

Who should attend??



This class is designed for personnel responsible for ensuring the proper functioning of stormwater structures, features, and Best Management Practices (BMPs) as they relate to City requirements and the Municipal Separate Storm Sewer System (MS4) permit. Specific focus is given to the inspection and maintenance of *permanent* BMPs. The course covers MS4 permit requirements for maintenance activities of permanent stormwater controls, construction site erosion control BMPs, and materials/waste handling practices. The class also covers fixed facility stormwater management practices such as spill plans and chemical storage. In brief, the class provides the training necessary to effectively maintain stormwater BMPs.

Student Learning Objectives:

- Describe the basic requirements of the regulatory program for stormwater management
- List the stormwater permit conditions that effect BMP owners and operators
- Describe the types of permanent controls used for stormwater pollution control and typical construction and maintenance requirements
- Describe the proper installation techniques for construction site erosion control BMPs and required maintenance activities with a focus on post construction, pre-permit inactivation
- Describe how to conduct an inspection of stormwater BMPs features, both temporary and permanent

Program for Ensuring Operations and Maintenance of Private and Public Stormwater Best Management Practices

The City of Colorado Springs (City) was issued a Municipal Separate Storm Sewer System (MS4) Permit from the Colorado Department of Public Health and Environment (CDPHE), with the latest permit being issued in 2004. A requirement of the Permit is for the City to ensure that operations and maintenance (O&M) is occurring on private and public stormwater Best Management Practices, a.k.a. BMPs (e.g., ponds, porous landscape detention, etc.).



Since 2002, the City has required BMPs for new construction or redevelopment in order to treat stormwater runoff from the site and required maintenance of the BMPs. In 2008, a requirement for inspections was added to ensure the BMPs are working properly and being properly maintained. The program is currently an addendum to the City's Drainage Criteria Manual, Volume 2. The new program and code require that annual inspections by the BMP owners occur on BMPs constructed after June 1, 2008.



Why is this needed?

The new requirement for ensuring O&M is necessary due to 50% of BMPs failing within 5 years of construction due to lack of maintenance. We anticipate that there will be a positive impact on local stream water quality with the implementation of this program.



Requirements for Ensuring Operations and Maintenance of Best Management Practices:

This program requires that BMP owners or responsible parties (e.g., HOAs, property maintenance companies, landscape maintenance companies, etc.) inspect their facilities and annually report on activities to City Engineering. Maintenance of the BMPs continues to be the private BMP owners' responsibility. In addition, maintenance agreements and plans identifying required maintenance, maintenance frequency, and estimated costs are required prior to construction occurring at the site.



This program also requires a PE certification on construction of permanent stormwater BMPs. Over the last several years, a PE certification has been required for construction of *public* drainage facilities. Colorado State law regulates the practice of engineering and states that observation of construction to evaluate compliance with plans and specifications is considered the practice of engineering and must be performed by a licensed professional engineer or supervised by a licensed professional engineer. The PE certification requirement should ensure that private BMPs are constructed properly and are functioning as designed.



City Engineering Responsibilities:

City Engineering will provide oversight and monitoring of the program and perform compliance inspections at a minimum of once every 3 to 5 years. The program is currently an addendum to the City's Drainage Criteria Manual, Volume 2.

City Engineering will provide education, training, and assistance to BMP owners or responsible parties to give these individuals the knowledge and tools needed to comply with the requirements. In addition, the City will provide inspection forms and templates for maintenance plans/agreements.

City Code requires that BMPs constructed after June 1, 2008 meet the requirements of this program. The City is required to ensure that O&M has occurred on these BMPs. The City will not be required to ensure that O&M has occurred on BMPs installed prior to June 1, 2008.

Operations and Maintenance of Stormwater Best Management Practices

Presented by Scott Olson from
Altitude Training Associates

When: September 20, 2011 Tuesday
(1:00-5:00 pm) 12:30 pm check-in

Where: CAB (City Administration Building)
30 S. Nevada Ave., Suite 102
Colorado Springs, CO

Cost: \$\$\$.\$\$ which includes handouts.
Class size is limited to 50 so register soon!!
(We will use a wait list if necessary)

Registration space is not guaranteed until
fee has been received.

Parking is available on the SW corner for a
fee. Free street parking is available a few
blocks away.

Parking will NOT be validated.

| | | |
|----------------|--------|------|
| Name(s): | | |
| | | |
| Company: | | |
| Email contact: | | |
| Address: | | |
| City: | State: | Zip: |
| Phone: | | |
| Fax: | | |

Registration deadline: **Wed., Sept. 14th**
Please enclose a check for \$\$\$.\$\$ per person
made payable to City Engineering*
Sorry, Credit Cards cannot be accepted.

Return registration form to:

Stormwater Engineering
Attn: Cheryl Callahan
P.O. Box 1575 MC 520

Colorado Springs, CO 80901

For more information, call 719-385-5543

***FAX YOUR RESERVATION TO: 719-385-5095**

No cancellations 14 days prior to class,
substitution allowed until class time.

Contact Information

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| Grading, erosion & stormwater quality control plan review | (719) 385-5979 |
| Hillside grading, erosion and stormwater quality control plan review | (719) 385-5905 |
| Stormwater Engineering | (719) 385-5980 |
| or visit our website at: www.springsgov.com/stormwater | |
| For specific information on this O&M program, please call Joel Mackey (385-5097) | |



PLEASE READ!!!

We anticipate this class filling up quickly. Please fax in your registration **(719-385-5095)** and provide a fax number for us to confirm your status before sending in payment. We will be putting any overflow registrants on a waitlist.

PLEASE READ!!!

City of Colorado Springs
Stormwater Engineering
P.O. Box 1575 – MC 520
Colorado Springs, CO 80901-1575

Operations and Maintenance of Stormwater Best Management Practices

Training Class!!

Tuesday
October 19, 2010
1:00 p.m. to 5:00 p.m.

