



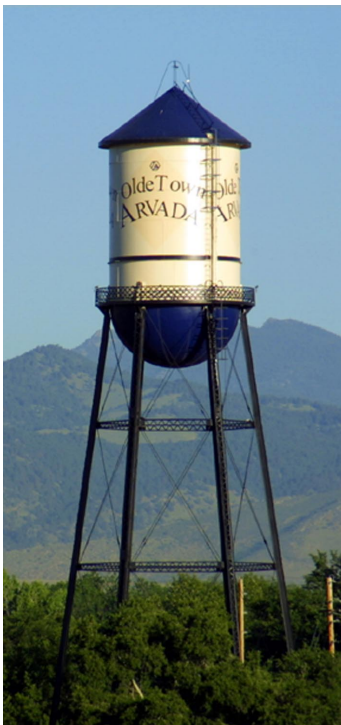
City of Arvada

City of Arvada Public Works
8101 Ralston Road
Arvada, CO 80001-8101

Phone 720 898 7810
Fax 720 898 7603

STORMWATER GENERAL PERMIT APPLICATION

STORMWATER DISCHARGES
ASSOCIATED WITH
MUNICIPAL SEPARATE STORM
SEWER SYSTEMS



March 2003



TABLE OF CONTENTS

Tab 1
INSTRUCTIONS i – iv

Tab 2
GENERAL PERMIT APPLICATION FORM 1 – 2

ATTACHMENT A

Tab 3
Program Perspective 1 – 4

Tab 4
Section 1. Public Education and Outreach 5 – 10

Tab 5
Section 2. Public Participation and Involvement 11 – 12

Tab 6
Section 3. Illicit Discharge Detection and Elimination 13 – 16

Tab 7
Section 4. Construction Site Erosion Control 17 – 22

Tab 8
Section 5. Post-Construction Stormwater Management 23 – 24

Tab 9
Section 6. Pollution Prevention / Good Housekeeping for
Municipal Operations 25 – 27

ATTACHMENT B

Tab 10
Memorandum of Understanding:
City of Arvada and North Jeffco Park and Recreation District

LOCATION MAP (Insert)

**STORMWATER DISCHARGES ASSOCIATED WITH
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

This application covers regulated Small Municipal Separate Storm Sewer Systems (MS4s). (See definitions, Colorado regulation CCR 61.) The need for permit coverage will be determined by the Water Quality Control Division (the "Division"). **Do not apply for coverage under the Phase II Municipal Permit unless you have been notified by the Division.**

Submission of this application constitutes notice that the entity identified in Item 1 of this form agrees to comply with all applicable terms and conditions of the Small MS4 general permit (COR-070000), and understands that implementation of the permittee's stormwater management program areas as described in the application is required to begin with 30 days after the completed application is submitted, or by April 9, 2002, whichever is later.

Application Due Dates: For MS4s that the Division has determined need permit coverage, the owner or operator of the MS4 shall submit an application by **March 10, 2003**, or within 180 days of Division notification, whichever is later. Note that the application should not be submitted before December 2002, or until the draft MS4 permit has been sent to public notice, whichever is earlier. This form may be reproduced.

Permit Fee: Do not send any payment with this application. You will be billed once you are covered under a permit.

Application Completeness: All items of the application must be completed accurately and in their entirety or the application will be deemed incomplete, and processing of the permit will not begin until all information is received. One original copy of the completed application (no faxes) shall be submitted, only to:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-Permits
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Joint Applicants: Submit one copy of your application. The final submittal package should also include one copy of the joint attachments per applicant.

If you have questions on completing this application, you may contact the Division at (303) 692-3517, or via email at cdphe.wqstorm@state.co.us.

INSTRUCTIONS

- Item 1 - **Applicant Identification:** Provide the name and address of the permit applicant (the city, town, county or district), local contact, and mailing address. Indicate whether the applicant is the owner and/or operator of the MS4, and the status as a city, county or other public entity. Include the applicant's Federal employer identification number (nine digits). This number will be used as an identifier for billing purposes. If available, include the email addresses of the local contact, and the legally responsible person (the person who signs the application – see Item 11).
- Item 2 - **Location Description:** Provide a narrative description of the geographical location of the MS4, including city or town (this is especially important for systems at military bases and large education, hospital or prison complexes, and special districts and associations).

Item 3 - **Location Map:** A location map for the MS4 (hard copy only) must be submitted. The boundaries of permit coverage must be indicated. (This information is also necessary in order to complete Items 4, 7 and 8.) For enforcement purposes, the map must be of sufficient detail so that the exact boundaries, by street or other demarcation, can be determined. The Division originally sent out a map showing the urbanized area boundaries; however, it is up to the permittee to ascertain the accuracy of the map. This may entail obtaining additional information from the US Census Bureau or EPA Region VIII.

The map must show the city, town, county or district boundaries or service area, as applicable. Counties must also indicate the unincorporated area boundaries. For any MS4s that are partially within an urbanized area, the location map must show the urbanized area boundaries.

It is recommended to start with the portion of the USGS (U.S. Geological Survey) quadrangle map showing the MS4 area. These are available and easily obtainable for the entire state (call USGS, (303) 202-4700). Although not particularly current, they do provide a large amount of information for very little effort. You can then use the USGS map as a guide for preparing your location map, which will probably be more detailed. If alternative maps are used, they must be of sufficient scale so that individual property locations can be determined in relation to the urbanized area and the municipal boundaries. For very small MS4s (e.g., hospital districts), the map should be of an appropriate scale to clearly indicate the property boundaries. Maps should be folded to 8½ x 11 inches.

Item 4 - **Receiving Waters:** Identify the named receiving waters within the MS4 permitted boundaries. Receiving waters are any waters of the State of Colorado. These include any and all surface waters that are contained in or flow in or through the State of Colorado (except for water withdrawn for use until use and treatment have been completed). This definition includes all water courses, even if they are usually dry, and irrigation ditches that receive municipal stormwater. It also includes storm sewer systems owned by other entities.

Item 5 - **Responsible Entity/Legal Agreement:** If another entity (municipality, county, etc.) will perform some portion or all of the six program areas for your MS4 as outlined in the instruction for attachment 9.a, so indicate. (It is not necessary to file a Joint Application for this situation to exist.) Under attachment 9.e, you will need to attach information on the agreement with the alternate entity.

Item 6 - **Joint Applications:** Two or more applicants may submit a joint application, i.e., a single submittal that addresses all program areas for each applicant. Each joint applicant must complete and submit their own two page application and Appendix A with the application package.

Item 7 - **Population:** Indicate the resident number of people living within the permitted area. For special districts such as hospitals, universities, etc., indicate the maximum daily user population (i.e., how many people is the facility/entity designed to handle?) If your permitted area is less than the total area of your MS4, provide a reasonable estimate of the population within the permitted area.

Item 8 - **Area:** Indicate the approximate number of square miles in the permitted area. For sites under one square mile, approximate number of acres may be used.

Item 9 - **Attachments:** The following attachments must be included with your application. (If you are a submitting a joint application, refer to Appendix A for additional requirements.) You must use the document entitled Colorado's Phase II Municipal Guidance as a basis for program development, although using additional sources is also advisable. The Guide is available at <http://www.cdphe.state.co.us/wq/PermitsUnit/wqcdpmt.html> or by calling 303-692-3517.

The information in the application must be accurate at the time of submittal. However, as programs/legal agreements described in the application are more fully developed, changes can occur. The general permit will describe the process to be used in this situation.

- a. Program Perspective: A brief overview of the overall water quality concerns, priorities, and goals specific to your city/county/agency that were considered in the development of your stormwater program areas. For example, if the effect of nutrient loading on local water bodies is of particular concern to local citizens, address how the individual programs will be developed to address this concern. Jurisdictional restraints, industrial sectors of concern, related water quality initiatives, recreational uses affected by stormwater pollution, etc. can also be addressed. If specific water quality concerns have not been determined and addressed in certain areas, provide a discussion of how future priorities may be determined and incorporated into your programs.
- b. Program Areas: A general description of the elements that the permittee or another entity will implement for each of the stormwater program areas listed. The description must be detailed enough for the Division to determine the MS4 operator's general strategy for complying with each of the six program areas. This should include an indication of which of the program elements recommended in the Colorado's Phase II Municipal Guidance (or other BMPs) the permittee intends to utilize, and to what degree particular elements will be stressed.

Existing program areas - In some cases, the applicant may already have a program or segments of a program in place and functioning, that meet the requirements of the regulation. In this case, the program or segments shall be fully described in the application. If the program or segments will be used to fulfill the permit requirement, then the description will be considered as a commitment to continue them. Measurable goals for those sections will not be needed, unless some existing segments need to be merged with new items, or if the program or segment is not fully implemented.

- c. Measurable Goals: The measurable goals for each of the program area components, including, whenever possible, a proposed schedule of compliance dates for each of the measurable goals, including interim milestones and the frequency of the action. In general, goals and compliance dates for major program components should be included, at a minimum, for each year of permit coverage. Wherever possible, the goals should incorporate measures of potential or actual environmental benefits derived from the program components.
- d. Urbanized Areas/Coverage: The area of the MS4 in which each program area will be implemented. Many MS4s fall partially within urbanized areas (as defined by the US Census). The Phase II municipal regulation only requires those portions of the MS4 within the urbanized areas to have MS4 permit coverage. (This provision does not apply to those MS4s designated by the Division in their entirety.) The applicant must, at a minimum, implement each program area for the entire urbanized area within their jurisdiction, or, if designated separately by the Division, the entire designated area. However, the Division strongly urges that each permittee apply the permit provisions to their entire MS4, for the following reasons:
 - ease of administration, less confusion; provides consistent requirements for developers, municipal staff, residents, industries, etc. across the permittee's jurisdiction
 - less strict requirements for non-urbanized areas can encourage sprawl
 - areas near the urbanized area boundaries will probably be included in the next census, and so will need coverage in the future
 - where building has not yet occurred in annexed areas, the potential for heavy construction activity means that those areas could be especially in need of stormwater controls
 - the stormwater pollution potential from the urban fringe is very similar to the potential from urbanized areas
 - the Division may designate the entire MS4 as needing permit coverage, due to certain circumstances (e.g., discharge to sensitive waters, TMDL in place, high potential for water quality impacts due to land use, large number of complaints for certain areas, etc.)

****Important**** Even if part or all of your Program is applied to areas outside of the urbanized area, those outside areas will not be regulated under the permit unless those areas have also been designated by the Division.

In this attachment, for each of the six program areas, indicate where the program area will be applied, i.e., within the urbanized area only, or within your entire jurisdiction.

- e. Legal Agreement: In cases where a separate entity will perform one or more program area components on behalf of the permittee, an Intergovernmental Agreement (IGA) or other type of formal notification signed by representatives of both parties must be submitted, confirming that the alternate entity commits to performing the specified activity(s) on behalf of the permittee. It must cover all program areas that will be implemented partly or entirely by the other entity. Keep in mind that the permittee is still legally responsible under the permit for ensuring implementation of the program areas.

If a formal legal agreement addressing the specifics of relationship between the two parties has not been reached at the time of application, a document certifying the intention to develop a full agreement, signed by representatives of both parties, must be submitted. It must include a proposed timeline for all actions, including the execution of a legally binding agreement.

If a formal legal agreement has been reached, and the actual codes, ordinances, regulations, etc. to be employed are in place, they may be summarized (with appropriate citations to the regulations, etc.) and included.

Item 10 - **Program Certification**: The certification of completion of the Stormwater Management Program must be signed by the applicant or their authorized agent.

Item 11 - **Application Certification**: The application must be signed to be considered complete. In all cases, it shall be signed as follows: in the case of a municipal, state, or other public agency, by either a principal executive officer, ranking elected official, or other duly authorized employee.

APPENDIX A - JOINT APPLICATION

Two or more applicants may submit a joint application, i.e., a single submittal that addresses all program areas for each applicant. Program areas or sections of program areas may be performed jointly with another entity, or solely by another entity. Each applicant must fill out their own two page application and Appendix A. The attachments may be jointly prepared, and the entire package jointly submitted. For filing purposes, one copy of the attachments is required per applicant.

Item A - Indicate all of the entities that are applying jointly. Include your own agency on the first line.

Item B - Indicate, for your MS4 only, which entities are responsible for carrying out which stormwater program areas. If more than one entity is responsible (for either part of or the entire program area listed), check all boxes that are applicable. The numbers assigned to the entities in Item A correspond to the numbers along the top of the table.

Additional information for Attachments 7.a and 7.b -

Program areas or sections of program areas that will be performed jointly with another entity, or solely by another entity, must be clearly indicated. For example, under the Public Education measure, it may state that “City A and City B will perform this program area jointly, as outlined below.” Or, “City A will perform this specific program area on behalf of Special District B, as outlined below, and as per the attached Inter-Governmental Agreement.”

GENERAL PERMIT APPLICATION

STORMWATER DISCHARGES
ASSOCIATED WITH

**MUNICIPAL SEPARATE STORM SEWER
SYSTEMS (MS4s)**

(Permit No. COR-090000)

For Agency Use Only

C O R - 0 9 _____

Date Received
Year Month Day

_____ _____ _____
Billing Code: 20 21 22 23

Please print or type. All items must be completed accurately and in their entirety or the application will be deemed incomplete and processing of the permit will not begin until all information is received. Please refer to the instructions for information about the required items. An original signature of the applicant is **required**.

1. **Name and address of the permit applicant:**

Agency Name City of Arvada

Mailing Address 8101 Ralston Road

City, State and Zip Code Arvada, CO 80001-8101

County Jefferson

Phone Number (720) 898-7000 Who is applying? Owner Operator

Federal Employer ID#: 8 4 - 6 0 0 0 6 3 3

Entity Type: State County City/Town Other: _____

Local Contact (responsible for program implementation) Sandra McDonald

Title Stormwater Coordinator Phone Number (720)898-7811

Email address (local contact) smcdonald@ci.arvada.co.us

Email address (legally responsible person) CKOCIAN@ci.arvada.co.us

2. **Location of the MS4:**

Location Description (narrative) The City of Arvada is located in the northwest portion of the Denver metropolitan area. The geographic area covered by this Permit Application includes the urbanized area as defined by EPA, and all property located within the City limits. North boundaries include Standley Lake and W. 88th Avenue. East boundaries include Sheridan Boulevard and, in areas south of W. 68th Avenue, Tennyson Street. The southern boundary is generally defined as Interstate 70 or 76, and the western boundary varies and is delineated on the Permit Application Location Map.

3. **Location Map/Boundaries:**

a. All entities except counties

Location map must be attached showing city, town, or district boundaries, and urbanized area (UA) boundaries, if part(s) of the MS4 is within a UA.

b. Counties only

Location map must be attached showing county boundaries, unincorporated area boundaries within the county, and urbanized area (UA) boundaries.

4. **All named receiving waters (state waters) within the permitted area, including other MS4s:**

State Waters: Clear Creek, Ralston Creek, Leyden Creek, Little Dry Creek, Van Bibber Creek, Church Ditch, Farmers Highline, Croke Canal; **MS4s within permitted area:** North Jeffco Parks and Recreation District, Jefferson County Public Schools, Red Rocks Community College.

- 5. **Will another entity perform some portion or all of the six program areas for your MS4?**
 No Yes If Yes, include attachment 9.e.
- 6. **Is this part of a Joint Application?** No Yes If Yes, complete and attach Appendix A.
- 7. **Resident population within the permitted area (districts use max. daily user population):** 101,300
- 8. **Approximate number of square miles in the permitted area:** 32.6 square miles
- 9. **Attachments.** For each of the six stormwater program areas (Public Education and Outreach, Public Participation and Involvement, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management, and Pollution Prevention and Good Housekeeping for Municipal Operation), the following attachments must be included with this application. (See Appendix A for additional requirements for Joint Applicants.)
 - a. Program perspective – Please see Appendix A and Goal Statement and Target Audience for each Section.
 - b. General description of the program area elements - Please see Introduction of Programs for each Section.
 - c. Measurable goals for each of the program area components- Please see Measurable Goals for each Section.
 - d. The area of the MS4 in which each program area will be implemented (i.e., within the urbanized area only or within the entire jurisdiction) – Although some areas in the western portion of the City are not included in EPA’s urbanized area map, all areas within Arvada City Limits will be covered under the permit.
 - e. Legal agreement, in cases where another entity will perform one or more program area components on behalf of the permittee. – Not applicable.

10. **Stormwater Management Program Certification**
 "I certify under penalty of law that a complete Stormwater Management Program, as described in the attachments to this application, has been prepared for my agency. The program areas were prepared with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the Stormwater Management Program is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for falsely certifying the completion of said Program, including the possibility of fine and imprisonment for knowing violations."

Signature of Applicant or Authorized Agent	Date Signed
William A. Ray Jr.	Public Works Director
Name (printed)	Title

11. **Signature of Applicant (legally responsible person)**
 "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

Signature of Applicant	Date Signed
------------------------	-------------

Craig G. Kocian
Name (printed)

City Manager
Title

7/02/MS4

-2-



PROGRAM PERSPECTIVE

The City of Arvada fully intends to meet the requirements of the State of Colorado as outlined and defined in the **Federal Register** / Vol. 64, No. 235§122.34 and the application requirements outlined in Colorado's Phase II Municipal Guidance¹ prepared by the Water Quality Control Division of the Colorado Department of Public Health and Environment (CDPHE). Furthermore, the City intends to protect the waters of the U.S. from further pollution, contamination, and/or degradation. To meet these objectives the City of Arvada will develop, implement, and enforce a Stormwater Management Program (SWMP) that will reduce the discharge of pollutants to the Maximum Extent Practicable (MEP), to protect water quality. To achieve this objective The City will work with and solicit support and participation from the community by increasing the public's awareness through the incorporation of a wide and diverse set of Best Management Practices (BMP's). Attached is a description of the proposed program elements of the SWMP the City of Arvada will implement over the next five years to meet the requirements of the Colorado Water Quality Control Act (CCR 61.8(11)(a)(i)) and satisfy the requirements of the six minimum measures. This document is Attachment A to the Permit Application.

1.0 BACKGROUND

Arvada, Colorado, is located immediately northwest of Denver. The City's 32.6-square mile area has a variety of ridges, hillsides, and slopes, as foothills in the west transition to prairie in the east. It is a semi-arid region, with an average precipitation of approximately 14 inches per year.

The population of Arvada is now estimated to be 101,300 people.² The City of Arvada is a suburb of Denver and characterized by its renovated historic downtown area, an integrated system of parks and bike paths, an award-winning fine arts center, and several large-acreage agricultural parcels. There is little industrial activity, and most people commute to jobs outside the City. According to 2002 estimates, Arvada is approximately 80% built-out; therefore, few vacant properties remain for development.

2.0 CITY OF ARVADA STORMWATER DRAINAGE

Arvada's surface water consists of a reservoir, several lakes and ponds, four small creeks, three main dirt-lined irrigation ditches / canals, and several dozen smaller irrigation ditches / canals. The City acquires its drinking water from the Arvada/Blunn Reservoir, which is located upstream of urban stormwater runoff, and from Denver Water's Moffat system. Lakes and ponds are often used as flood control within the City, but much of the City's stormwater runoff eventually flows into four main creeks. These State classified creeks traverse the City from west to east, and include Little Dry Creek, Leyden Creek, Ralston Creek, and Van Bibber Creek. The City has within its borders, three main irrigation ditches, Church Ditch, Farmers Highline, and Croke Canal. The ditches are not owned or operated by the City, and stormwater is normally diverted away from them. However, stormwater does enter these main irrigation conduits in some limited areas. Smaller irrigation ditches are considered a part of the City's MS4, and are used throughout the City to redirect irrigation flows and capture stormwater.

¹ Colorado Phase II Municipal Guidance, October 2001, <http://www.cdphe.state.co.us/wq/PermitsUnit/wqcdpmt.html>, page 1.

² Denver Regional Council of Governments Revised Population Figures, February 2003.



3.0 POTENTIAL SOURCES OF STORMWATER CONTAMINATION

Somewhat unique to Arvada is that there are no permitted point-source discharges along the City's waterways, except for Minimum Discharge Permits (MinDi Permits). Arvada does not have an industrial stormwater discharge facility within its jurisdiction, such as an airport, wastewater treatment plant, or landfill. The City does not allow treated discharge from oil and gas remediations into storm drains. Therefore, there are no substantive influxes of contamination from industry in the surface water throughout the City.

Without direct flows of contaminants into the storm sewer and limited industrial operations to contribute contaminants, much of the issues that the City must address are a result of natural systems or actions by the public or commercial businesses. The Arvada Stormwater Program has evaluated what it believes are the major water quality areas of concern, specifically sediment loading, pathogens, nutrients, and floatables (trash).

According to EPA, an overabundance of sediment can cause physical, chemical, and biological harm to waterways by filling in rivers and lakes, and destroying habitat. Potential sources of sediment in Arvada's waterways include the following:

- High velocity winds in the foothills depositing airborne sediment downwind.
- Dirt-lined canals and ditches contributing sediment to redirected irrigation water.
- Earth working activities and construction contributing sediment to the storm sewer system.
- Municipal operations such as street sanding after snow events depositing sand and salt into the storm sewer system.

The second primary water quality concern is elevated pathogen and nutrient levels, which contribute to unhealthy ecosystems. Pathogen levels elevate after stormwater runoff events. Wildlife near creek corridors or pet owners failing to pick up and dispose of pet waste could cause elevated pathogen levels. Pathogens in surface water can expose humans and animals to disease if they come into contact with the water. Fertilizers contain high amounts of nutrients, such as nitrogen and phosphorous. When fertilizers are not properly applied, they can be transported from lawns, into waterways to cause algal blooms. Algal blooms use up the water's dissolved oxygen, which is necessary for aquatic life.

Floatables, or trash, represent the last of the major water quality concerns. Aside from being unattractive, trash contributes contaminants to the waterways and inhibits free flow of the creeks in and around flood control improvements. Trash from residential and commercial areas wash or are windblown into gutters, storm drains, or waterways. High use areas along the City's major creeks, including open-spaces, parks, bicycle paths and golf courses, appear to increase the trash problem.



4.0 STORMWATER GENERAL PERMIT

The City of Arvada conducted an analysis of the requirements under the Phase II Stormwater regulations. To assure that the City had the resources available to address the Permit needs, the City hired a Stormwater Coordinator to develop programs required under the Permit and implemented a Stormwater Utility to fund these programs. Over the last two years Arvada has been proactive in creating a solid foundation for the Stormwater Program and plans to continue this commitment through the Permit implementation.

During the first term of the Stormwater General Permit, the City of Arvada will concentrate on continuing existing programs that have been successful in the past, such as Arvada Pride Day and Storm Drain Stenciling, as well as implementing new programs.

- Public Education and Outreach best management practices (BMPs) will attempt to make the public and businesses aware of their effect on stormwater and possibly change their perspective on proper disposal of waste material and use of pesticides and fertilizers. Customers of the Apex Center will be included in these efforts.
- Public Participation / Involvement BMPs will allow the public to contribute to Arvada's environmental future by bringing them into the planning process.
- Development of an Illicit Discharge Detection and Elimination (IDDE) Plan and the outfall mapping required under the IDDE Minimum Control Measure will assist the City in responding to illicit discharges quickly and efficiently, thus limiting the contaminant's impact on the City's waterways. The Apex Center parcel will be included in the City's Plan.
- Programs established for the Construction Site Erosion Control Minimum Control Measure should reduce sediment loadings as construction sites in Arvada become increasingly aware of the risks of noncompliance with erosion and sediment control ordinances and regulations.
- Long-term BMPs Minimum Control Measure will require the City to evaluate water quality and water quantity BMPs as a method for reducing contaminants in the waterways.
- Finally, Pollution Prevention / Good Housekeeping for Municipal Operations will address runoff control of contaminants at City operations, storm sewer maintenance, and deicing practices. The Apex Center will have a separate runoff control plan and their permanent staff will be trained on that plan.

In addition to implementing the programs detailed in this Permit Application under each of the Minimum Control Measures, project management controls will be implemented. First, ordinances currently in place that address stormwater runoff quality will be reviewed and potentially amended. Second, compliance and enforcement programs will be reviewed and revised to address issues encountered, especially illicit discharge detection and elimination and construction site sediment and erosion control. Finally, data management and tracking mechanisms will be developed to evaluate



how to modify programs to increase their effectiveness and to report to the State the accomplishments under the Permit.

5.0 INCLUSION OF NON-STANDARD MS4S

The Colorado Department of Public Health and Environment, Water Quality Control Division, notified three entities that are doing business in Arvada that they qualify as a non-standard MS4. Non-standard MS4s are publicly owned systems that are similar to separate storm sewer systems in cities and counties, including, but not limited to, systems at military bases and large education, hospital or prison complexes. The systems notified are as follows:

- North Jeffco Recreation District - the Apex Center
- Red Rocks Community College – Arvada Campus
- Jefferson County School District

The City of Arvada entered into discussions with North Jeffco Recreation District, and has agreed to include the Apex Center facility under the City's Stormwater General Permit. The City will not include Red Rocks Community College or Jefferson County School District under its Stormwater General Permit.

6.0 PROGRAM DESCRIPTIONS

Attachment A of the Stormwater General Permit Application describes the six Minimum Control Measures and the programs that Arvada is proposing for each of them. At the end of each section are the Measurable Goals for that Minimum Control Measure. Measurable Goals indicate when each of the program elements will be implemented.

Listed below are the sections contained in this Application:³

- Section 1. Public Education and Outreach
- Section 2. Public Participation and Involvement
- Section 3. Illicit Discharge Detection and Elimination
- Section 4. Construction Site Erosion Control
- Section 5. Post-Construction Stormwater Management
- Section 6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each year, the City will report to the State the accomplishments realized under each of the six Minimum Control Measures. The annual report will indicate any properties that have been since annexed to the City, and thus covered under the Stormwater General Permit.

The City of Arvada worked closely with surrounding municipalities and counties in the development of this Permit Application. The City will continue to work with these entities where water quality issues are not limited to Arvada's jurisdictional boundaries and where cooperative efforts would enhance the effectiveness of stormwater programs.

³ The requirements for the six Minimum Control Measures in the Stormwater General Permit are detailed in the Colorado Phase II Municipal Guidance, October 2001, <http://www.cdphe.state.co.us/wq/PermitsUnit/wqcdpmt.html>.



SECTION 1. PUBLIC EDUCATION AND OUTREACH

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The goal of the Public Education and Outreach Program is to provide residents with the information necessary to understand their effect on stormwater and then, through that knowledge, make appropriate choices to reduce impacts on stormwater quality. Educational tools include brochures and newsletters (the Arvada Report, which is a City newsletter that is delivered to every household, apartment and business in the City six times a year). The Arvada website provides information on the proper disposal and/or recycling of trash and hazardous materials. The Stormwater Program encourages opportunities to participate in environmental programs.

Informational sources must be clear and address majority and minority audiences. A focus on educating elementary age children is of particular interest because research has shown that an early appreciation of the environment may alter damaging behavior in the future. It has been determined that children can be very influential with their families. Arvada businesses will receive educational materials applicable to their operations.

Apex Center: Apex Center customers will be a target audience under the City of Arvada's Stormwater General Permit. The City will share its educational resources with the Apex Center for distribution to its patrons.

2.0 ADOPTED CODES AND REGULATIONS

The City of Arvada Code, Section 30-9 makes it unlawful to dispose of rubbish on any street sidewalk, vacant lot, or public place (Code 1960, § 21-4). The City of Arvada Code, Section 6-60 makes it unlawful to leave dog (animal) feces on any property except for that of the owner or custodian (supporting Ordinance No. 3496, § 2, 12-14-98). The City of Arvada Code, Section 15-44 makes it unlawful for any person to discharge anything other than naturally occurring stormwater, with some listed exceptions, onto the City's streets or into the City's storm drainage system (supporting Ordinance No. 2934, § 1, 11-2-92).

3.0 INTRODUCTION OF PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must conduct public outreach to educate and engage the residents, and members of the business community in understanding how their actions affect stormwater.

3.1 Existing Programs

Below are descriptions of best management practices (BMPs) that are being conducted in the City.

3.1.1 Storm Drain Marking

The City of Arvada, in a cooperative effort with the Jefferson Soil Conservation Service, works with 4th through 8th grade students to apply medallions to storm drains in



residential areas. The medallions are marked with the phrase “No Dumping – Drains to Creek”. An educational video is shown and the students are assessed before and after the project. Portions of the City have been marked with these medallions.

3.1.2 Adopt-a-Street / Park / Trail

The Adopt-a-Street / Park / Trail Programs are designed to help keep Arvada clean and attractive. Volunteers enter into a written agreement with the City stating that they will be responsible for cleaning up litter on a segment of a particular street or stream a minimum of two times per year. The City provides trash bags and safety vests, and collects the filled bags when the volunteers have completed the litter pickup. Permanent signs are posted on the adopted streets, parks, and trails to recognize the efforts of volunteers.

3.1.3 Arvada Pride Day

Each year, the City hosts Arvada Pride Day, a half-day event scheduled on a day close to Earth Day (April). Arvada Pride Day promotes pride in our City by giving residents and civic groups an opportunity to clean up trash on Arvada's streets, rights-of-way, parks and creeks. After the cleanup, there is a free picnic and prizes for all participants. Area businesses and the City have donated waste disposal, food, beverages and prizes.

3.1.4 Majestic View Nature Center and Two Ponds National Wildlife Refuge

Arvada's Majestic View Nature Center and Community Park is a valuable resource providing environmental education and awareness of our natural resources. The park now encompasses over 80 acres, which includes wetland areas, an interpretive trail, prairie grasses and an assortment of wildlife. The 3,000 square foot center features hands-on nature and environmental displays, wildlife exhibits, classrooms and meeting space. The Stormwater Program is working closely with the Majestic View Nature Center to expand and improve the nonpoint source pollution display.

A parcel at 9210 W 80th Avenue containing over 60 acres was obtained by the City of Arvada and deeded to the Federal Division of Wildlife to create the Two Ponds National Wildlife Refuge. Plains cottonwood, Russian olive, and Brome Grass dominate the Refuge. Ninety-nine species of birds, as well as fox, muskrat beaver, raccoon, frogs and turtles have been observed on the Refuge. Guided tours, off-site programs, open trails, and an environmental education area are available to relate the importance of protecting water quality for the benefit of wildlife. The City works closely with the Refuge on water quality issues and will continue to cooperate with the caretakers.

3.1.5 Arvada Website

The Arvada Website contains information concerning stormwater programs; that includes storm drain marking, recycling, a brochure entitled What You Can Do to Protect Arvada's Waterways, and ways to become involved in City cleanup. The Website is used to post volunteer opportunities, link residents to other websites, and describe the accomplishments of and difficulties encountered by the Stormwater Program.



The website is easily updated through a program implemented by the City in 2001. The Stormwater Coordinator acts as the Utilities Department web coordinator and, thus is able to update all Water Quality and Utilities web pages. The Stormwater Program plans to continue website updating as materials become available.

3.1.6 Rooney Road Recycling Center

The manager of Arvada's Water Quality and Environmental Services Section serves on the Board of the Rooney Road Recycling Center. The Rooney Road Recycling Center provides a means for residents to properly dispose household hazardous waste. The City subsidizes the Center to keep charges to residents low. The Rooney Road Recycling Center charges \$10 per load when the customer makes an appointment and drops off the waste material. Curbside pickup is available to residents for only \$15. Curbside pickup makes available proper disposal of household hazardous waste to those without a means to drive. The Center provides recycling services to residents without charge.

3.1.7 Annual Stormwater Utility Report

The Arvada Stormwater Utility was implemented in January 2002. During the Utility's first year, the City collected \$ 2.1 million dollars for flood control projects, minor Capital Improvement Projects and the Stormwater Program. To report on the expenditures of the Utility, an annual Stormwater Utility Report is developed. The report is available on the City's website and is sent to individuals upon request.

3.1.8 Outreach to Civic Organizations

The Stormwater Program is working with various volunteer organizations in the City. Below are a few examples of volunteer group participation:

- Eagle Scout projects conducted, such as pet waste pickup dispensers and storm drain marking
- Optimist Clubs cooking on Arvada Pride Day after trash cleanup
- Commercial businesses donate prizes for those participating in cleanup events
- Participation in the Adopt-A-Street / Park / Trail Programs
- Completion of Community Service Projects

3.2 New Programs

Below are descriptions of BMPs that will be implemented in the first five-year term of the Stormwater General Permit.



3.2.1 Improve and Distribute Brochures and Information

Although Arvada currently distributes brochures to the public, the goal of this performance measure will be to improve the current set of brochures and develop additional sources of information on nonpoint source pollution to form a cohesive informational resource.

The Stormwater Program will review nonpoint source educational outreach materials available both in the City and materials developed by other entities, including government, nonprofit, and academic resources. A set of Arvada educational materials will be developed that can be used as displays, programs, brochures, websites, or newsletter articles. The Stormwater Program will then coordinate the distribution of that resource to neighborhoods and businesses.

Distribution of information and brochures will be in several forms:

- Brochures distributed at City gatherings
- Brochures made available to Apex Center patrons
- Nonpoint Source Display at the Majestic View Nature Center
- Annual Article for the Arvada Report
- Flyer inserted into Utility Bills
- Periodic updates to the Stormwater Program Website

It is hoped that through an iterative and cohesive public education and outreach program, a larger population will be exposed to information on nonpoint source pollution.

3.2.2 Pet Waste Program

The City of Arvada currently has an Ordinance that can levy fines from \$25 up to \$999 against someone who fails to pick up after their pet in public areas. Signs are posted at most parks that list the rules of the park, including the rule to clean up after your pet.

Working with the Parks Department, Arvada's Stormwater Program plans to implement a Pet Waste Program that will include the following:

- Provide pet waste bags in selected City parks to assist owners in picking up after their pets. Provide maintenance of the dispensers.
- Implement a campaign to inform the public about the health and environmental hazards of pet waste.
- Provide neighborhoods and residents with tools to encourage others to pick up after their pet.

3.2.3 Leverage Existing Educational Resources

When possible, the City will work with other governments, organizations, and non-profits to leverage educational resources developed by others. Through 319 Grants, State enforcement



actions, and national initiatives, a multitude of environmental educational information already exists. The City of Arvada will leverage these resources whenever possible.

4.0 MEASURABLE GOALS

The following measurable goals are established to reflect the needs of the City and the area served.

Target Date	Activity
December 1, 2003	Compile a list of resources of nonpoint source pollution educational materials. Conduct a Pilot of the Pet Waste Program. Publish a Stormwater article for the Arvada Report.
December 1, 2004	Develop a core set of brochures and identify target audience. Acquire materials for the Pet Waste Program and coordinate their installation. Publish a Stormwater article for the Arvada Report.
December 1, 2005	Implement Pet Waste Program. Publish a Stormwater article for the Arvada Report.
December 1, 2006	Document number of brochures / newsletters distributed to public and selected businesses. Document number of Pet Waste Program bags refilled. Publish a Stormwater article for the Arvada Report.
December 1, 2007	Review effectiveness of brochure / newsletter distribution. Review effectiveness of the Pet Waste Program. Publish a Stormwater article for the Arvada Report.



City of Arvada

**STORMWATER DISCHARGES ASSOCIATED WITH
MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

GENERAL PERMIT APPLICATION
ATTACHMENT A

This page intentionally left blank.



SECTION 2. PUBLIC PARTICIPATION AND INVOLVEMENT

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The public can provide valuable input and assistance to our municipal stormwater management program through involvement in pollution prevention, public education, and visual monitoring. The goal of the Public Participation/Involvement Program is to give residents opportunities to participate in multiple activities related to stormwater quality while, at the same time, gaining knowledge about the effect their activities has on stormwater quality.

Apex Center: The Public Participation and Involvement Minimum Measure will be satisfied during the Public Hearing process because the City must codify the Inter-Governmental Agreement with North Jeffco Park and Recreation District.

2.0 ADOPTED CODES AND REGULATIONS

The City of Arvada Charter, Section 5.8 that describes the public process of passing an ordinance and noticing public hearings (supporting Ordinance No. 2670, § 4, 10-2-89, and Ordinance No. 3712, § 2, 8-6-01). Further public rulemaking procedures are codified in the City of Arvada Code, Section 2-121 and 33-259.

3.0 INTRODUCTION OF PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must comply with applicable State and local public notice requirements using an effective mechanism for reaching the public. Other programs may be implemented to facilitate public participation and involvement in the Phase II Stormwater Permit programs.

3.1 Existing Programs

Below are descriptions of best management practices (BMPs) that are being conducted in the City.

3.1.1 Local Public Notice Requirements

The City of Arvada will notify the community when changes to the City Code are anticipated, with increased attention to notifying minority groups and economically disadvantaged communities. According to the City's Charter, a notice must be published at least 10 days in advance of the public hearing. The City publishes its legal notices on a Publication Board at City Hall and in the Legal Section of the local newspaper.

The City anticipates that changes to the City Code during the first term of the Stormwater General Permit will be needed to update any manuals referred to in the code, codify compliance and enforcement programs, and implement the Inter-Governmental Agreement with the North Jeffco Park and Recreation District to include the Apex Center under the City's Stormwater General Permit.



3.1.2 Stormwater Permit Implementation Task Force

The permittee will engage a Citizen Task Force to help develop and review each minimum measure of the proposed Stormwater General Permit application. The Task Force will review the progress made by the City throughout the Permit's first-year and review the Annual Report to be submitted to the State.

3.1.3 Ask Arvada

The City of Arvada provides residents a venue to electronically submit a question to the City using e-mail. This Program is called "Ask Arvada," or "Arvada Answers." Like a Hotline, residents can initiate an exchange with public officials about City issues. The Stormwater Program will incorporate the existing e-mail program with the proposed Hotline to support public involvement in its efforts. The address for "Ask Arvada" is http://ci.arvada.co.us/AskArvada_Form.cfm.

3.2 New Programs

There are no new programs being developed for the Public Participation and Involvement Minimum Control Measure. However, the City will be looking into various methods to improve accessibility to public notices. Because many residents do not visit City Hall's publication board, nor do they receive the local newspaper with the legal notices, alternative methods to announce public hearings, public meetings, or public opportunities to participate in environmental stewardship may be used. The Arvada Report, a bimonthly newsletter that is delivered to every home, business, and apartment, is available to announce opportunities for public participation. The City's website can be used to announce opportunities to participate.

4.0 MEASURABLE GOALS

There are no Measurable Goals provided for the Public Participation and Involvement Minimum Control Measure, as the existing BMPs are compliant with the permit requirements.



SECTION 3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The goal of the Illicit Discharge Detection and Elimination (IDDE) Program will be to protect receiving water quality from pollutant levels that degrade and threaten aquatic life, wildlife, and human health. The IDDE Program will seek improvements in intermittent, storm-driven pollution carried into the storm sewers and illicit discharges that occur during dry weather.

The IDDE Program will be designed to identify, locate and correct untreated discharges that contribute pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, and pathogens, to receiving water bodies. The Program will investigate illicit discharges entering the system either through direct connections (wastewater piping connected to storm drains, for example) or through indirect connections and management practices, such as infiltration from leaky wastewater systems, spills, dumping into the storm drain, infiltration into the MS4 from cracked sanitary systems, or spills collected by drain outlets.

Apex Center: The City of Arvada will include the Apex Center in its IDDE Program and assist in training their employees on recognition of and response to IDDE occurrences.

2.0 ADOPTED CODES AND REGULATIONS

The City of Arvada Code, Section 15-44 makes it unlawful for any person to discharge anything other than naturally occurring stormwater into the City's storm drainage system (supporting Ordinance No. 2934, § 1, 11-2-92). The Stormwater General Permit provides exceptions to discharges other than naturally occurring stormwater, instructing the MS4 to address them "only if the permittee identifies them as significant contributors of pollutants to the permittee's MS4." These discharges include: landscape irrigation, lawn watering, diverted stream flows, irrigation return flow, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, springs, flows from riparian habitats and wetlands, water line flushing, discharges from potable water sources, foundation drains, air conditioning condensation, water from crawl space pumps, footing drains, individual residential car washing, dechlorinated swimming pool discharges, and street wash water discharges, or flows from fire fighting activities.⁴

3.0 INTRODUCTION OF PROPOSED PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must prohibit illicit discharges through ordinance, develop a storm sewer system map, and develop and implement a plan that outlines procedures to detect, notify, trace and eliminate illicit discharges. Training of City of Arvada field staff in the operations of this plan must be conducted as well.

⁴ Colorado Phase II Municipal Guidance, October 2001, <http://www.cdphe.state.co.us/wq/PermitsUnit/wqcdpmt.html>, page 18.



3.1 Existing Programs

Below are descriptions of best management practices (BMPs) that are being conducted in the City.

3.1.1 Develop a Stormwater Control Ordinance

The City of Arvada has an ordinance that prohibits any discharges into the storm sewer system except stormwater, and other exceptions, such as landscape irrigation, lawn watering, diverted stream flows, irrigation return flow, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, springs, flows from riparian habitats and wetlands, water line flushing, discharges from potable water sources, foundation drains, air conditioning condensation, water from crawl space pumps, footing drains, individual residential car washing, dechlorinated swimming pool discharges, and street wash water discharges, or flows from fire fighting activities. The Stormwater Program will review the Ordinance and modify it where necessary.

3.1.2 Storm Drain Marking

The Storm Drain Marking Program discourages disposal into storm drains, and helps the public understand that illicit discharges into storm drains directly affect waterways. See Public Education and Outreach for more information.

3.1.3 Arvada Website

The Arvada Website contains information concerning where and how to dispose of waste that could be a stormwater contaminant. The website will include information on who you call and when you would call City staff or emergency personnel if an illicit discharge occurs. Procedures will be revised once the IDDE Hotline is created (see Section 3, subsection 3.2.2 for more information on the IDDE Hotline).

3.1.4 Rooney Road Recycling Center

The Rooney Road Recycling Center provides the public an accessible option for the proper disposal of hazardous and non-hazardous materials. See Public Education and Outreach for more information.

3.2 New Programs

Below are descriptions of BMPs that will be implemented in the first five-year term of the Stormwater General Permit.

3.2.1 Develop the Storm Sewer System Map

The City of Arvada will develop a detailed and accurate Storm Sewer System Map. The Storm Sewer System Map will include, to the maximum extent practicable, the location of all stormwater outfalls that are owned or operated by the permittee, and the State waters into which each outfall discharges. The map will include those outfalls that discharge to State waters, specifically, Van Bibber, Leyden, Little Dry, Ralston and Clear



Creeks, and the Farmers' Highline Canal, Church Ditch and Croke Canal. Smaller irrigation ditches throughout the City are considered part of the City's MS4.

The Storm Sewer System Map will be used to determine the extent and possible sources of discharges during dry weather. More importantly, the map will assist in responding to and tracing illicit discharges when they occur.

3.2.2 Develop a Plan to Detect and Address Non-Stormwater Discharges

The City of Arvada must develop a plan to detect and address non-stormwater discharges. The plan will indicate methods to be used to detect illicit discharges, such as:

- Training of employees on recognition and reporting of suspected problems
- Establishing and maintaining a public complaint hotline
- Performing dry weather inspections
- Identifying areas of industrial and non-industrial activity for each drainage basin

The plan will include methods to trace the source of an illicit discharge, including identifying the drainage area for each outfall. Locations of all inlets and manholes may or may not be available. However, when an illicit discharge occurs, this information will be reviewed for accuracy and completeness.

The plan will include procedures to remove the source of an illicit discharge, including the following:

- Identification of hazardous versus non-hazardous materials;
- Notification of the appropriate officials, including adjacent jurisdictions and / or the State;
- Identification of the responsible party; and
- Identification and implementation of the correct procedures to remove the source of discharge.

Once the plan is complete, the City's Stormwater Program will conduct training for selected field personnel to further standardize the identification of illicit discharges.

3.2.3 Develop a Compliance and Enforcement Program for IDDE

Although the City of Arvada has an ordinance that prohibits any discharges into the storm sewer system except stormwater, a compliance and enforcement program will be



further developed. The City of Arvada will establish procedures, as outlined above, so that illicit discharges are addressed consistently and appropriately.

4.0 MEASURABLE GOALS

The following measurable goals are established to reflect the needs of the City and the area served.

Target Date	Activity
December 1, 2003	Document the percent of Storm Sewer System Map complete Establish a Hot Line for illicit discharge reporting Document number of dry weather inspections performed Document number of illicit discharges detected and eliminated
December 1, 2004	Document the percent of Storm Sewer System Map complete Advertise the existence of the Hot Line Complete the Illicit Discharge Detection and Elimination Plan Document number of dry weather inspections performed Document number of illicit discharges detected and eliminated Establish Compliance and Enforcement Program for illicit discharges
December 1, 2005	Document the percent of Storm Sewer System Map complete Document number of calls received on the Hot Line Document number of dry weather inspections performed Document number of illicit discharges detected and eliminated Document number of staff trained on the IDDE Plan Document number of Compliance and Enforcement Actions
December 1, 2006	Document the percent of Storm Sewer System Map complete Document number of calls received on the Hot Line Document number of dry weather inspections performed Document number of illicit discharges detected and eliminated Document number of staff trained on the IDDE Plan Document number of Compliance and Enforcement Actions
December 1, 2007	Document the percent of Storm Sewer System Map complete Document number of calls received on the Hot Line Document number of dry weather inspections performed Document number of illicit discharges detected and eliminated Document number of staff trained on the IDDE Plan Document number of Compliance and Enforcement Actions



SECTION 4. CONSTRUCTION SITE EROSION CONTROL

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The goal of the City of Arvada's Construction Site Erosion Control Program is to reduce pollutants in stormwater runoff to the City's waterways from construction activities that result in land disturbance of one or more acres, or construction activity that is part of a larger common plan of development or sale that would disturb one acre or more.

The target audience will include those grading and / or building in the City, and City staff and contractors. The Program must be implemented consistently throughout the City. Thus training, inspections, and compliance and enforcement procedures will be developed, as well as a procedure to track and follow-up on complaints from the public.

Apex Center: The Apex Center does not anticipate any construction in the next five years. However, if construction at the site occurs, the Stormwater General Permit will be revisited.

2.0 ADOPTED CODES AND REGULATIONS

In anticipation of State stormwater requirements in the late 1980s, Arvada implemented the Erosion and Sediment Control Ordinance. According to the City of Arvada Code, Article V. the Erosion and Sediment Control Ordinance "promotes the safety, public health, convenience and general welfare of the community through the prevention, mitigation, and control of soil erosion and sedimentation resulting from grading, stripping, excavating, filling, stockpiling, and other earth disturbing activities." (supporting Ordinance No. 2985, § 1, 7-26-93).

In the Ordinance, the City adopted by reference the September 1, 1992, Urban Storm Drainage Criteria Manual, Volume 3: Best Management Practices manual developed by Urban Drainage and Flood Control District. This manual discusses stormwater quality management, structural and non-structural best management practices (BMPs), and maintenance issues.

To assist owners and operators in selecting appropriate BMPs, the City of Arvada developed the Guide to Erosion Control and Water Quality Protection in January 1994. This document describes some basic BMPs to reduce erosion and control sediment transportation.

During site plan review, the City uses the following guidance manuals as criteria:

- Land Development Code, Arvada Community Development Department, revised August 28, 2000, and the
- City of Arvada Engineering Code of Standards and Specifications for the Design and Construction of Public Improvements, revised November 15, 2002.

With the Erosion and Sediment Control Ordinance, the Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual, Volume 3, and the City's Guidance Manuals, much of the regulatory technical requirements for this minimum control measure are met. With the issuance of



the Stormwater General Permit, inspections of construction sites for erosion and sediment control best management practices (BMPs) will be conducted on a regular basis and enforcement procedures will be developed and implemented.

3.0 INTRODUCTION OF PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must:

- Develop, implement, and enforce a pollutant control program that includes procedures for site plan review, inspections during construction, and penalties to ensure compliance;
- Require construction site owners or operators to implement erosion and sediment control BMPs, such as silt fences, temporary detention ponds and placement of hay bales, and to control other waste at the construction site, such as discarded building materials;
- Implement procedures for receipt, consideration, and possible implementation based on information provided by the public; and
- Conduct training and education for construction site owners and operators.

3.1 Existing Programs

The City of Arvada conducts a Plan Review Process of proposed industrial, commercial, multiple single-family-lot residential, and multi-family residential projects. A Plan Review Process includes a review by Community Development, Engineering and Utilities Departments to determine whether the project is compliant with City ordinances. Review of the Erosion Control Plan is conducted by Engineering and is part of the Plan Review Process. The City reviews improvements for single lots through the Building Permit Process. To a lesser extent, single lot improvements receive a review for erosion and sediment control BMPs.

3.1.1 Erosion and Sediment Control Ordinance

Once construction begins, the City possesses the authority to address noncompliance under the Erosion and Sediment Control Ordinance. The City of Arvada, Erosion and Sediment Control Ordinance requires owners and operators to “undertake all reasonable efforts to prevent, mitigate, and control accelerated erosion resulting or arising from such earth disturbing activities.” The Ordinance requires that the Stormwater Management Plan be submitted to the City, and that it conforms to all State of Colorado requirements prior to any earth moving taking place.

3.1.2 Plan Review Process

Developers who propose industrial, commercial, multiple single-family-lot residential, and multi-family residential projects submit plans, which are reviewed by City staff. The City is



requiring any development of one acre or more to provide the State-issued Stormwater Discharges Associated with Construction Activities General Permit, and a Stormwater Run-off Plan (SRP), which can be the same as the Stormwater Management Plan required by the State. The SRP must contain the designation of the party responsible for erosion control at the project site. The SRP will include information such as site description, location and description of appropriate BMPs, and inspection and maintenance procedures.

In the case of a builder working on several sites in a subdivision, a single representative SRP that describes the various lots may be considered adequate, pending review and acceptance by the City Engineering Division.

The City Engineering Division will review the SRPs to ensure that the applicant provided a mechanism to keep piled or graded dirt from leaving the site either through installation of a silt fence around the perimeter or other structural erosion control BMPs. The City will not approve site plans if the SRP is determined to be inadequate.

3.2 New Programs

During the first five-year term of the Stormwater General Permit, The City of Arvada will develop, implement, and enforce a program to reduce pollutants in stormwater from construction activities that result in land disturbance of one or more acres, or construction activity that is part of a larger common plan of development or sale that would disturb one acre or more, including procedures for site inspections and compliance or enforcement actions.

3.2.1 Construction Site Inspection and Enforcement Program

Under the State-issued Construction General Permit, the construction site owner or operator is required to complete regularly scheduled inspections, as well as post-event (such as a rain or snowstorm, snowmelt) inspections, to ensure that the BMPs are operating as designed, determine if maintenance is needed, and to locate and clean any areas where sediment and debris have moved off-site.

The City of Arvada will conduct erosion and sediment control inspections of construction sites that are one or more acres or construction activity that is part of a larger common plan of development or sale that would disturb one acre or more. Additional construction site erosion and sediment control inspections will be prioritized or conducted in response to storm events or complaints received. The results of the inspections will be evaluated annually to determine if the protocol needs to be revised.

Procedures will be developed to document the construction site inspections and a means to track and document the inspections performed will be established so that appropriate follow-up occurs. Erosion control compliance tracking will be facilitated by a database integrated with other City departments, including Building, Community Development, and Engineering.



3.2.2 **Construction Site Materials Handling – Spill prevention**

The City of Arvada will require the site owner or operator to control all chemical, petroleum, liquid and solid waste storage, and concrete wash water. The provisions must be included on the applicant’s SRP and meet the State’s requirements.

3.2.3 **Training and Education for Construction Site Owners and Operators**

The City of Arvada, in cooperation with area Cities and Counties, will provide informational sessions to owners, operators and contractors. Contractors will be informed of structural and nonstructural BMPs. Arvada field staff will be trained to recognize erosion and sediment control problems, and to report issues to the Stormwater Program for follow-up.

At pre-construction meetings, the City will remind the owner / operator that erosion control BMPs must be in place prior to site grading.

3.2.4 **Response to Public Concerns**

The City of Arvada will provide information to its residents on its website and through the Arvada Report concerning erosion and sediment control, what it means, what are BMPs, and how are BMPs used by the construction industry. Resident calls and complaints will be documented, and legitimate concerns will initiate follow-up action. Residents will be encouraged to call in construction site erosion and sediment control complaints on the Hot Line established for the Illicit Discharge Detection and Elimination Program.

4.0 **MEASURABLE GOALS**

The following measurable goal is established to reflect the needs of the City and the area served.

Target Date	Activity
December 1, 2003	List modifications of Ordinances as needed and implement Develop Education and Training Program for staff inspectors, site owners / operators / landscapers Document number construction site inspections performed Establish a Hot Line for public reporting
December 1, 2004	Document number of construction site inspections performed Establish Compliance and Enforcement Program Document number of staff inspectors, site owners / operators / landscapers trained Document number of resident calls to the Hot Line
December 1, 2005	Document number of construction site inspections performed Document number of compliance and enforcement actions taken Document number of staff inspectors, site owners / operators / landscapers trained Document number of resident calls to the Hot Line



City of Arvada

STORMWATER DISCHARGES ASSOCIATED WITH MUNICIPAL SEPARATE STORM SEWER SYSTEMS

GENERAL PERMIT APPLICATION ATTACHMENT A

December 1, 2006	Document number of construction site inspections performed Document number of compliance and enforcement actions taken Document number of staff inspectors, site owners / operators / landscapers trained Document number of resident calls to the Hot Line
December 1, 2007	Document number of construction site inspections performed Document number of compliance and enforcement actions taken Document number of staff inspectors, site owners / operators / landscapers trained Document number of resident calls to the Hot Line



City of Arvada

**STORMWATER DISCHARGES ASSOCIATED WITH
MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

GENERAL PERMIT APPLICATION
ATTACHMENT A

This page intentionally left blank.



SECTION 5. POST-CONSTRUCTION STORMWATER MANAGEMENT

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The goal of the City of Arvada's post-construction stormwater management program is to prevent or minimize impacts to stormwater in areas undergoing new development and redevelopment.

All City departments involved in development and redevelopment, including Community Development and Zoning, Public Works – Engineering, Wastewater, Environmental Services, and Street Divisions are involved in the process from site plan submittal to the inspection and maintenance of a completed project.

In 2001, the City instituted a stormwater utility. Funds generated from the utility are used for capital drainage improvements and can be used for routine maintenance of existing structural controls.

Apex Center: The Apex Center does not anticipate any construction in the next five years. However, if construction at the site occurs, the Stormwater General Permit will be revisited.

2.0 ADOPTED CODES AND REGULATIONS

The Arvada Land Development Code requires that site plans submitted for review and possible construction in the City of Arvada address drainage facilities that are compliant with the Urban Storm Drainage Criteria Manual, Volume 3: Best Management Practices manual developed by Urban Drainage and Flood Control District. The Code requires that the owner or developer of land to be improved maintain such facilities (Ordinance 3209, 8-25-95, removed and codified in the Land Development Code by Ordinance 3639, 8-28-00).

3.0 INTRODUCTION OF PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must identify stormwater BMPs installed in a new development or redevelopment that disturbs greater than or equal to one acre or the construction activity is part of a larger common development plan or sale disturbing one acre or more. Then the BMPs must be inspected and the MS4 must ensure that long-term maintenance is conducted through a control mechanism or by conducting the maintenance with City staff.

3.1 Existing Programs

Below are descriptions of best management practices (BMPs) that are being conducted in the City.

3.1.1 Long-Term Maintenance Ordinance

An Ordinance is in place to hold the owner or developer liable for the long-term maintenance of BMPs that they are required to install (Ordinance 3209, 8-25-95, removed and codified in the Land Development Code by Ordinance 3639, 8-28-00).



3.2 New Programs

Below are descriptions of BMPs that will be implemented in the first five-year term of the Stormwater General Permit.

3.2.1 Establish Procedures to Identify BMPs

The Plan Review Process will be used to identify and inventory BMPs proposed for new development and redevelopment. The approved BMPs will be consistent with the Urban Storm Drainage Criteria Manual, Volume 3: Best Management Practices developed by Urban Drainage and Flood Control District.

3.2.2 Implement an Inspection Procedure

To increase the probability that long-term operation and maintenance of structural BMPs occurs, the City will perform annual inspections of BMPs in residential and commercial development and redevelopment that were installed in March 2003, or later. The City will provide inspection reports to the property owner, or responsible party to perform identified maintenance requirements. In the event that maintenance is not completed, the City will take necessary action to ensure that the work is completed, per municipal code.

4.0 MEASURABLE GOALS

The following measurable goals are established to reflect the needs of the City and the area served.

Table with 2 columns: Target Date and Activity. Rows list goals for December 1, 2003 through 2007, including activities like developing databases, inspections, and corrective action plans.



SECTION 6. POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

1.0 GOAL STATEMENT AND TARGET AUDIENCE

The goal of the City of Arvada's Pollution Prevention / Good Housekeeping for Municipal Operations will be to develop guidance in the form of Run-off Control Plans for City operations that are designed to reduce runoff and eliminate pollutant contamination of stormwater. Arvada's stormwater management programs will initiate discussions and training with City staff about how their work impacts stormwater quality. Contractors for the City will be trained so that they are aware of the impact their operations have on stormwater quality as well.

Apex Center: The Apex Center will develop a Run-off Control Plan for that facility and train their employees on good housekeeping procedures.

2.0 ADOPTED CODES AND REGULATIONS

The City of Arvada Code, Section 15-44 makes it unlawful for any person to discharge any substance other than naturally occurring stormwater into the City's storm drainage system with certain exceptions (supporting Ordinance No. 2934, § 1, 11-2-92).

The City of Arvada Code, Section 27-174 (b)(4) requires contractors working within the City Right-of-Way to "observe and comply with the provisions of the City Charter, ordinances, and rules and regulations of the city and state, and federal laws that in any manner limit, control, or apply thereto". When required, the Spill Prevention Control and Countermeasure (SPCC) Plan is developed for municipal operations that store oil on-site. The SPCC Plan is developed in accordance with 40 CFR Part 112.

3.0 INTRODUCTION OF PROGRAMS

To satisfy this Minimum Control Measure, the City of Arvada must:

- Develop Runoff Control Plans for all City facilities that may have the potential to contribute pollutants to stormwater;
- Train staff on pollution prevention, spill control and proper waste disposal;
- Inspect facilities to determine compliance with the Plans;
- Conduct maintenance of the storm sewer system; and
- Conduct street sweeping.

3.1 Existing Programs

Below are descriptions of best management practices (BMPs) that are being conducted in the City.



3.1.1 SPCC Plans Maintenance

Every five years, update the SPCC Plans for City facilities. Training is provided to the facility staff that handle oil on what is contained in the SPCC Plan. Coordination and assignment of inspection, maintenance and emergency preparedness responsibilities is conducted during this training/review.

3.1.2 Storm Sewer Maintenance

A portion of the Stormwater Utility is directed to the Wastewater to maintain the storm sewers. Routine maintenance is conducted, and the Wastewater Section may dispatch a TV or Vac truck if there is a complaint. As maintenance is conducted, the location of storm sewer lines is verified and checked for accuracy with the storm sewer maps, and the information is updated as necessary.

3.1.4 Conduct Street Sweeping

The City of Arvada conducts street sweeping at least twice a year and will continue to do so. Staff in the City of Arvada, Streets Section, conducts street sweeping. A portion of the Stormwater Utility Fund is directed to the Streets Section to pay for this street sweeping.

3.2 New Programs

Below are descriptions of BMPs that will be implemented in the first five-year term of the Stormwater General Permit.

3.2.1 Development of Runoff Control Plans

The City of Arvada will develop and implement Runoff Control Plans for City facilities with the ultimate goal of reducing impacts to stormwater from City operations into the storm sewer system. Initially, a map of facilities owned and maintained by the City will be developed that identifies facility name, location, inlet / runoff collection points, outlet structures where the stormwater drains off the property, major drainage ways, industrial activities, and outside material storage. Runoff Control Plans will include the following:

- Potential Pollutant Sources
- BMPs for Pollutant Sources
- Site Map
- Preventive Maintenance
- Inspection Program
- Good Housekeeping Procedures
- Spill Prevention and Response Procedures
- Employee Training Program
- Contractor Training Program
- Recordkeeping

Examples of facilities include City Hall, administration buildings, water treatment plant, fleet maintenance, parks and streets service yard, waste water collection service yard, and parks /



golf course maintenance facilities. Other City facilities will be inspected to evaluate the potential for stormwater impacts and to determine if a Runoff Control Plan is needed. The City will assess park and municipal facilities to recommend reductions in the use of pesticides, herbicides, and solvents. Management practices to reduce water use will be included in the assessment as well as opportunities for pilot programs for revegetation and xeriscaping. It is anticipated that Runoff Control Plans may evolve into an over-all Environmental Management System for City facilities to comply with applicable regulatory, policy and permit requirements.

3.2.2 Pollution Prevention Evaluation

The City will evaluate methods to reduce the need for environmentally hazardous substances, control and manage spent chemicals in the City’s operations, and investigate methods to reduce waste to the maximum extent practicable. For example, an analysis of sand / salt use throughout the City will be conducted and recommendations made. The City will conduct street sweeping to properly dispose of the sand / salt, and conduct maintenance of storm sewer lines.

4.0 MEASURABLE GOALS

The following measurable goals are established to reflect the needs of the City and the area served.

Target Date	Activity
December 1, 2003	Inventory City facilities to determine which do not require a Runoff Control Plan Document City facilities with a Pollution Prevention Evaluation conducted Document number of City contracts evaluated for spill prevention requirements Document number of parks / golf courses evaluated for grounds keeping
December 1, 2004	Create and implement Runoff Control Plans Document City facilities with a Pollution Prevention Evaluation conducted Document number of City contracts evaluated for spill prevention requirements Document number of parks / golf courses evaluated for grounds keeping
December 1, 2005	Document number of City staff trained on Runoff Control Plans Document City facilities with a Pollution Prevention Evaluation conducted Document number of City contracts evaluated for spill prevention requirements Document number of parks / golf courses evaluated for grounds keeping
December 1, 2006	Document number of City staff trained on Runoff Control Plans Document City facilities with a Pollution Prevention Evaluation conducted Document number of City contracts evaluated for spill prevention requirements Document number of parks / golf courses evaluated for grounds keeping
December 1, 2007	Document number of City staff trained on Runoff Control Plans Document City facilities with a Pollution Prevention Evaluation conducted Document number of City contracts evaluated for spill prevention requirements Document number of parks / golf courses evaluated for grounds keeping



City of Arvada

**STORMWATER DISCHARGES ASSOCIATED WITH
MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

MEMORANDUM OF UNDERSTANDING
CITY OF ARVADA AND
NORTH JEFFCO PARK AND RECREATION DISTRICT

ATTACHMENT B

The following Memorandum of Understanding commits the City of Arvada and North Jeffco Park and Recreation District to developing an Inter-Governmental Agreement to include the District's Apex Center in the City's Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems General Permit.

On or before March 10, 2003, the City of Arvada (City) is required to apply for a Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (MS4) General Permit (Stormwater General Permit).

In September 2002, Jefferson County Public Schools, Red Rocks Community College, and North Jeffco Park and Recreation District were notified that they are Non-Standard MS4s and must either apply for a Stormwater General Permit or be included in the City's Stormwater General Permit. Non-Standard MS4s are entities independent of local jurisdictions that serve an average of 1,000 people or more per day. For the North Jeffco Park and Recreation District (District), the Apex Center was the only facility that qualified.

In accordance with the requirements of the Stormwater General Permit Application conditions, the City and the District agree to develop an Inter-Governmental Agreement, which will outline the responsibilities each entity will have under the Stormwater General Permit. This Inter-Governmental Agreement is targeted to be completed by December 1, 2003.

Craig Kocian, City Manager
City of Arvada

Michael Miles, Executive Director
North Jeffco Park and Recreation District

Date

Date