co-permittees are relying on another entity to satisfy some of the permit obligations, if applicable.

This document fulfills the annual reporting requirements for the third year following the effective date of the Permit, pursuant to Sections II.B.1 through II.B.6, IV.C, and Appendix A. The following sections provide a comprehensive summary of the Co-permittees' efforts towards completion of the six aforementioned Minimum Control Measures, and an overall evaluation of the SWMP to date.

## II.B Minimum Control Measures

### II.B.1 *Public Education and Outreach*

The requirements of Minimum Control Measure 1, *Public Education and Outreach*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.1.d and Appendix A of the Permit.

**1. *Describe the public education programs and outreach programs accomplished during the previous calendar year, including at least one copy of each educational material distributed.***

The Fairbanks Storm Water Advisory Committee (FSWAC) was formed in 2003 to coordinate and carry out the development, implementation, and review of the SWMP. Subsequent to issuance of the Permit in 2005, the FSWAC selected members to form a Public Education and Outreach Subcommittee to implement a public education and outreach program to meet the requirements of Minimum Control Measures 1 and 2 of the Permit. The subcommittee currently consists of representatives from the Co-permittees and Fairbanks North Star Borough (FNSB), which has a separate Phase II NPDES Permit. Subcommittee meeting minutes for the 2007/2008 reporting year are included in Appendix A.

In accordance with the SWMP, public 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 waterbodies, and provides information on how citizens and businesses can take steps to reduce pollutants in storm water runoff. Program activities completed during the 2007/2008 reporting year include:

- Maintaining an Informative Storm Water Management Program Webpage
- Broadcasting a Spring Public Service Announcement (PSA)
- Providing National Earth Week Educational Presentations to Local Schools
- Distributing Educational Material at Local Events

Additional public education and outreach activities completed during the 2007/2008 reporting year included hosting an annual community stream cleanup event, organizing an ongoing Adopt-A-Stream (AAS) Program, conducting a Community Survey, implementing a Storm Drain Stenciling Program, and convening monthly FSWAC meetings open to the public; which are later discussed under Minimum Control Measure 2.

The following summarizes the public outreach and education activities accomplished under Minimum Control Measure 1 during the 2007/2008 reporting year.

Fairbanks Storm Water Management Program Webpage

The FNSB maintains the Fairbanks Storm Water Management Program Webpage at <http://co.fairbanks.ak.us/PWorks/StormWaterManagementProgram/> on behalf of the both the FNSB and Co-permittees. The webpage provides a definition of storm water, background on why storm water is regulated, description of the Fairbanks Storm Water Management Program, agency contacts, directions on how to report illicit discharges, news and events, FSWAC meeting dates, and a copy of the FNSB's and Co-permittees' Phase II NPDES Permits and current Annual Reports. The webpage also provides viewers links to the DOT&PF Alaska Storm Water Pollution Prevention Plan Guide, EPA Storm Water Program webpage, EPA Construction General Permit, a flyer detailing the steps for contractors/homeowners to obtain permit coverage, and a map of the Fairbanks Urbanized Area. The COF also maintains a link to the webpage on their Home Page at <http://ci.fairbanks.ak.us/>.

In April 2008, the webpage was updated to include new agency contact information, a link to the online Community Survey, an FSWAC Citizen Member Vacancy Announcement, and other announcements regarding National Earth Week, Annual Spring Cleanup Day, and the Annual Stream Cleanup event. A copy of the updated webpage is included in Appendix A.

Spring Public Service Announcement

In April 2008, the FSWAC prepared a new PSA for distribution to local radio stations to broadcast over the radio during the week leading up to the Annual Spring Cleanup Day, which was held on May 10, 2008. The PSA reminded the public to help keep pollutants out of our storm drains and ditches, which ultimately drain to our waterways.

The PSA was sent to KIAK, KUAC, KFAR, and KJNP radio stations on April 30, with an "any on-air announcement" request through May 9, 2008. KIAK forwarded the message to all Clear Channel stations including KIAK, KKED, KAKQ, and KKED; and KFAR forwarded the message to all New Northwest stations including KCBF, KXLR, and KWLF. The PSA was delivered on "run of station," which means the number and time of day of the broadcasts were self-determined by each radio station. A copy of the Spring 2008 PSA is included in Appendix A.

National Earth Week Educational Presentations

The FSWAC delivered an updated version of the *Storm Water is Cool* presentation to various FNSB elementary schools in Fairbanks and North Pole during the observation of National Earth Week in late April 2008. The 15- to 25-minute presentation provided an overview of the types of pollutants carried in storm water, how those pollutants reach area waterbodies, and what can be done to limit the effects. Several of the presentations also included an additional 15- to 25-

minute watershed model demonstration. The EnviroScape® Nonpoint Source Model helped children make the visual connection between what they learned during the slide show and what happens in our watershed. The children watched storm water pick up pollutants (cocoa and colored drink mixes) and carry them to a lake.

In total, there were 16 presentations delivered to over 500 elementary school children at six different schools. After each presentation, *Storm Water is Cool* wristbands were distributed to the students. Some first, second, and third grade students also received National Earth Week coloring books.

The enthusiastic reaction of the children and the generation of insightful questions evidenced the success of this educational effort. A copy of the slide show presentation, spreadsheet outlining participation, information on the watershed model, coloring book, and some student responses are included in Appendix A.

#### Educational Material Distribution

In addition to the educational material distribution detailed above, the FSWAC developed a Community Survey on local storm water quality for distribution throughout the summer at local events. The first distribution was made at the Northern Living Home Show in Fairbanks during the weekend of March 28 – 30, 2008, at the Fairbanks Soil and Water Conservation District booth. The Northern Living 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, equipments, and services. Approximately 150 vendors participate each year with an average of 7,500 people attending over a 3-day weekend.

Provided at the Fairbanks Soil and Water Conservation District booth during the event was over 100 hardcopies of the Community Survey and approximately 75 *Storm Water is Cool* wristbands. Additional discussion of the Community Survey is included under Minimum Control Measure 2.

#### **2. Describe the methods and frequency of distributing information.**

As discussed above, the FSWAC distributed educational information to the public using multiple formats including the world-wide-web, radio broadcasts, in-person presentations, and print media. The Fairbanks Storm Water Management Webpage provides information on our local storm water program to the public year-round. The Spring PSA and National Earth Week Educational Presentations are provided annually in 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 frequency of distribution of other educational material distribution varies from year to year, but is largely focused in the summer months during the construction season. For example, the Community Survey and other related outreach materials will be distributed throughout the summer at local events through the end of September.

***3. Describe the target audiences and pollutants / sources that are addressed by the program, and how they were selected.***

Target audiences for the public education and outreach program include:

- Home and property owners
- Business owners
- Other federal, state, and local agencies
- Students

Education and outreach efforts have been tailored to reach the above-listed target audiences, both individually and collectively, through message content and method of distribution. For example, the content and accessibility of the Fairbanks Storm Water Management Webpage collectively provides regulatory information for home, property, and business owners. The National Earth Week Educational Presentations, on the other hand, limit their focus to educating students which may have limited exposure to curriculum on storm water and the effects of water pollution. Furthermore, the Spring PSAs and other educational material distribution, such as the Community Survey, focus on all residents of the community.

The FSWAC selected pollutants of concern to address under this program based on Alaska's Category 5 / Section 303(d) Impaired Waters List, which includes the Chena River, Chena Slough, and Noyes Slough. The pollutants of concern for the Chena River and Chena Slough include petroleum products and sediment; and Noyes Slough includes petroleum products, sediment, and debris. Information on each of these pollutants was specifically incorporated into all of the aforementioned education and outreach efforts.

***4. Estimate the number of people reached by the program over the previous 12-month period.***

The public education and outreach program has reached approximately 6,500 people during the 2007/2008 reporting year; which includes over 1,000 visitors to the Fairbanks Storm Water Management Webpage between June 2007 and May 2008, roughly 5,000 residents that may have heard the PSA over the radio, over 500 students that attended the National Earth Week Educational Presentation, and approximately 100 people that picked up a Community Survey and wristband at the Northern Living Home Show.

Under Minimum Control Measure 2, additional public education and outreach activities completed during the 2007/2008 reporting year may have also reached a potential audience of 5,000 people. These activities included hosting an annual community stream cleanup event, organizing an ongoing AAS Program, implementing a Storm Drain Stenciling Program, and convening monthly FSWAC meetings open to the public.

***5. List the measurable goals for the public education and outreach program over the next calendar year, and dates by which the measurable goals will be achieved.***

The measureable goal for the public education and outreach program over the next reporting year will be a general increase in the number and frequency of PSAs broadcasted, number of presentations given to local schools and organizations, and number and type of educational materials distributed. The Public Education and Outreach Subcommittee will meet again in June or July 2008 to discuss, plan, and direct efforts to achieve this goal. Preliminary ideas for the next reporting year include the following:

Seasonal Public Service Announcements

The subcommittee will develop seasonal PSAs for distribution during each season of the year (i.e. summer, fall, winter, and spring), which will address storm water concerns and BMPs pertinent to each season. For instance, PSAs may focus on lawn care and vehicle maintenance practices during the summer, leaf litter disposal during the fall, snow disposal practices during the winter, and snowmelt runoff during the spring. PSA distribution methods may also include newspaper advertisements in addition to radio broadcasts.

Educational Presentations

The FSWAC is currently scheduled to make a presentation before the Alaska Society of Professional Land Surveyors on May 27, 2008. The presentation will include an overview of the two Phase II NPDES Permits held by the FNSB and Co-permittees, background on storm water concerns in the Fairbanks area, and information on new and upcoming local regulation of storm water. The FSWAC may also make a similar presentation before the Alaska Society of Civil Engineers in July or August 2008.

Additionally, the National Earth Week Educational Presentations made to local schools may be expanded to middle and high schools next April. Past presentations have focused on elementary schools, and are planned to continue. However, the subcommittee is now ready to increase their reach to begin educating higher grade levels.

Educational Material Distribution

The subcommittee plans to make additional distributions of educational material, including the Community Survey, at the following local events this summer:

- |                                       |                        |
|---------------------------------------|------------------------|
| • Golden Days Street Fair             | July 19, 2008          |
| • Tanana Valley State Fair            | August 1 – 9, 2008     |
| • Annual Community Stream Cleanup Day | August 2008 (Date TBD) |

The Golden Days Parade and Street Fair is an annual week-long event in downtown Fairbanks, consisting of a collection of local festivities honoring the history of gold discovery in Fairbanks.

The subcommittee will focus on the Street Fair portion of the event, when a multitude of vendors are present, and the subcommittee can secure a booth to distribute education materials. In addition to distribution of the Community Survey, the subcommittee plans to prepare flyers promoting storm water education and sustainable practices, as well as local regulatory information.

Similarly, the subcommittee plans to secure a booth this summer at the Tanana Valley State Fair to distribute educational materials. Members of the subcommittee will assist in manning the booth at the Fair to present informational handouts and perform direct outreach to the public. The handouts and other materials prepared for the Golden Days Street Fair and Tanana Valley State Fair will also be provided to volunteers participating in the annual Community Stream Cleanup Day.

#### Local Car Wash Fundraising Events

In an effort to promote proper water capture and retention at car wash fundraisers, the subcommittee also plans to identify facilities that retain storm water on site, as well as locations that provide large grassy areas to see if they are willing to host the fundraisers. The subcommittee will promote the use of these locations throughout the summer.

#### ***6. Identify the persons responsible for implementing and coordinating the education activities.***

The following individuals were responsible for implementing and coordinating the public education and outreach activities during the 2007/2008 reporting year:

|         |   |
|---------|---|
| COF:    | Jackson Fox, Environmental Manager  |
| CONP:   | Bill Butler, Director of City Services  |
| UAF:    | Thaddeus Williamson, Environmental Health, Safety, and Risk<br>Management Department Safety Officer |
| DOT&PF: | Brett Nelson, Maintenance Environmental Analyst   |

The Co-permittees would also like to thank Jennifer Schmetzer of the FNSB and Joni Scharfenberg of the Fairbanks Soil and Water Conservation District, for their significant contributions to the public education and outreach program during the 2007/2008 reporting year. Ms. Schmetzer and Ms. Scharfenberg are both members of the FSWAC, as well as the Public Education and Outreach Subcommittee.

Compliance with Permit Requirements

To date, the Co-permittees have met all requirements detailed under Minimum Control Measure 1 and Section II.B.1 of the Permit. The following table provides a summary of the public education and outreach requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component   | Compliance Date                 | Status<br>(as of May 2008) |
|----------------|--|---------------------------------|----------------------------|
| II.B.1.a       | Plan and implement public education program for local community        | June 1, 2006                    | Complete                   |
| II.B.1.b       | Distribute storm water educational materials to target audiences       | Annually, in April of each year | Complete, ongoing          |
| II.B.1.c       | Prepare and distribute outreach materials to print and broadcast media | Annually, in April of each year | Complete, ongoing          |



*II.B.2 Public Involvement / Participation*

The requirements of Minimum Control Measure 2, *Public Involvement / Participation*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.2.h and Appendix A of the Permit.

**1. Describe the activities and target audiences for public involvement that the program accomplished for the preceding 12-month period, including any monitoring and / or survey results, number of storm drains stenciled, etc.**

The target audiences for the public involvement / participation efforts are the same as those for the education and outreach program outlined under Minimum Control Measure 1 in the previous section. The following summarizes the public involvement / participation activities accomplished under Minimum Control Measure 2 during the 2007/2008 reporting year.

Fairbanks Storm Water Management Program Webpage

The FNSB maintains the Fairbanks Storm Water Management Program Webpage at <http://co.fairbanks.ak.us/PWorks/StormWaterManagementProgram/> on behalf of the both the FNSB and Co-permittees. As previously discussed under Minimum Control Measure 1, the webpage provides a copy of the FNSB's and Co-permittees' Phase II NPDES Permits and current Annual Reports. In April 2008, the webpage was updated to include new agency contact information, a link to the online Community Survey, an FSWAC Citizen Member Vacancy Announcement, and other announcements regarding National Earth Week, Annual Spring Cleanup Day, and the Annual Stream Cleanup event. A copy of the updated webpage is included in Appendix A.

Annual Community Stream Cleanup Day

The FSWAC, with help from the Tanana Valley Watershed Association (TVWA) and Fairbanks Soils and Water Conservation District, held the third annual Community Stream Cleanup Day in Fairbanks at Noyes Slough on August 25, 2008. The event was advertised in the Fairbanks Daily News-Miner Outdoor Calendar, over the radio with a 30-second PSA, via email and local bulletin boards with a flyer, and via mail to local residents living along the slough. The event began at 9:00 a.m. with a safety orientation talk, and individual participants were assigned to mapped sections of the 5.5-mile long slough. The cleanup effort proceeded by canoe and on foot, along the banks of the slough. The FSWAC provided the canoes, bags, gloves, tables, and food and drinks for the event, as well as vans to provide transportation to and from pickup and drop-off locations, and signed litter pickup sites where participants were directed to drop off collected debris and pick up extra bags. A local business, Fountainhead Development Inc., also sponsored the event by providing participants t-shirts decorated with thematic graphics of the cleanup effort.

In total, over 40 people participated in the event, removing approximately 2.4 tons of debris from Noyes Slough, including litter, bags, drums, pipe, tires, vehicle parts, shopping carts, chairs, bikes, concrete debris, and various other items. Cleaning up the slough presented an outstanding educational opportunity to reach local businesses and residents who live or work along the Noyes Slough, as well as a number of interested and involved citizens who responded to our advertisements, notifying other residents of the event. A copy of the 2007 Community Stream Cleanup Day advertisements, photos and a newspaper article covering the event, and other associated event materials are included in Appendix B.

In conjunction with the Community Stream Cleanup Day at Noyes Slough, the FSWAC also provided garbage bags and signed litter pickup sites at other local waterbodies for individuals preferring to focus their cleanup efforts in areas other than Noyes Slough. Garbage bags and a map of the litter pickup sites were made available to interested persons at the Fairbanks, North Pole, and University Fire Stations between August 20 and 25, 2008. Litter pickup sites were located at Ballaine Lake, Deadman Slough, Chena Slough, Beaver Springs, Tanana River, and Chena River at Pike's Landing, Pioneer Park, and Graehl Park. The objective of the combined cleanup effort was to increase public awareness for future Community Stream Cleanup Days.

#### Volunteer Monitoring and AAS Program

The FSWAC entered into a Memorandum of Agreement (MOA) with the TVWA in April 2008 to implement the AAS Program on behalf of the FSWAC. Under the terms of the MOA, volunteer monitoring is a component of the AAS Program. A copy of the MOA is included in Appendix B.

The community-based AAS Program provides an array of volunteer monitoring and restoration activities that provide residents and local businesses and organizations with the opportunity to become active stewards of the watershed. Elements of the program include water quality monitoring, bio-assessment studies, litter pick-up, stream bank restoration and maintenance, and management of flow restrictions. Through implementation of the program, the FSWAC and TVWA can raise public and agency awareness of water quality issues, the community can monitor and improve local water quality within the watershed, and the TVWA can obtain a strong volunteer base by providing members of the community a sense of ownership in local water quality issues.

Under the terms of the MOA, the TVWA has agreed to administer the AAS Programs with the support of the FSWAC. For successful implementation of the programs, the TVWA will maintain guidelines for the programs and an up-to-date list of stream section adoptees and the stream sections they are responsible for maintaining. The FSWAC will provide program support by providing annual funding and additional, in-kind assistance to the TVWA, as well as hosting the annual Community Stream Cleanup Day.

Annual program record keeping and reporting requirements will include records of program meetings held, number of adoptees participating in the programs, identification and total length

of each adopted stream section, approximate percentage of adopted stream length compared to the overall length, and summary of cleanup efforts performed by adoptees and other volunteers. The first volunteer training session for the AAS Program was held on May 3, 2008. Copies of the Training Session Agenda, Volunteer Training Manual (1<sup>st</sup> Edition), AAS Program Questionnaire, Volunteer Water Quality Monitoring Contract Agreement, and Field Sampling Checklist are included in Appendix B. To date, six "Stream Teams" have been formed to carry out AAS Program activities. The TVWA is also currently in the process of adopting out three stream sections to three local organizations in Fairbanks, as the first stream section adoptees.

#### Community Survey

As previously discussed under Minimum Control Measure 1, the FSWAC developed a Community Survey of public knowledge, behaviors, and attitudes related to storm water management in the Fairbanks area. The survey was published on March 28, 2008, in both hardcopy format and online through [www.surveymonkey.com](http://www.surveymonkey.com). The first hardcopy distribution was made at the Northern Living Home Show in Fairbanks at the Fairbanks Soil and Water Conservation District booth. An online link was also placed on the FNSB's main webpage and Fairbanks Storm Water Management Webpage. To date, over 100 surveys have been collected. A copy of the survey is included in Appendix B.

Future distributions are scheduled for the Golden Days Street Fair (July 19) and Tanana Valley State Fair (August 1-9). The survey period will remain open through September 30, 2008.

#### Storm Drain Stenciling Program

The FSWAC has continued its storm drain stenciling program in the 2007/2008 reporting year. The purpose of the stencils is to identify storm drain inlets to the public, educate the public on where storm water drains outfall, and discourage illicit discharges. A total of 38 new storm drain inlets were stenciled during the 2007/2008 reporting year. A picture of a stenciled storm drain inlet and a table showing the location and number of storm drains stenciled to date is included in Appendix B.

#### Storm Water Advisory Committee

As previously discussed under Minimum Control Measure 1, the FSWAC has regularly convened meetings since 2003. The FSWAC meets on a monthly basis to coordinate and carry out the development, implementation, and review of the SWMP. Common topics addressed by the committee include:

- Identification of threats to local waterbodies, and recognition of the importance of detecting and reporting illicit discharges
- Preparation of ordinances and regulations for illicit discharges, construction site storm water runoff, and post-construction storm water management

- Review and comment on local storm water management programs
- Selection and implementation of BMPs
- Review of the effectiveness of permit activities
- Coordination of group permittee activities

Current committee members and participants include representatives from the COF, CONP, UAF, DOT&PF, FNSB, and ADEC. The committee also has one Citizen Member from North Pole, serving as a community representative of North Pole. In an effort to appoint an additional Citizen Member to serve as a community representative of Fairbanks, the FSWAC posted a Citizen Member Vacancy Announcement on April 1, 2008. The vacancy announcement and FSWAC Meeting Schedule can be found on the Fairbanks Storm Water Management Webpage.

Current FSWAC subcommittees include the Public Education and Outreach Subcommittee and MS4 Mapping Subcommittee. All FSWAC meetings are open to the public, and advertised on the Fairbanks Storm Water Management Webpage and in the Fairbanks Daily News-Miner under the Community Announcements section of the newspaper. Copies of the meeting minutes, vacancy announcement, meeting schedule, and newspaper advertisements for the 2007/2008 reporting year are included in Appendix B.

***2. Describe the procedures for receiving and reviewing public comments.***

The Co-permittees maintain 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 personnel to be addressed. Public comments received during the 2007/2008 reporting year, including documentation of their resolution if required, are included in Appendix B.

***3. Describe the measurable goals for the public involvement / participation program over the next 12-month period, and dates by which the Co-permittees will accomplish each of the upcoming measurable goals.***

Presented below are the measureable goals to be accomplished over the next reporting year for each of the aforementioned public involvement / participation activities.

**Annual Community Stream Cleanup Day**

The measureable goal for the annual Community Stream Cleanup Day is a general increase in the number of participants each year. From 2006 to 2007, the number of people participating in the annual Community Stream Cleanup Day doubled. Selection of a stream for next year's event has yet to be made; however, the FSWAC expects to solicit even greater participation than previous years' events. The FSWAC is currently deliberating conducting next year's event at either (1) Chena River, which has even greater visibility to area residents than Noyes Slough or Chena Slough; or (2) Noyes Slough, which remains in need of continued cleanup, and for which the ADEC recently published a Draft TMDL for debris.

The 2008 Community Stream Cleanup Day will again be scheduled for mid to late August. The FSWAC additionally plans to distribute handouts and other materials prepared for the Golden Days Street Fair and Tanana Valley State Fair to volunteers participating in the event, as discussed under Minimum Control Measure 1.

#### Volunteer Monitoring and AAS Program

The measureable goal for the AAS Program and volunteer monitoring activities is an increase the length of streams adopted each year, and to hold at least one volunteer training session each year. As previously noted, the first volunteer training session for the AAS Program was held on May 3, 2008. The next volunteer training session is currently scheduled for May 24, 2008. A copy of the May 24<sup>th</sup> Training Session Agenda is included in Appendix B. To date, the TVWA has also secured six "Stream Teams" to carry out AAS Program activities, and is currently in the process of adopting out three stream sections to three local organizations in Fairbanks, as the first stream section adoptees. Over the next reporting year, the FSWAC expects both the number of Stream Teams and length of streams adopted to increase.

#### Community Survey

The measureable goal for the Community Survey is to develop, distribute, and analyze the survey. Future distributions of the Community Survey this summer are scheduled for the Golden Days Street Fair on July 19 and Tanana Valley State Fair August 1 - 9. The survey period will remain open through September 30, 2008. Depending on the number of surveys collected in 2008, the FSWAC may additionally choose to continue the survey in 2009. The final results of the survey will be submitted to the EPA no later than six months prior to the expiration date of the Permit.

#### Storm Drain Stenciling Program

The measureable goal for the Storm Drain Stenciling Program over the next reporting year will be to stencil at least 25 additional storm drain inlets, and examine previously stenciled inlets for paint wear. The Co-permittees intend to continue the program throughout the summer, concentrating on pedestrian corridors in downtown and other areas of Fairbanks.

#### Storm Water Advisory Committee

The measureable goal for the FSWAC is to regularly convene meeting throughout the next reporting year. The FSWAC currently, and will continue to, hold monthly meetings open to the public. A representative from each of the Co-permittees is present at each meeting. In order to aid in increasing public attendance at these meetings, the FSWAC will also pursue added advertisement of the meetings. Preliminary advertising ideas include posting meeting announcements in the UAF Cornerstone Faculty & Staff Newsletter, and on the Associated General Contractors of Alaska website.

**4. Identify the persons responsible for implementing and coordinating the public involvement / participation activities.**

The following individuals were responsible for implementing and coordinating the public involvement / participation activities during the 2007/2008 reporting year:

COF: Jackson Fox, Environmental Manager  
Michael Schmetzer, Director of Public Works & City Engineer  
Helena Byard, Engineer I  
CONP: Bill Butler, Director of City Services  
UAF: Thaddeus Williamson, Environmental Health, Safety, and Risk  
Management Department Safety Officer  
William Krause, Hazardous Materials Supervisor  
DOT&PF: Brett Nelson, Maintenance Environmental Analyst  
Clark Milne, Maintenance Engineer

The Co-permittees would also like to thank the FNSB, Fairbanks Soil and Water Conservation District, and TVWA for their significant contributions to the public involvement / participation activities during the 2007/2008 reporting year. All three entities provided much-needed support to the FSWAC during the 2007 Community Stream Cleanup Day. The TVWA has also greatly benefitted the FSWAC by volunteering to implement the AAS Program on behalf of the Co-permittees.

**Compliance with Permit Requirements**

To date, the Co-permittees have met all requirements detailed under Minimum Control Measure 2 and Section II.B.2 of the Permit. The following table provides a summary of the public involvement / participation requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component  | Compliance Date                          | Status (as of May 2008) |
|----------------|---|--|-------------------------|
| II.B.2.b       | Make the SWMP and all Annual reports available to the public            | Ongoing                                  | Complete, ongoing       |
| II.B.2.c       | Host an annual Community Stream Cleanup Day                             | January 1, 2007, and annually thereafter | Complete, ongoing       |
| II.B.2.d       | Organize an ongoing Volunteer Monitoring and AAS Program                | June 1, 2007, and ongoing thereafter     | Complete, ongoing       |
| II.B.2.e       | Develop and distribute a Storm Water Attitude Survey                    | June 1, 2009                             | Complete, ongoing       |
| II.B.2.f       | Develop and implement a Storm Drain Stenciling Program                  | June 1, 2006, and ongoing thereafter     | Complete, ongoing       |
| II.B.2.g       | Convene a Storm Water Advisory Committee on a regularly scheduled basis | Ongoing                                  | Complete, ongoing       |

*II.B.3 Illicit Discharge Detection and Elimination*

The requirements of Minimum Control Measure 3, *Illicit Discharge Detection and Elimination*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.3.h and Appendix A of the Permit.

**1. Describe the criteria used to prioritize investigations in areas suspected of having illicit discharges.**

Criteria to prioritize illicit discharge investigations are based on available water quality information, land and building use, and history of public complaints and confirmed illicit discharges. This process relies heavily on the knowledge of Co-permittee staff members of the MS4 flow paths and facilities' potential to discharge. The current prioritization of facilities to be examined during the illicit discharge investigation process is as follows:

- Priority 1: Heavy industrial and commercial areas; and automobile-related facilities
- Priority 2: Dry cleaners/laundromats; construction companies; manufacturing companies; laboratories; and medical facilities
- Priority 3: Older, residential neighborhoods; retail establishments; and schools

**2. Describe the procedures used to locate and remove illicit discharges, including detection methods.**

Dry-weather screening of outfalls in high-priority areas (i.e. heavy industrial and commercial areas) is the primary method of detecting illicit discharges. The Co-permittees are, and will continue to, survey outfalls within their respective jurisdictions on a monthly basis during the summer. All Co-permittee Public Works and Maintenance staff are also trained and directed to check outfalls for flow during dry weather conditions while performing other work in areas where the outfalls are located. Any color, odor, turbidity, and floatable matter in dry-weather flow will be noted in order to help identify possible sources of the discharge. Once detected, an illicit discharge will be tracked back to its source by tracing the discharge upstream through manhole observations, until a manhole junction is reached that shows no evidence of discharge, indicating that the non-storm water flow originates downstream of that manhole junction. Identification of the responsible party will then be determined by examining and investigating nearby facilities in order of the aforementioned criteria.

To aid in the detection and elimination of illicit discharges, and in accordance with the requirements of Minimum Control Measure 3, the Co-permittees have additionally taken steps to (1) sample outfalls in the spring and late summer when flow is prevalent to obtain background data on storm water quality discharging from the MS4; (2) prepare a comprehensive map of the MS4, including all portions of the MS4 owned by the Co-permittees and FNSB; and (3) conduct a

hydrologic study of all roadway drainage structures to determine whether flows from those structures drain to Waters of the U.S.; as follows:

Outfall Discharge Monitoring

In April 2008, the Co-permittees continued water sampling efforts at outfall locations identified in the February 2006 *Monitoring Program Plan including Quality Assurance Requirements*. In total, six outfalls were sampled with one duplicate. The Co-permittees plan to continue annually sampling outfalls in the spring and late summer to build base level parameters for detection of illicit discharges. Copies of the April 2008 Outfall Discharge Monitoring Report, Summary of Analytical Results, and Narrative of Analyses are included in Appendix C.

Comprehensive MS4 Map / Hydrologic Study

The FNSB and Co-permittees have completed development the comprehensive MS4 map of all storm water conveyance systems within the Urbanized Area. The map currently resides in the FNSB's Geographical Information System, and contains locations of all jurisdictional boundaries, storm drain inlets and outfalls, outfall receiving waters, and FNSB and Co-permittee owned and operated facilities. In conjunction with the mapping efforts, a hydrologic study was also performed to delineate area watershed boundaries and identify storm water flow paths to Waters of the U.S. An electronic copy of the map and hydrologic study will be appended to FNSB's 2008 Annual Report.

***3. Provide a summary of all dry weather testing conducted to date, and of Co-permittee activity to remove any identified illicit discharges.***

The Co-permittees began conducting dry weather screening of outfalls on the Chena River from Fort Wainwright downstream to Noyes Slough in June 2007. The purpose of the dry weather screening is to detect and eliminate ongoing, unpermitted non-storm water discharges to the MS4. Screening is conducted in the summer months during dry weather periods when no storm water flow is occurring. When non-storm water discharges are detected, a water sample is taken from the outfall and subsequently tracked up-drain from the discharge point to the source using the MS4 Map. Since inception of the dry weather screening program, four illicit discharges have been detected by the Co-permittees. In 2007, illicit discharges were detected from a hot dog vendor who was pouring cooking wastewater down a storm drain inlet in downtown Fairbanks, a restaurant that was pouring mop wastewater down a storm drain inlet in downtown Fairbanks, and a contractor observed washing out a concrete truck into a ditch/swale behind the UAF Power Plant. In 2008, a residence was also observed to have piled snow laden with animal feces and hay straw on top of a storm drain inlet. In each case, the COF responded by contacting the responsible party in person, and successfully eliminated each discharge. All of the aforementioned illicit discharges, follow-up investigations, and resolutions are documented in the Illicit Discharge Log included in Appendix C. To date, no illicit discharges have been detected in North Pole.



***4. Include a copy of the established ordinance or other regulatory mechanism used to prohibit illicit discharges into the MS4. If the permittee has yet to develop this local requirement, describe the plan and schedule for doing so, and progress towards implementation.***

The COF and CONP are the only entities of the four Co-permittees which have municipal authority to adopt and enforce Ordinances. The COF approved and adopted an Illicit Discharge Ordinance (No. 07-5703) in July 2007. A copy of this Ordinance is included in Appendix C. The FNSB, which has a separate Phase II NPDES Permit, has also recently developed a draft Illicit Discharge Ordinance for approval by the FNSB Assembly, which is currently slated for June 12, 2008. The FNSB's draft Ordinance closely follows the COF's Ordinance, but provides more concise language on prohibited discharges and penalties therein. The CONP is planned to follow suit by April 2009, by adopting a similar ordinance to that of the COF and FNSB. Similarity in all three ordinances will provide users of the MS4 a clear understanding of the type of discharges and acts prohibited throughout the Urbanized Area, regardless of the separate jurisdictions of the three municipal authorities.

***5. Describe the enforcement policy and jurisdiction.***

As stated in the COF's current Illicit Discharge Ordinance, whenever the COF finds that a person, business, or public entity has violated a prohibition of the Ordinance, the COF will order compliance by written notice of the violation to the responsible party. The notice may require the performance of monitoring, analyses, and reporting; elimination of illicit connections, discharges, practices, or operations; abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; payment of a fine to cover administrative and remediation costs; and implementation of source control or treatment BMPs. If the abatement of a violation and/or restoration of affected property are required, the notice will provide a deadline for completion of the remediation or restoration. The notice will also advise that, should the violator fail to remediate or restore affected property within the established deadline, the work will be performed by the COF or a designated contractor, and the expense thereof will be charged to the violator.

The CONP plans to adopt a similar enforcement policy in their upcoming Ordinance by April 2009. In such cases where investigations indicate the illicit discharge(s) originates outside the COF's and CONP's jurisdictions, the Co-permittees will notify the appropriate agency which has jurisdiction, namely the FNSB, ADEC, or EPA.

The COF's jurisdiction to enforce the Illicit Discharge Ordinance applies to the MS4, in its entirety, within the Urbanized Area of Fairbanks; including the portions of the MS4 with State of Alaska ROWs located within the Urbanized Area of Fairbanks which are owned or operated by the DOT&PF. The CONP's jurisdiction similarly applies to the MS4, in its entirety, within the Urbanized Area of North Pole; including the portions of the MS4 with State of Alaska ROWs located within the Urbanized Area of North Pole which are owned or operated by the DOT&PF.

The FNSB will have jurisdiction over the portion of MS4 owned and operated by UAF and DOT&PF within the Urbanized Area and outside the City Limits of Fairbanks and North Pole.

***6. Describe the methods used over the previous 12-month period to inform the public and/or train public employees about illicit discharges and the improper disposal of waste.***

As discussed under Minimum Control Measures 1 and 2, efforts were made during the 2007/2008 reporting year to inform the public about illicit discharges and improper disposal of waste. Efforts included (1) updating the Fairbanks Storm Water Management Webpage to include agency contacts from each of the Co-permittees and FNSB, and procedure for reporting illicit discharges; (2) broadcasting the Spring PSA, which identified the types of pollutants to keep out of the storm drain and roadside ditches; (3) incorporating information about the types and causes of illicit discharges into the National Earth Week Educational Presentations; and (4) implementing the Storm Drain Stenciling Program, which created public awareness about where storm water goes after it enters a storm drain inlet. The Community Survey also contains questions asking residents what they do with grass clippings from their lawn, how often they use fertilizers, where they wash their personal vehicles, how they dispose of used motor oil, and how often they pick up pet waste. Results from this survey will inevitably help the Co-permittees identify pollutant sources in storm water, detect future illicit discharges, and curtail future public education and outreach efforts.

Efforts to train Co-permittee staff to help detect illicit discharges have also continued during the 2007/2008 reporting year, as follows:

City of Fairbanks

The COF Department of Public Works crews range in size from approximately 32 personnel during winter months to as many as 50 during summer months. Their responsibilities include refuse collection, constructing roadway improvements, cleaning and maintaining streets and the storm drain system, constructing improvements to storm drain system (i.e. installation of new catch basins, manholes, and laterals), and maintenance of 14 City-owned and managed facilities comprising over 256,000 square feet of building space. The COF's MS4 is composed of 477,400 linear feet of pipe, 2,193 catch basins, 407 manholes, seven Stormceptors, 57 outfalls to the Chena River, and 36 outfalls to the Noyes Slough. The COF also has approximately 350 lane miles of road.

The COF Director of Public Works provides trainings to Public Works Lead and Field personnel each spring to apprise them of the Phase II NPDES Permit requirements related to illicit discharges. All personnel are requested in the field to maintain, to the best of their ability, a continued surveillance of city streets, ROW, and storm drain system, including area businesses discharging curb-side and any illegal sub-grade connections observed at area construction sites. In addition, two personnel dedicated to cleaning and maintenance of the storm drain system, as

well as various crews constructing improvements, are instructed to look for any flows or discharges that are not consistent with the seasonal elements. All personnel are directed to the Director of Public Works immediately if dry weather flow is observed, or odors or visual inspection indicates non-storm water related flows in the system. The COF has also instituted a permit system to control the discharge of building cooling water into the MS4. During dry flow periods, it is important to know where permitted activities occur in order to make it easier to identify illicit discharges. The COF has identified four buildings within the City Limits that discharge cooling water into the MS4, and has issued permits and collects annual discharge fees from these four facilities.

#### City of North Pole

The CONP Department of Public Works consists of two personnel who perform and direct summer street maintenance with the assistance of local contractors. Street maintenance includes pavement repair, roadside brush cutting, signage maintenance and repair, inspection, cleaning and repair of drainage structures including culverts, catch basins, storm drains, and roadside ditches. Each spring, the CONP Director of City Services conducts trainings to apprise personnel of the Phase II NPDES Permit requirements related to illicit discharges and surveillance of area construction activities.

#### University of Alaska Fairbanks

The UAF Roads & Grounds Shop consists of 16 fulltime personnel and up to 18 part-time student employees depending on the time of year and available workload. The roads crew's primary duty is to maintain and clean UAF streets and parking lots by performing asphalt repair, routine sweeping and cleaning, and sanding and snow removal during winter months. Additional tasks include trench digging, laying new power lines, repairing hydrants, locating broken water lines, sloping grounds for proper drainage, and moving materials into an ecosystem dump site. There are approximately eight miles of roadway and 52 parking lots covering over 1,000,000 square feet. In the summer, the grounds crew also maintains over 2,200 acres of landscape by mowing, irrigating, fertilizing, top dressing, aerating, edging and pruning. All Roads & Grounds Shop personnel are trained each spring to apprise them of the Phase II NPDES Permit requirements related to illicit discharges, surveillance of area campus activities, and BMPs to employ when conducting field work on campus.

#### Alaska Department of Transportation & Public Facilities – Northern Region

DOT&PF Maintenance has an estimated 46 personnel operating within the Urbanized Area, including 35 personnel dedicated fulltime to field work. Similar to the COF and CONP, DOT&PF personnel perform scheduled maintenance of the roadway and drainage systems. All DOT&PF Maintenance personnel are trained each spring to be apprised of the Phase II NPDES Permit requirements related to illicit discharges, surveillance of DOT&PF construction sites, and BMPs to

employ when conducting fieldwork. Personnel are directed to contact their supervisors immediately when any illicit discharge is detected.

***7. List the measurable goals for the illicit discharge detection and elimination program for the next 12-month period, and the dates by which each permittee will achieve each of the measurable goals.***

Presented below are the measureable goals to be accomplished over the next reporting year for each of the ongoing illicit discharge detection and elimination efforts.

Outfall Discharge Monitoring

The measureable goal for outfall discharge monitoring over the next reporting year will be conduct at least one spring or late summer monitoring event and collect samples from at least five outfalls. Currently, the Co-permittees plan to conduct the next sampling event in late July or August 2008, when rain intensity increases and there is sufficient outfall flow to collect samples.

Dry-weather Screening of Outfalls

The measureable goal for dry-weather screening outfalls over the next reporting year will be to continue screening activities throughout the summer, document the number of outfalls visited, identify the outfalls with suspected illicit discharges, and document the resulting investigation and enforcement actions taken. The objective of this goal is to quantify existing and continued dry-weather screening activities to accurately exhibit compliance with the requirement of Minimum Control Measure 3 to screen at least 50% of the Co-permittees' outfalls by the expiration date of the Permit.

CONP Illicit Discharge Ordinance

The measureable goal for the CONP is to adopt an Illicit Discharge Ordinance by April 2009. The CONP plans to adopt a similar ordinance to that of the COF and FNSB. Similarity in all three ordinances will provide users of the MS4 a clear understanding of the type of discharges and acts prohibited throughout the Urbanized Area, regardless of the separate jurisdictions of the three municipal authorities.

***8. Identify the persons responsible for coordination and implementation of the illicit discharge detection and elimination program.***

The following individuals were responsible for coordination and implementation of the illicit discharge detection and elimination program during the 2007/2008 reporting year:

|       |   |
|-------|---|
| COF:  | Jackson Fox, Environmental Manager<br>Michael Schmetzer, Director of Public Works & City Engineer |
| CONP: | Bill Butler, Director of City Services  |

UAF: Thaddeus Williamson, Environmental Health, Safety, and Risk  
Management Department Safety Officer  
DOT&PF: Brett Nelson, Maintenance Environmental Analyst

Compliance with Permit Requirements

To date, the Co-permittees have met all requirements detailed under Minimum Control Measure 3 and Section II.B.3 of the Permit, with the exception of the CONP passing an Illicit Discharge Ordinance. The following table provides a summary of the illicit discharge detection and elimination requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component  | Compliance Date | Status (as of May 2008)      |
|----------------|---|-----------------|------------------------------|
| II.B.3.a       | Conduct a Hydrologic Study of all roadway drainage structures within the Co-permittees' jurisdiction    | June 1, 2008    | Complete                     |
| II.B.3.b       | Develop and implement a plan to detect and address illicit discharges                                   | June 1, 2007    | Complete                     |
| II.B.3.c/d     | Adopt an ordinance to prohibit illicit discharges to the MS4, and effectively prohibit those discharges | June 1, 2008    | COF-Complete<br>CONP-Pending |
| II.B.3.e       | Inform the public, et al, of the hazards associated with illegal discharges and improper waste disposal | June 1, 2007    | Complete,<br>ongoing         |
| II.B.3.f       | Finalize a comprehensive storm sewer map  | June 1, 2008    | Complete                     |
| II.B.3.g       | Complete dry-weather field screening for non-storm water from 50% of all outfalls                       | June 1, 2010    | Ongoing                      |

*II.B.4 Construction Site Storm Water Runoff Control*

The requirements of Minimum Control Measure 4, *Construction Site Storm Water Runoff Control*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.4.g and Appendix A of the Permit.

- 1. Include a copy of the established ordinance or other regulatory mechanism used to require erosion, sediment, and waste control at construction sites. If the Co-permittees have yet to develop the required regulatory mechanism, describe the plan and schedule of doing so.***

The COF and CONP are the only entities of the four Co-permittees which have municipal authority to adopt and enforce Ordinances. The COF approved and adopted a Construction Site Storm Water Runoff Ordinance (No. 07-5702) in July 2007. Subsequent to passing the Ordinance, however, the COF received input from other local agencies the Ordinance was overly restrictive and contain requirements above and beyond what is mandated by federal law. The Ordinance was therefore amended in April 2008 to remove all overly restrictive requirements, and approved and adopted as amended on May 19, 2008. Copies of the original Ordinance and amended Ordinance (No. 08-5751) are included in Appendix D.

The CONP followed suit in May 2008, by drafting a similar Construction Site Storm Water Runoff Ordinance (No. 08-14) to that of the amended COF Ordinance. The first reading of the CONP Ordinance before council occurred on May 19, and is slated for approval and adoption by the CONP City Council on June 2, 2008. A copy of the draft CONP Ordinance is included in Appendix C. The FNSB, which has a separate Phase II NPDES Permit, has also recently developed a draft Construction Site Storm Water Runoff Ordinance for approval by the FNSB Assembly, which is currently slated for June 12, 2008. The FNSB's draft Ordinance closely follows the COF's Ordinance, but provides more concise language on the storm water plan review and inspection requirements. Similarity in all three ordinances will provide users of the MS4 a clear understanding of the storm water plan review and inspection requirements throughout the Urbanized Area, regardless of the separate jurisdictions of the three municipal authorities and ADEC.

The COF and CONP are also currently in the process of establishing an MOA with ADEC for storm water plan review activities associated with new construction within the Urbanized Area of Fairbanks and North Pole. Under the terms of this MOA, the ADEC will agree to transfer storm water runoff plan review responsibilities for private development within the Urbanized Area of the Fairbanks and North Pole to the local government level. The ADEC will continue to be responsible for storm water runoff plan review responsibilities for all public development. The MOA is currently planned to be signed and put into effect in June 2008, and will be appended to the 2009 Annual Report.

***2. Provide a summary of the number of sanctions and enforcement actions taken by the Co-permittees to ensure compliance with the construction site ordinance during the previous 12-month period.***

No sanctions or enforcements actions were taken during the 2007/2008 reporting year by the COF in accordance with their Construction Site Storm Water Runoff Ordinance. Subsequent to adoption of the Ordinance, the COF opened a new Environmental Manager position to direct the development and implementation of the storm water plan review and inspection program. The COF filled the position in January 2008, and progress has been made towards developing the program in preparation for the 2008 construction season. The plan review program was added to the Building Permit application process at the COF in April 2008, which directs all contractors/owners applying for a Building Permit to submit storm water plans in accordance with the Ordinance 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 proper erosion and sediment controls. Nine COF Department of Public Works and Engineering Division staff have been trained and certified in erosion and sediment control practices to assist with implementation of the program. The CONP is planned to follow suit by June 2008, by adopting a similar ordinance and establishing a similar storm water plan review and inspection program to that of the COF and FNSB.

***3. Include a copy of the written requirements for appropriate erosion, sediment, and waste control BMPs at construction sites.***

The COF and CONP Construction Site Storm Water Runoff Ordinances adopt by reference the current version, and all future amendments, of the DOT&PF *Alaska Storm Water Pollution Prevention Plan (SWPPP) Guide* and EPA Construction General Permit. The DOT&PF Alaska SWPPP Guide identifies appropriate erosion, sediment, and waste control BMPs for construction sites in Alaska; and is available for download by the public through the DOT&PF website at ([http://www.dot.state.ak.us/stwddes/dcsenviron/assets/pdf/swppp/english/eng\\_guide\\_all.pdf](http://www.dot.state.ak.us/stwddes/dcsenviron/assets/pdf/swppp/english/eng_guide_all.pdf)). Beginning in 2007, a number of 16-hour *Certified Erosion & Sediment Control Lead* trainings were also provided by the DOT&PF and Associated General Contractors of Alaska on the DOT&PF SWPPP Guide and other appropriate erosion, sediment, and waste control BMPs for construction sites in Alaska. During the 2007/2008 reporting year, over 200 individuals from the Fairbanks area have attended these trainings, including local contractors, engineering consultants, and agency staff. A summary of the trainings provided during the 2007/2008 reporting year, as well as a copy of the registration webpage, are included in Appendix D.

In April 2008, the COF additionally published a *Construction Site Storm Water Runoff Plan Requirements* handout for contractors/owners applying for a Building Permit through the COF Building Department. The handout outlines the storm water plan submittal requirements to the Building Department in accordance with the COF Construction Site Storm Water Runoff Ordinance. A copy of the handout is included in Appendix D. The CONP plans to develop and

publish a similar handout by June 2008, outlining the storm water plan submittal requirements to their Building Department.

***4. Provide a summary of the number of site plan reviews conducted by each permittee.***

No site plan reviews were conducted during the 2007/2008 reporting year by the COF in accordance with their Construction Site Storm Water Runoff Ordinance. The plan review program was only recently added to the Building Permit application process at the COF in April 2008. As of May 2008, the COF is now accepting storm water plan submittals through their Building Department. The CONP will begin accepting storm water plan submittals through their Building Department once their upcoming Ordinance is adopted. To formalize the plan review process, a storm water plan review checklist has also been developed for use during the 2008 construction season. A copy of the checklist is included in Appendix D, and a summary of the number of site plan reviews conducted by the COF and CONP during the 2008 construction season will be included in the 2009 Annual Report.

***5. Describe the procedures for receipt and consideration of information submitted by the public.***

As described under Minimum Control Measure 2, the Co-permittees maintain 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 personnel to be addressed. Public comments received during the 2007/2008 reporting year, including documentation of their resolution if required, are included in Appendix B.

***6. Provide a summary of the number of sites inspected during the previous 12-month period, including a description of the site inspection procedures, how sites will be prioritized for inspection, and when and how often a site will be inspected.***

No site inspections were conducted during the 2007/2008 reporting year by the COF in accordance with their Construction Site Storm Water Runoff Ordinance. The plan review program was only recently added to the Building Permit application process at the COF in April 2008. As of May 2008, the COF is now accepting storm water plan submittals through their Building Department, and will begin conducting site inspections for all sites disturbing an acre or more of land. Site inspections will be conducted at each site at least once per year for proper erosion and sediment controls. The CONP will begin conducting site inspections once their upcoming Ordinance is adopted. To formalize the inspection process, a storm water site inspection checklist has been developed for use during the 2008 construction season. A copy of the checklist is included in Appendix D, and a summary of the number of site inspected by the COF and CONP during the 2008 construction season will be included in the 2009 Annual Report.



**7. List the measurable goals for the construction site runoff control program.**

The measureable goals for the construction site storm water plan review and inspection program over the next reporting year will be (1) implementation and enforcement of the COF Construction Site Storm Water Runoff Ordinance during the 2008 construction season; (2) adoption of the CONP Construction Site Storm Water Runoff Ordinance by June 2008; and (3) conducting at least one training session for the local contractor/developer/engineer audience on the Ordinances by August 2008. The COF currently plans to make presentations on their Construction Site Storm Water Runoff Ordinance during a joint ADEC/DOT&PF SWPPP Workshop in June 2008, as well as to the Alaska Society of Professional Land Surveyors in May 2008 and Alaska Society of Civil Engineers by August 2008.

**8. Identify the persons responsible for coordination and implementation of the construction site runoff control program.**

The following people were responsible for coordination and implementation of the construction site runoff control program during the 2007/2008 reporting year:

COF: Jackson Fox, Environmental Manager  
CONP: Bill Butler, Director of City Services  
UAF: Thaddeus Williamson, Environmental Health, Safety, and Risk  
Management Department Safety Officer  
DOT&PF: Brett Nelson, Maintenance Environmental Analyst

Compliance with Permit Requirements

To date, the Co-permittees have met all requirements detailed under Minimum Control Measure 4 and Section II.B.4 of the Permit, with the exception of the CONP passing a Construction Site Storm Water Runoff Ordinance and the Co-permittees conducting a training on the Ordinances. The following table provides a summary of the construction site storm water runoff control requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component   | Compliance Date | Status (as of May 2008)      |
|----------------|--|-----------------|------------------------------|
| II.B.4.a       | Develop, implement, and enforce a construction site storm water runoff control program for activities disturbing one or more acres of land | June 1, 2007    | COF-Complete<br>CONP-Pending |
| II.B.4.b       | Adopt an ordinance to require construction site operators to practice erosion, sediment, and waste control                                 | June 1, 2007    | COF-Complete<br>CONP-Pending |
| II.B.4.c       | Publish and distribute written requirements for construction site BMPs   | June 1, 2007    | Complete                     |

| Permit Section | SWMP Component  | Compliance Date | Status<br>(as of May 2008)          |
|----------------|---|-----------------|-------------------------------------|
| II.B.4.d       | Develop procedures for reviewing site plans and receiving public comment                                    | June 1, 2007    | Complete                            |
| II.B.4.e       | Develop and implement procedures for site inspections and enforcement                                       | June 1, 2008    | Complete                            |
| II.B.4.f       | Conduct training for contractors/developers/engineers on the construction ordinance(s) and BMP requirements | June 1, 2008    | Ordinances-Pending<br>BMPs-Complete |

*II.B.5 Post-Construction Storm Water Management in New Development and Redevelopment*

The requirements of Minimum Control Measure 5, *Post-Construction Storm Water Management in New Development and Redevelopment*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.5.f and Appendix A of the Permit.

- 1. Include a copy of the BMP design manual containing structural and non-structural BMPs that will be used to manage post-construction runoff from new development and redevelopment projects within the MS4s; and specific priority areas for this program.***

The Co-permittees have not yet developed a BMP Design Manual for post-construction storm water management. It is anticipated the Co-permittees and FNSB will collectively develop the manual over the next reporting year to fulfill the requirements of Minimum Control Measure 5 of the Permit by May 2009. The manual will include a list of strategies reflecting a combination of structural and non-structural BMPs appropriate to the MS4, including appropriate design and construction requirements for snow disposal sites, septic systems, and parking lots. Design storm criteria, basin characterization, methods and parameters for estimating flows, and sizing of detention and infiltration facilities are also anticipated to be addressed in the manual. A copy of the manual will be included in the 2009 Annual Report.

- 2. Provide an explanation of the design and performance features of the chosen BMPs that are intended to minimize water quality impacts.***

The design and performance features of post-construction BMPs will be provided subsequent to publication of the BMP Design Manual, and included in the 2009 Annual Report. The Co-permittees are still in the early stages of identifying BMPs that will perform in the climate of the Fairbanks area. The climate of the Fairbanks area differs from climates of most other areas of the U.S. due to long and cold winters, which allow up to seven months of pollutant accumulation on paved surfaces. Moreover, spring snowmelt is the dominant runoff event in the Fairbanks area, and typically occurs when many structural BMPs are still partially frozen and not functioning properly.

Information from various state agencies with similar climates will be carefully reviewed for applicability, including post-construction BMPs currently used in Minnesota and Wisconsin. Possible BMPs may include source, treatment, and flow controls. Source control BMPs will target pollution prevention, prevention or minimization of the loss of soil from the land, and prevention of other adverse effects of storm water. Treatment control BMPs will target pollutant removal, possibly including settling ponds, filtration, the use of biological or chemical reaction, and/or absorption methods. Flow control BMPs will target attenuation of the rate, frequency, and duration of storm water surface runoff, including flow diversion practices.

Another source of valuable information that the Co-permittees and FNSB will utilize in BMP selection is the *BMP Effectiveness Report* prepared in February 2006 by Shannon & Wilson for ADEC. This report identifies structural and non-structural BMPs currently in use in the Fairbanks area, lists other BMPs that may be of use in the Fairbanks area, evaluates the likely effectiveness of the BMPs, and provides a strategy for monitoring the effectiveness of BMPs.

***3. Include a copy of the established ordinance or other regulatory mechanism used to address post-construction runoff control. If the permittee has yet to develop the required regulatory mechanism, describe the plan and schedule for doing so.***

The COF and CONP are the only entities of the four Co-permittees which have municipal authority to adopt and enforce Ordinances. The COF approved and adopted a Post-Construction Storm Water Management Ordinance (No. 07-5704) in July 2007 to meet the requirements of Minimum Control Measure 5 of the Permit. A copy of this Ordinance is included in Appendix D. Considering this Ordinance was written and adopted prior to publication of the upcoming BMP Design Manual, the COF may elect to update or amend this Ordinance to more closely follow the requirements of the manual when published. The CONP is planning to follow suit by April 2009, by adopting a similar ordinance to that of the COF. Similarity in these ordinances will provide users of the MS4 a clear understanding of the post-construction requirements throughout the Urbanized Area, regardless of the separate jurisdictions of the municipal authorities and ADEC.

***4. Describe how long term operations and maintenance of the selected BMPs will be ensured, including the organizations responsible, and their expected operations and maintenance schedule.***

As previously discussed, the Co-permittees are still in the early stages of identifying BMPs that will perform in the climate of the Fairbanks area. During development of the BMP Design Manual, long term operation and maintenance of post-construction BMPs will be addressed; and a corresponding description will be included in the 2009 Annual Report.

***5. Describe plans to inform and educate developers and the public about appropriate project designs that minimize water quality impacts.***

The Co-permittees plan to conduct a workshop in 2009 to inform and educate developers, engineers, and the public about the Post-Construction Storm Water Management Ordinances and BMP Design Manual. The workshop will be held subsequent to publication and distribution of the BMP Design Manual, which is currently scheduled for May 2009.

***6. List the measurable goals for the post-construction runoff control program, including the dates by which the permittee will achieve each of the measurable goals.***

The measurable goals for the post-construction site storm water management program over the next reporting year will be (1) publication of the BMP Design Manual by May 2009; (2)

adoption of the CONP Construction Site Storm Water Runoff Ordinance by April 2009; and (3) conducting at least one workshop for developers, engineers, and the public on the Ordinances and BMP Design Manual by June 2009.

**7. Identify the persons responsible for coordination and implementation of the post-construction storm water management program.**

The following people were responsible for coordination and implementation of the post-construction storm water management program during the 2007/2008 reporting year:

COF: Jackson Fox, Environmental Manager  
CONP: Bill Butler, Director of City Services  
UAF: Thaddeus Williamson, Environmental Health, Safety, and Risk  
Management Department Safety Officer  
DOT&PF: Brett Nelson, Maintenance Environmental Analyst

Compliance with Permit Requirements

Over the next reporting year, the Co-permittees will continue efforts to meet all requirements detailed under Minimum Control Measure 5 and Section II.B.5 of the Permit. The following table provides a summary of the post-construction storm water management requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component   | Compliance Date | Status (as of May 2008)      |
|----------------|--|-----------------|------------------------------|
| II.B.5.a       | Develop, implement, and enforce a program to address post-construction runoff from new development and redevelopment | June 1, 2009    | Pending                      |
| II.B.5.b       | Adopt an ordinance requiring BMPs to reduce pollutants in storm water runoff from new development and redevelopment  | June 1, 2009    | COF-Complete<br>CONP-Pending |
| II.B.5.c       | Publish and distribute a BMP design manual for post-construction storm water management                              | June 1, 2009    | Pending                      |
| II.B.5.e       | Develop and conduct at least one workshop for developers and engineers on the ordinance(s) and BMP design manual     | June 1, 2009    | Pending                      |

*II.B.6 Pollution Prevention and Good Housekeeping for Municipal Operations*

The requirements of Minimum Control Measure 6, *Pollution Prevention and Good Housekeeping for Municipal Operations*, are presented below with discussion of the Co-permittees' efforts to meet these requirements based on the Annual Report requirements presented in Section II.B.6.e and Appendix A of the permit.

**1. Describe the activities, maintenance schedules, and long term inspection procedures for controls to reduce discharge of floatables and other pollutants to the MS4.**

Within their respective ROWs, each Co-permittee is responsible for snow removal and street sanding operations during the winter months and street sweeping and storm drain cleaning operations during the summer months. Beginning in 2006, the Co-permittees instituted an information tracking system for these activities to assist with reducing the discharge of pollutants, including sediment, to the MS4.

Winter Maintenance Activities

Comparatively, the DOT&PF maintains major and minor arterials while the COF and CONP maintain major and minor collectors and local streets. Snow plowing, street sanding, and snow removal is primarily focused on routes to the local hospital, area schools, primary business districts, and core downtown areas of COF and CONP; followed by local streets within residential neighborhoods.

The Co-permittees utilize designated snow storage sites that are generally suitable for onsite containment of accumulated sediment and miscellaneous debris. Snow removal and storage operations are tracked by date of operation, area and subarea, number of loads and cubic yards hauled, haul time, and snow storage site used. Debris is collected following spring break-up and disposed at the FNSB Solid Waste Landfill. Copies of the Co-permittees' snow removal logs, as available, and an inventory of snow storage sites used by the Co-permittees are included in Appendix F.

Street sanding operations are similarly scheduled by area of priority depending on street surface conditions, and tracked by date of operation, area, and number of loads, cubic yards, and tonnage spread. Copies of the Co-permittees' street sanding logs, as available, are included in Appendix F.

Summer Maintenance Activities

During spring break-up, which typically commences in early to mid-April, the Co-permittees focus on ensuring the MS4 is operating effectively. Steam is often used to open frozen storm drains and culverts, and pumps are used to transfer water from areas of ponding, in an attempt to maintain flow in the MS4 and minimize damage to residential, commercial, and public property.

Street sweeping operations generally commence after spring break-up in late April through early May, and continue until all arterials, collectors, and local streets are clean of aggregate. Street sweeping operations are tracked by date of operation, broom number, area and subarea, street location, number of loads and cubic yards hauled, haul time, and storage site used. During the summer months, the Co-permittees also clean and maintain the MS4 using a vacuum truck to flush and pump accumulated sediment and debris from catch basins, lateral lines, manholes, sedimentation collection devices, and culverts. Storm drain cleaning operations are tracked by date of operation, equipment number/type, area and subarea, street location, number of loads hauled, haul time, and storage site used, and gallons of liquid and cubic yards of solids collected. Copies of the Co-permittees' street sweeping and storm drain cleaning logs, as available, are included in Appendix F.

During the summer months, area businesses and local residents also perform construction activities within the ROW, including pavement cuts and excavations, construction of new or repairs to existing utility mains and services, new driveways, and sidewalks. Within our respective jurisdictions, the Co-permittees conduct plan reviews, issue permits, and inspect the construction activities through substantial completion to ensure all work is performed according to applicable standards, erosion and sediment controls are in place and properly maintained, and the MS4 is protected.

The Co-permittees also maintain their respective ROWs during the summer months by clearing vegetation and collecting debris from roadside ditches that are part of the MS4. During routine curbside collection of residential garbage, crews are further instructed to stop and collect any debris that is observed to be illegally disposed within the ROW. If crews encounter hazardous materials that could impact public health or the environment they are instructed to contact their supervisor, who will oversee appropriate assessment, cleanup, transport, and disposal.

***2. Describe the employee training program used to prevent and reduce storm water pollution including the targeted department personnel, frequency of such training, and a copy of training materials.***

The Co-permittees presently conduct training sessions for department personnel two times per year on the prevention and reduction storm water pollution from municipal activities. During the spring, personnel are trained in *MS4 Maintenance*, which includes an overview of the Phase II NPDES Permit requirements and tracking protocols and proper documentation of street sweeping and storm drain cleaning operations. During the fall, personnel are trained in *Snow Storage Site Operation and Maintenance*, which includes an overview of the Phase II NPDES Permit requirements and tracking protocol and proper documentation of snow removal and street sanding operations. Each training session averages two hours and targets public works, ground, building maintenance, and technical staff in preparation for winter and summer seasonal work changes. Training materials include a copy of the Permit and most recently updated and agency-specific Street Sweeping Log, Storm Drain Cleaning Log, Street Sanding Log, Snow Removal Log, and Snow Storage Site Inventory, which are included in Appendix F.

- 3. Provide a summary of the controls for reducing or eliminating the discharge of pollutants from areas owned or operated by the Co-permittees, including but not limited to streets, roads, and highways; maintenance and storage yards; waste transfer stations; fleet or maintenance shops with outdoor storage areas; salt / sand storage locations; and snow disposal sites operated by the Co-permittees.**

In coordination and compliance with EPA Hazardous Waste Regulations, each of the Co-permittees control discharges of hazardous wastes and other pollutants to the MS4 from their respective facilities and ROWs such as streets, parking lots, maintenance yards, storage yards, waste transfer stations, maintenance shops, sand and gravel storage locations, and snow storage sites. Permanent controls include oil recycling, glycol recycling, sand and gravel recycling, designated vehicle wash down areas, sumps and oil/water separators in vehicle storage buildings, wash racks that drain to the sanitary sewer, and containment and retention BMPs at sand/gravel and snow storage sites. Additional controls implemented during the 2007/2008 reporting year include the use of slow-release and organic fertilizers on flower beds and lawns, and added water-saving techniques to minimize nutrient-laden runoff to the MS4.

- 4. Describe procedures to ensure proper disposal of waste removed from the MS4 and MS4 operations including dredge spoils, accumulated sediments, floatables, and other debris.**

The COF currently stores sediment waste removed from the MS4 in stockpiles at their Department of Public Works Facility and other designated dump sites on City-owned property, which are well-sited and graded for onsite containment of accumulated sediment waste. Sediment wastes are then screened and recycled each year for reuse in street sanding and other Department of Public Works operations. Floatables and other debris are collected and disposed at the permitted FNSB Solid Waste Landfill in Fairbanks. The CONP, UAF, and DOT&PF also dispose of sediment waste, floatables, and other debris at the FNSB Landfill.

Day-to-day MS4 operations, and the use of heavy equipment therein, generates small quantities of non-recyclable oils and fuels, non-recyclable hydraulic fluid, solvents and degreasers, petroleum-contaminated pads, and empty petroleum product containers. All hazardous wastes generated are properly transferred and released to the FNSB Household Hazardous Waste Facility in Fairbanks or a licensed Hazardous Waste Contractor for processing and off-site disposal.

- 5. Describe procedures to assure 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.**

Assessment of flood management projects for impacts on water quality does not fall under the purview of the Co-permittees, unless the projects are privately funded and occur on private property within the Urbanized Area of Fairbanks or North Pole. Such projects would require



adherence to the COF or CONP Construction Site Storm Water Runoff Ordinance and Post-Construction Storm Water Management Ordinance. All of other projects in the Fairbanks area require federal, state, and FNSB authorization, often in the form of a permit.

Flood management projects generally result in dredge or fill in wetlands and other waterbodies, 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 Urbanized Area, regardless of whether or not they result in dredge or fill in wetlands and other waterbodies, 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, U.S. Fish & Wildlife Service, 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.

- 6. List the industrial facilities owned or operated by the Co-permittees that discharge to the MS4, including facilities that are subject to EPA's Multi-Sector General Permit or individual NPDES permits for discharges of storm water associated with industrial activity. Include the EPA permit tracking number or a copy of the industrial Notice of Intent form for each facility, as appropriate.***

The Co-permittees do not own or operate any industrial facilities that discharge to the MS4.

**7. List the measurable goals for the pollution prevention and good housekeeping program, including dates by which the Co-permittees will achieve each of the measurable goals.**

The measurable goal for the pollution prevention and good housekeeping program over the next reporting year will be providing continued fall and spring training sessions to personnel for pollution prevention measures related to municipal operations.

**8. Identify the persons responsible for coordination and implementation of the pollution prevention and good housekeeping program.**

The following people were responsible for coordination and implementation of the pollution prevention and good housekeeping program during the 2007/2008 reporting year:

COF: Jackson Fox, Environmental Manager  
Michael Schmetzer, Director of Public Works & City Engineer  
CONP: Bill Butler, Director of City Services  
UAF: Thaddeus Williamson, Environmental Health, Safety, and Risk  
Management Department Safety Officer  
DOT&PF: Brett Nelson, Maintenance Environmental Analyst

Compliance with Permit Requirements

To date, the Co-permittees have met all requirements detailed under Minimum Control Measure 6 and Section II.B.6 of the Permit. The following table provides a summary of the pollution prevention and good housekeeping requirements, their compliance date, and status as of May 2008.

| Permit Section | SWMP Component   | Compliance Date                       | Status (as of May 2008) |
|----------------|--|---------------------------------------|-------------------------|
| II.B.6.a       | Develop and implement an operation and maintenance program to prevent pollutant runoff from municipal operations   | June 1, 2007                          | Complete, ongoing       |
| II.B.6.b       | Complete a study to evaluate the effectiveness of current street cleaning, waste disposal practices, and other municipal activities with potential for storm water impacts within the Co-permittees' jurisdictions | June 1, 2007                          | Complete (2006)         |
| II.B.6.c       | Develop and conduct appropriate training for municipal personnel related to optimum maintenance practices for the protection of water quality  | June 1, 2007, and annually thereafter | Complete, ongoing       |

| Permit Section | SWMP Component  | Compliance Date | Status<br>(as of May 2008) |
|----------------|---|-----------------|----------------------------|
| II.B.6.d       | Ensure 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 | June 1, 2007    | Complete                   |

## **II.C Storm Water Management Plan Evaluation**

Presented below is an evaluation of the Co-permittees' progress towards fulfilling each Minimum Control Measure of the SWMP in accordance with the timelines set in the Permit.

### **Minimum Control Measure 1: Public Education and Outreach**

The Co-permittees have met all requirements detailed under Minimum Control Measure 1 of the Permit to date. In accordance with the SWMP, public 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 Co-permittees have successfully implemented the public education and outreach program in April of all three reporting years, with a general increase in the number and frequency of PSAs broadcasted, number of presentations given to local schools and organizations, and number and type of educational materials distributed. The Co-permittees also agree the BMPs identified under Minimum Control Measure 1 have proven to be appropriate and effective for the local community. Therefore, no changes to the SWMP are proposed at this time.

### **Minimum Control Measure 2: Public Involvement / Participation**

The Co-permittees have met all requirements detailed under Minimum Control Measure 2 of the Permit to date. The Co-permittees have successfully hosted an Annual Community Stream Cleanup Day, implemented a Storm Drain Stenciling Program, and convened a Storm Water Advisory Committee during all three reporting years; and met all previous measureable goals for each program. The Volunteer Monitoring and AAS Program was organized during the second reporting year, but implementation of the program was not realized until the third reporting year when the Co-permittees entered an MOA with the TVWA. The program is now in full-swing with the TVWA conducting water quality sampling trainings to local volunteers, and coordinating cleanup activities with local organizations which have adopted stream sections. The Co-permittees also prepared and distributed the Community Survey a year ahead of schedule, which assesses public knowledge, behaviors, and attitudes related to storm water management in the Fairbanks area. Response to the survey has been very successful with over 100 surveys collected in the first two months of its availability. The Co-permittees agree the BMPs identified under Minimum Control Measure 2 have proven to be appropriate and effective for the local community. Therefore, no changes to the SWMP are proposed at this time.

### **Minimum Control Measure 3: Illicit Discharge Detection and Elimination**

The Co-permittees have met all requirements detailed under Minimum Control Measure 3 of the Permit to date, with the exception of the CONP passing an Illicit Discharge Ordinance. The Comprehensive MS4 Map, Hydrologic Study, and public education efforts were all completed

within the timelines set in the Permit. The COF also adopted their Illicit Discharge Ordinance a year ahead of schedule. The CONP, however, has yet to adopt an Illicit Discharge Ordinance. The CONP plans to adopt an identical ordinance to that of the COF and FNSB by April 2009. Dry-weather screening of outfalls is currently underway, and the Co-permittees expect to screen 50-percent of their outfalls by the compliance date of June 2010. The Co-permittees agree the BMPs identified under Minimum Control Measure 3 have proven to be appropriate and reasonable for their respective agencies. Therefore, no changes to the SWMP are proposed at this time.

**Minimum Control Measure 4: Construction Site Storm Water Runoff Control**

The Co-permittees have met all requirements detailed under Minimum Control Measure 4 of the Permit to date, with the exception of the CONP passing a Construction Site Storm Water Runoff Ordinance and the Co-permittees conducting a training to local contractors/developers/engineers on the Ordinances. The Co-permittees were to develop, implement, and enforce a construction site storm water runoff program by June 2007. However, development and implementation of the program proved to become a large effort for the municipal authorities, for which the COF opened and filled a new Environmental Manager position to head up the program. As of June 2008, six months after the hire of the Environmental Manager, the program is now fully developed and beginning to be implemented. The CONP has also yet to adopt a Construction Site Storm Water Runoff Ordinance, and the Co-permittees have yet to conduct a training to local contractors/developers/engineers on the Ordinances; however, both are currently scheduled for June 2008. The Co-permittees agree the BMPs identified under Minimum Control Measure 4 are appropriate and feasible, given more time to fine tune implementation of the program as issues arise. No changes to the SWMP are proposed at this time. However, since the 2008 construction season will be the first year of implementation, the Co-permittees expect added evaluation and corresponding adjustment of the program over the next reporting year.

**Minimum Control Measure 5: Post-Construction Storm Water Management**

Over the next reporting year, the Co-permittees will continue efforts to meet all requirements detailed under Minimum Control Measure 5 of the Permit. Though not required until June 2009, the Co-permittees have already made progress with developing the post-construction storm water management program. The COF adopted their Post-Construction Storm Water Management Ordinance two years ahead of schedule, and the Co-permittees are beginning discussions with the FNSB to collectively develop a BMP Design Manual for the Fairbanks area soon after conclusion of the 2008 construction season. The Co-permittees agree the BMPs identified under Minimum Control Measure 5 are appropriate and reasonable for their respective agencies. Therefore, no changes to the SWMP are proposed at this time.

**Minimum Control Measure 6: Pollution Prevention and Good Housekeeping**

The Co-permittees have met all requirements detailed under Minimum Control Measure 6 of the Permit to date. Development and implementation of an operation and maintenance program to prevent pollutant runoff from municipal activities, and personnel training therein, have been implemented since June 2007 in compliance with the timelines set in the Permit. The COF also conducted a study of the effectiveness of their street sweeping operations, and all of the Co-permittees are now tracking their snow removal, street sanding, street sweeping, and storm drain cleaning operations. The Co-permittees agree the BMPs identified under Minimum Control Measure 6 have proven to be appropriate and reasonable for their respective agencies. Therefore, no changes to the SWMP are proposed at this time.

## Appendix A

### Public Education and Outreach

|  |  |
|--|--|
| Fairbanks Urbanized Area Map .....                               |  |
| Public Education and Outreach Subcommittee Meeting Minutes ..... |  |
| Fairbanks Storm Water Management Webpage Information .....       |  |
| Spring 2008 Public Service Announcement.....                     |  |
| National Earth Week Educational Presentation.....                |  |
| Summary of Presentation Participation .....                      |  |
| EnviroScape® Watershed Model .....                               |  |
| Earth Day Coloring Book .....                                    |  |
| Student Responses .....  |  |

## Appendix B

### Public Involvement / Participation Activities

|   |  |
|---|--|
| 2008 Annual Community Stream Cleanup Day Materials.....     |  |
| AAS Program MOA between FSWAC and TVWA.....                 |  |
| 2008 Training Session Agendas .....                         |  |
| Volunteer Training Manual (1 <sup>st</sup> Edition) .....   |  |
| AAS Program Questionnaire .....                             |  |
| Volunteer Water Quality Monitoring Contract Agreement ..... |  |
| Field Sampling Checklist .....                              |  |
| Community Survey .....                                      |  |
| Storm Drain Stenciling Program .....                        |  |
| 2007/2008 FSWAC Meeting Minutes.....                        |  |
| 2007/2008 FSWAC Meeting Schedule.....                       |  |
| FSWAC Citizen Member Vacancy Announcement .....             |  |
| FSWAC Newspaper Advertisement .....                         |  |
| Public Comments Log – 2007/2008 Entries .....               |  |



## Appendix C

### Illicit Discharge Detection and Elimination

|  |  |
|--|--|
| April 2008 Outfall Discharge Monitoring Report .....     |  |
| Summary of Outfall Sampling Results 2006 – 2008 .....    |  |
| Narrative of Outfall Sampling Analyses 2006 – 2008 ..... |  |
| Illicit Discharge Log .....                              |  |
| COF Illicit Discharge Ordinance (No. 07-5703) .....      |  |

## Appendix D

### Construction Site Storm Water Runoff Control

|   |
|---|
| COF Construction Site Storm Water Runoff Ordinance (No. 07-5702) .....                                    |
| COF Amended Construction Site Storm Water Runoff Ordinance (No. 08-5751) .....                            |
| CONP Draft Construction Site Storm Water Runoff Ordinance (No. 08-14) .....                               |
| Fairbanks Storm Water Training Summary (July 2007 – May 2008) .....                                       |
| Example Fairbanks <i>Certified Erosion &amp; Sediment Control Lead</i> Training Registration/Agenda ..... |
| Example Fairbanks <i>Erosion &amp; Sediment Control Plans</i> Training Registration/Agenda .....          |
| COF <i>Construction Site Storm Water Runoff Plan Requirements</i> Handout & Fee Schedule .....            |
| COF/CONP Storm Water Plan Review Checklist .....  |
| COF/CONP Storm Water Construction Site Inspection Checklist .....   |

**Appendix E**

**Post-Construction Storm Water Management**

COF Post-Construction Storm Water Management Ordinance (No. 07-5704).....

## Appendix F

### Pollution Prevention & Good Housekeeping

|  |  |
|--|--|
| Fairbanks Snow Storage Site Inventory.....                                 |  |
| COF Snow Removal Log – 2008 .....  |  |
| DOT&PF Snow Removal Log – 2007/2008 .....                                  |  |
| UAF Campus Wide Snow Removal & Street Sanding Work Orders – 2006/2008..... |  |
| CONP Snow Removal & Street Sweeping Summary – 2007/2008 .....              |  |
| COF Street Sanding Log – 2007/2008.....                                    |  |
| COF Street Sweeping Log – 2007.....  |  |
| COF Street Sweeping Log – 2008.....  |  |
| DOT&PF Street Sweeping Log – 2007/2008.....                                |  |
| UAF Campus Wide Street Sweeping & Cleaning Work Orders – 2006/2008.....    |  |
| COF Storm Drain Cleaning Log – 2007.....                                   |  |
| UAF Campus Wide Storm Drain Maintenance Work Orders – 2006/2008.....       |  |
| UAF Facilities Services 2008 Snow Event Plan .....                         |  |