



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

MAY 15 2013

Ref: 8ENF-W-NP

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Tim Mitros  
Engineering Development Review and Stormwater Manager  
City of Colorado Springs  
30 S. Nevada Street, 401  
Colorado Springs, CO 80901

Re: Municipal Storm Water Inspection Report,  
NPDES Permit Number – COS000004

Dear Mr. Mitros:

Enclosed is a copy of the inspection report for the Environmental Protection Agency's (EPA's) inspection of the City of Colorado Springs Municipal Separate Storm Sewer System on February 4-7, 2013. Findings were noted during the inspection and are summarized in the enclosed report.

Within **forty-five (45) days** of receipt of this report, please provide the EPA and the Colorado Department of Public Health and Environment (CDPHE) a summary of any corrective actions taken to address the findings identified in the enclosed report along with any additional information the City feels could change the findings. Please address each finding individually and reference the finding number in the order provided in the EPA's report "Findings and Corrective Actions Summary Table." Your response should be sent to:

U.S. EPA Region 8  
NPDES Enforcement Unit  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Attn: Alysia Tien (8ENF-W-NP)

Colorado Department of Public Health and Environment  
Water Quality Control Division  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Attn: Nathan Moore

Please contact me at 303-312-7021 or [tien.alysia@epa.gov](mailto:tien.alysia@epa.gov) if you have any questions.

Sincerely,

Alysia Tien  
NPDES Enforcement Unit  
Office of Enforcement, Compliance  
and Environmental Justice

Enclosures: EPA 3560 Form, Inspection Report, Photo Log

cc: Nathan Moore, CDPHE  
Michelle DeLaria, CDPHE



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Attn: Nathan Moore

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Sincerely,

A handwritten signature in black ink that reads "Alysia Tien".

Alysia Tien  
NPDES Enforcement Unit  
Office of Enforcement, Compliance  
and Environmental Justice

Enclosures: EPA 3560 Form, Inspection Report, Photo Log

cc: Nathan Moore, CDPHE  
Michelle DeLaria, CDPHE





**Water Compliance Inspection Report**

**Section A: National Data System Coding (i.e. PCS)**

Transaction Code: 1 [N] 2 [5] 3 [C][O][S][0][0][0][0][4] 11 12 [1][3][0][2][0][4] 17 yr/mo/day Inspection Type: 18 [-] Inspector: 19 [R] Fac Type: 20 [1]

Remarks: 21 [S][E][E][A][T][T][A][C][H][E][D][R][E][P][O][R][T] 66

Inspection Work Days: 67 [ ][ ] 69 Facility Self-Monitoring Evaluation Rating: 70 [ ] BI: 71 [ ] QA: 72 [ ] Reserved: 73 [ ][ ] 74 75 [ ][ ][ ][ ][ ] 80

**Section B: Facility Data**

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) City of Colorado Springs 30 S. Nevada Street, Suite 401 Colorado Springs, CO 80901	Entry Time/Date 9:10 AM 2/4/2013	Permit Effective Date 11/1/2011
	Exit Time/Date 4:30 PM 2/7/2013	Permit Expiration Date 10/31/2016
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Numbers Lisa Ross / Senior Civil Engineer/EDRD/ Stormwater / 719-385-5064 / (719) 385-5537 Tim Mitros / Engineering Division Review and Stormwater Manager / 719-385-5064 / (719) 385-5537 Others as identified in inspection report.	Other Facility Data (e.g., SIC, NAICS, and other descriptive information)  SIC Code:	
Name, Address of Responsible Official/Title/Phone and Fax Number Tim Mitros / Engineering Division Review and Stormwater Manager 719-385-5061 / (719) 385-5537 City of Colorado Springs, City Engineering Division 30 S. Nevada Street, Suite 401 Colorado Springs, CO 80901	Lat: 38°49'57.93"N (estimated) Long: 104°49'20.31"W (estimated)	
Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

**Section C: Areas Evaluated During Inspection (Check only those areas evaluated)**

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Pretreatment	<input checked="" type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention	
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Storm Water	
<input type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

**Section D: Summary of Findings/Comments**

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	_____
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	_____

Name(s) and Signature(s) of Inspector(s) Alysia Tien <i>Alysia Tien</i>	Agency/Office/Phone and Fax Numbers EPA 1595 Wynkoop St Denver, CO 80202 (303) 312-7021	Date 5/14/13
QA Reviewers	Multiple	Multiple

**INSTRUCTIONS**

**Section A: National Data System Coding (i.e., PCS)**

**Column 1: Transaction Code:** Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

**Columns 3-11: NPDES Permit No.** Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc. (Use the Remarks columns to record the State permit number, if necessary.)

**Columns 12-17: Inspection Date.** Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

**Column 18: Inspection Type\*.** Use one of the codes listed below to describe the type of inspection:

A Performance Audit	U IU Inspection with Pretreatment Audit	Pretreatment Compliance (Oversight)
B Compliance Biomonitoring	X Toxics Inspection	@ Follow-up (enforcement)
C Compliance Evaluation (non-sampling)	Z Sludge - Biosolids	{ Storm Water-Construction-Sampling
D Diagnostic	# Combined Sewer Overflow-Sampling	} Storm Water-Construction-Non-Sampling
F Pretreatment (Follow-up)	\$ Combined Sewer Overflow-Non-Sampling	: Storm Water-Non-Construction-Sampling
G Pretreatment (Audit)	+ Sanitary Sewer Overflow-Sampling	= Storm Water-Non-Construction-Non-Sampling
I Industrial User (IU) Inspection	⊗ Sanitary Sewer Overflow-Non-Sampling	< Storm Water-MS4-Sampling
J Complaints	\ CAFO-Sampling	= Storm Water-MS4-Non-Sampling
M Multimedia	= CAFO-Non-Sampling	> Storm Water-MS4-Audit
N Spill	2 IU Sampling Inspection	
O Compliance Evaluation (Oversight)	3 IU Non-Sampling Inspection	
P Pretreatment Compliance Inspection	4 IU Toxics Inspection	
R Reconnaissance	5 IU Sampling Inspection with Pretreatment	
S Compliance Sampling	6 IU Non-Sampling Inspection with Pretreatment	
	7 IU Toxics with Pretreatment	

**Column 19: Inspector Code.** Use one of the codes listed below to describe the lead agency in the inspection.

A — State (Contractor)	O — Other Inspectors, Federal/EPA (Specify in Remarks columns)
B — EPA (Contractor)	P — Other Inspectors, State (Specify in Remarks columns)
E — Corps of Engineers	R — EPA Regional Inspector
J — Joint EPA/State Inspectors—EPA Lead	S — State Inspector
L — Local Health Department (State)	T — Joint State/EPA Inspectors—State lead
N — NEIC Inspectors	

**Column 20: Facility Type.** Use one of the codes below to describe the facility.

- 1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 — Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4 — Federal. Facilities identified as Federal by the EPA Regional Office.
- 5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

**Columns 21-66: Remarks.** These columns are reserved for remarks at the discretion of the Region.

**Columns 67-69: Inspection Work Days.** Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

**Column 70: Facility Evaluation Rating.** Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

**Column 71: Biomonitoring Information.** Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

**Column 72: Quality Assurance Data Inspection.** Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

**Columns 73-80:** These columns are reserved for regionally defined information.

**Section B: Facility Data**

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

**Section C: Areas Evaluated During Inspection**

# **Federal NPDES Storm Water Inspection – MS4**

**City and Colorado Springs Phase I MS4 Inspection Report  
Colorado Discharge Permit System, Permit #: COS000004**

**Inspection Dates: February 4, 2013 – February 7, 2013**

**Prepared by  
U.S. Environmental Protection Agency Region 8 NPDES Enforcement Unit**



# Federal NPDES Storm Water Inspection – MS4

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## Federal NPDES Storm Water Inspection – MS4

NATIONAL DATABASE INFORMATION	
<b>Inspection Date(s):</b> February 4-7, 2013	<b>Inspection Type:</b> MS4 Storm Water, Phase I
<b>Entry Time:</b> 9:10 AM	<b>Exit Time:</b> Approximately 4:30 PM
<b>NPDES ID Number:</b> COS000004	EPA Lead Inspection

Facility Location Information:(Name/Location/Mailing Address)	
<b>Site/Facility Location:</b> City of Colorado Springs City Engineering Division 30 S. Nevada Street, Suite 401 Colorado Springs, CO 80901	<b>Mail Report to:</b> Tim Mitros, Engineering Development Review and Stormwater Manager City of Colorado Springs 30 S. Nevada Street, 401 Colorado Springs, CO 80901

Contact Information		
	Name(s)/Title	Telephone
<b>On-Site Representatives:</b>	Lisa Ross/ Senior Civil Engineer / Engineering, Development and Review / Stormwater (Formerly – No longer employed with City of Colorado Springs Engineering Division)	719-385-5064
	Ryan Bouton / Engineering Tech II / Asset Management/Stormwater	719-385-5384
	Jeff Besse / Stormwater Specialist/ EDRD/Stormwater	719-385-5566
	Joel Mackey / O&M Engineering Inspector / Engineering, Development and Review /Stormwater	719-385-5097
	Steve Bodette / Engineering Inspector/City Engineering	719-385-5078
	Tim Mitros / Engineering, Development and Review and Stormwater Manager	719-385-5061
	Steve Kuehster / Senior Civil Engineer/ Engineering Development Review	719-385-5412
	Michael Kelso / Senior Engineering Inspector/ City Engineering	719-492-0996
	Todd Sturtevant / Senior Engineering Inspector/ City Engineering	719-499-1812
	Alan Williamson / Eng. Tech II/ City Engineering	719-385-5063
<b>Authorized Official(s)</b>	Tim Mitros / Engineering, Development and Review and Stormwater Manager	719-385-5061
<b>Co-Permittees Contact Information:</b>	N/A	
<b>Regulatory Inspectors:</b>	Alysia Tien / U.S. Environmental Protection Agency (EPA), Region 8 – Inspector	303-312-7021
	David Gwisdalla / U.S. EPA Region 8 – Inspector	303-312-6193
	Monia Ben-Khaled / U.S. EPA Region 8 – Inspector	303-312-6209
	Kacy Sable, U.S. EPA / National Enforcement Investigations Center (NEIC) – Inspector	303-312-9302
	Michelle DeLaria / Colorado Department of Public Health and Environment (CDPHE) – CDPS Permitting	303-692-3615

## Federal NPDES Storm Water Inspection – MS4

Permit Information			
<b>Is the permit on site and available?</b> Yes – two permits were evaluated during inspection			
<b>Effective Date:</b> Permit 1: November 1, 2011 Permit 2: March 4, 2004		<b>Expiration Date:</b> Permit 1: October 31, 2016 Permit 2: February 28, 2009 (administratively extended)	
<b>Area served by MS4:</b> Colorado Springs Area: 194 square miles (2010 Census Bureau)	<b>Population served by MS4:</b> Colorado Springs Population: 426,388 (2011 Estimated Census Bureau)	City of Colorado Springs City Engineering Division 30 S. Nevada Street, Suite 401 Colorado Springs, CO 80901	
		<b>Latitude (above listed facility):</b> 38°49'57.93"N	<b>Longitude (above listed facility):</b> 104°49'20.31"W
<b>Any co-permittees (if so, list contact information above):</b> None.			
<b>Permit area:</b>	City of Colorado Springs, Colorado		
<b>Receiving Water(s):</b> The Colorado Springs MS4 discharges into the Monument and Fountain Creeks and then into the Arkansas River.			
<b>Regulatory Inspector's source(s) of information:</b> City of Colorado Springs MS4 Colorado Discharge Permit, 2011/2010 Annual Report, 2010/2011 City of Colorado Springs Census Bureau Statistics, City of Colorado Springs 2011 NPDES Stormwater Permit Annual Report, interviews with on-site representatives and documents referenced below in the section entitled "Documents Reviewed During the Inspection"			

MS4 Program Areas Inspected During the Inspection			
<b>Public Education &amp; Outreach</b>	No	<b>Public Involvement/Participation</b>	No
<b>Illicit Discharge Detection and Elimination</b>	Yes	<b>Post-Construction Storm Water Management in New Development and Redevelopment</b>	Yes
<b>Industrial Facilities and High Risk Runoff</b>	Yes	<b>Construction Sites Storm Water Runoff Control</b>	Yes
<b>Pollution Prevention and Good Housekeeping for Municipal Operations</b>	Yes	<b>Storm Water Monitoring</b>	Yes
<b>Program Management</b>	Yes	<b>Compliance Schedule</b>	Yes



## Federal NPDES Storm Water Inspection – MS4

### Municipal Information

**Municipal Description:** The City of Colorado Springs encompasses approximately 194 square miles (2010) and has an estimated population of 426,388 persons (2011) within its boundary. At the time of the EPA’s inspection, the Colorado Springs Engineering Development Review (EDR) and Stormwater Team maintained responsibility for ensuring compliance with the City of Colorado Springs MS4 (the City) permit. The Stormwater Program was primarily managed by Lisa Ross, Senior Civil Engineer. Program authority had been delegated to Tim Mitros, Engineering Development Review and Stormwater Manager. Implementation of the City’s MS4 stormwater program involved coordination with other Colorado Springs programs such as the Assets Management Group and the Capital Program Management Team. In addition, the City collaborated with entities external to the City’s EDR and Stormwater Program such as the United States Geological Survey (USGS), the Regional Floodplain Administration, Colorado Springs Utilities (CSU), the Colorado Springs Fire Department/Hazardous Materials Response Team (HMRT), El Paso County and the Colorado Department of Public Health and Environment (CDPHE).

<b>Zoning as a percentage of the total municipal area:</b>	Residential: 29.5%	Developed Non-Residential (Commercial/ Industrial): 20.5%	Undeveloped/Agricultural: 50.0%
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### Inspection Details

The EPA’s inspection of the City was prompted as part of the EPA Municipal Infrastructure National Enforcement Initiative; which includes Phase I MS4s with populations greater than 100,000 in an urbanized area. The purpose of the inspection was to verify compliance with the City’s permit issued by the CDPHE. Upon arrival at the facility, the EPA inspectors displayed their credentials and outlined the process of the inspection to the on-site representatives. The inspection consisted of an opening conference, a records review, personnel interviews, field site visits and an official close-out meeting. Field site visits included municipal areas, industrial facilities, industrial outfalls, new development sites, sites related to illicit discharge activities and construction sites. The EPA inspection occurred February 4, 2013 – February 7, 2013 at the Colorado Springs City Administration Building with the close-out meeting occurring on February 7, 2013 from approximately 3:30 p.m. until 4:30 p.m. Additional information on the records review, field site visits and findings identified during the inspection is outlined in this report. The EPA Form 3560 and the photo logs are attached. The Findings and Corrective Actions Summary Table lists the findings for each MS4 program area that was inspected and indicates whether there is an associated corrective action and/or recommendation for each.

The listed program areas, see the “Program Area Details” section, of the City’s stormwater management program were inspected. The inspection process included review of general program documentation but may not have included the review of all documents that would prove compliance with all permit requirements. The City remains responsible for complying with all Permit requirements and performing on-going evaluations of its programs. The EPA and CDPHE reserve the right to review comprehensive documentation should it be deemed necessary in the future.

**Description of the weather conditions (e.g., temp., precipitation amount, etc) the last 10 days preceding the inspection; include the dates of the rain events:** Prior to the inspection, temperatures ranged from highs of approximately 27° F to 61° F with most days in the 40’s and 50’s (°F). Precipitation was recorded on February 6, 2013 (0.13 inch). Source of weather information: [www.weather.com](http://www.weather.com), [www.accuweather.com](http://www.accuweather.com) and [www.almanac.com](http://www.almanac.com).

## Federal NPDES Storm Water Inspection – MS4

Weather conditions during the inspection:			
<b>Day 1:</b> Max Temp 50° F. 0.0" of precipitation Sunny Partly cloudy	<b>Day 2:</b> Max Temp 52° F. 0.0" of precipitation Sunny Partly cloudy	<b>Day 3:</b> Max Temp 59° F. 0.13" of precipitation Mostly cloudy	<b>Day 4:</b> Max Temp 42° F. 0.0" of precipitation Sunny Partly cloudy

### Program Area Details

**Program Management:** The City's program is permitted by the State of Colorado under permit number COS000004. The MS4 program was primarily managed by Lisa Ross, Senior Civil Engineer, and responsibilities for the permit resided within the City's EDR and Stormwater Team. Collaboration with external entities and City programs for implementation of the MS4 Stormwater program included USGS, City of Colorado Springs (CCS) Code Enforcement, CCS Public Works Division, CCS Street Division, the Regional Floodplain Administration, CSU, the Colorado Springs Fire Department, El Paso County and CDPHE. Duties managed within the program were performed by City employees and included administration, planning, permitting, engineering/construction, inspection and enforcement activities. The program did not have a specific Stormwater Management Plan (SWMP) document; however, it was implemented through the use of multiple permit specific program area plans and operating procedures. Legal authorities for the program were obtained through the use of the city municipal codes and ordinances. Annual reports summarizing the previous calendar year's MS4 program information were signed off on by the approved signatory authority and submitted to the State per the permit's annual report submission schedule.

**Storm Water Monitoring (Monitoring) Program:** The City's Monitoring Program was primarily managed by Lisa Ross, Senior Civil Engineer. The Monitoring Program consisted of annual wet weather monitoring for selected parameters at locations along the Fountain and Monument Creeks as well as the initial identification of dry weather flows along impaired segments of the creeks.

#### Wet Weather Monitoring:

The City's Wet Weather Monitoring Program was implemented with the assistance of the USGS. Compliance monitoring samples for base flow, normal flow and stormwater data were collected by the USGS and analyzed at a USGS or a USGS-certified laboratory. The USGS would submit a summary of the sample data to the City and a written report of the data collected for each calendar year was summarized and submitted to the CDPHE in the City's annual report.

The wet weather monitoring program included both a chemical monitoring component and a biological/habitat assessment at the following three monitoring sites:

- 1) Fountain Creek near Colorado Springs/FOCR at 33<sup>rd</sup> St. (07103700)
- 2) Monument Creek above Woodmen Rd. (07103970)
- 3) Fountain Creek below Janitell Rd. (07105530)

The chemical monitoring component consisted of routine water quality monitoring at a frequency of up to four times per year. This included the sampling of one to two storm events each summer.

## Federal NPDES Storm Water Inspection – MS4

Chemical monitoring included the following analyses:

“Selected Constituents of Concern”	
Arsenic, total	Manganese, dissolved
Boron, total	Selenium, total
Boron, dissolved	Selenium, dissolved
Calcium, dissolved	Sulfate, dissolved
Copper, total	Suspended Sediment
Copper, dissolved	Phosphorus, total
Lead, total	Orthophosphorus, dissolved
Magnesium, dissolved	Nitrite + Nitrate, dissolved
Nickel, total	Ammonia, dissolved
Zinc, total	Nitrogen, total
Zinc, dissolved	<i>E. coli</i> (colonies/100 mLs)
Manganese, total	

The biological/habitat assessment consisted of a benthic macroinvertebrate survey, a stream habitat assessment and collection of temperature and specific conductance measurements in the field. The biological and habitat assessments occurred concurrently in the Fall.

### Dry Weather Monitoring:

The City was in the initial stages of implementing a Dry Weather Monitoring Program to sample discharges to impaired segments of the Fountain and Monument Creeks. The initial stages of the monitoring plan involved the identification of dry weather discharges from MS4 outfalls within the impaired segments. Those outfalls that are identified by the City as having dry weather flows (i.e. flows greater than 5 gallons per minute, gpm) and are either greater than 36” in diameter or are smaller than 36” in diameter with “significant dry weather discharge conditions”, will be tracked and monitored as “Outfalls of Concern” in the future. The identification process for dry weather discharges is scheduled to occur from October 2012 - December 2013. The identified “Outfalls of Concern” will be monitored four times (representing each calendar quarter) from April 1, 2014 - March 31, 2016. Monitoring will include the collection of flow rate and *E. coli* data to determine possible sources of contamination contributing to the impairment of the creek segments. The impaired creek segments included COARFO01a (Fountain Creek and tributaries above Monument Creek) COAFRO02a (Fountain Creek, Monument Creek to Hwy 47), COARFO04 (tributaries to Fountain Creek) and COARFO06 (Monument Creek from National Forest to Fountain Creek).

The City also performs “reactionary” dry weather sampling based on information received by the City of potential illicit discharges. There is currently no regularly scheduled dry weather monitoring program being implemented to proactively seek out potential illicit discharges.

**Illicit Discharge Detection and Elimination (IDDE) Program:** Mr. Alan Williamson, Engineering Tech II, was the primary program lead for the City’s IDDE Program until Mr. Ryan Bouton, Engineering Tech II, took over the lead program responsibilities beginning in 2013. The IDDE program was developed around the authority to prohibit illicit discharges with processes in place for prevention, response and enforcement. The City of Colorado Springs IDDE Program document, issued 10/1/2012 and revised 01/21/2013, identified the Division of the Fire Marshal (Fire Marshal) and the CSU Industrial Pretreatment Section as the entities responsible for performing “preventative inspections” for identifying illicit discharges. The Colorado Springs Fire Department, CSU, the



## Federal NPDES Storm Water Inspection – MS4

Regional Floodplain Administration, El Paso County (primarily septic malfunctions), CCS Public Works and CCS Code Enforcement were identified as being responsible for responding to potential IDDE issues. The Regional Floodplain Administration however, had very little direct involvement in IDDE response related to spills. The Administration's involvement was mainly limited to issues related to floodplain filling and there was no formal training provided for IDDE spill response

The call center at the Colorado Springs Police Operations Center, managed by Tina Young, received and screened calls related to potential illicit discharges in the City of Colorado Springs. The call center had day and evening shifts to cover incoming calls and had approximately seven to eight dispatchers and four to eight call takers available at all times. All reported events that involved hazardous materials were forwarded on to the Colorado Springs Fire Department and all non-hazardous material spill calls were sent to the CCS Code Enforcement for follow-up. Typically, the discharges/spills that involved 25 gallons or less were handled by Colorado Springs Fire Department personnel and those that were greater than 25 gallons were handled by the Colorado Springs Fire Department's HMRT. The City was notified by the Colorado Springs Fire Department or CCS Code Enforcement of any illicit discharges that reached the MS4. The City also received quarterly spill reports from the Colorado Springs Fire Department. The EPA inspectors interviewed Ms. Lisa Mitchell, Training Manager, for the Colorado Spring Police Operations Center Call Center. During the inspection, Ms. Mitchell described the training and processes implemented at the call center for screening calls.

CSU's Environmental Services was responsible for responding to illicit discharges from their systems (e.g., sanitary sewer overflows) and notifies the City of potential or actual discharges to the MS4. The CSU provided monthly reports of illicit discharges to the City however, during a phone interview conducted on February 22, 2013, with Mr. Todd Dahlberg, Engineer with the CSU Industrial Pretreatment Program, it was indicated that employees were not provided with specific IDDE training related to stormwater and that any IDDE training that was provided, was related to the industrial pretreatment inspection requirements.

The City's IDDE program also performs education and outreach awareness to prevent illicit discharges. The City has identified three target industries for education and outreach: concrete washout, automotive services (power washing, auto detailers..) and carpet cleaning. These industries were identified based on continuous evaluation of the types of IDDE issues/complaints received by the City.

The City derives its authority to eliminate illicit discharges within its MS4 through the City Code (Chapter 3, Article 8 Stormwater Quality Management and Discharge Control Code), which illustrate the limitations on discharge of pollutants and the enforcement by the City.

According to the City's 2011 Annual Report, the Illicit Discharges Management Program is divided into seven elements: 1) Prevention of Illicit Discharges and Improper Disposal, 2) Illicit Discharge Detection and Elimination, 3) Procedures to Prevent, Contain and Respond to Spills, 4) Educational Activities to Promote Reporting of Illicit Discharges and Improper Disposal, 5) Public Educational Activities to Promote Proper Management and Disposal of Potential Pollutants, 6) Household Chemical Waste Collection Programs, and 7) Control of Sanitary Sewer Seepage into the Municipal Storm Sewer System. Each of the seven areas was evaluated during the inspection. The City's Illicit Discharges Management Program primarily utilizes the Fire Marshal, CSU, public works employees and public education and awareness to identify illicit discharges within the City. The City performed

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annual training for City Engineering Inspectors, Stormwater Technicians and CCS Street Division staff which consisted of a presentation reviewing current IDDE documents and a discussion on identification and response to illicit discharges. Employees who attended the training were also provided with a list of procedures and contacts for the IDDE program. The training was not mandatory and there was no mechanism in place to ensure that all City personnel involved in IDDE detection had received the training on an annual basis.

The City has the ability to provide verbal warnings, educational flyers, written warnings and municipal summons. The City would initially issue a verbal warning and provided educational material to the illicit discharge responsible party. In case the verbal warning fails to remediate the situation, or a repeated violation is noticed, the City may escalate its enforcement to include a written warning in the form of a non-compliance letter or notice of violation. In serious instances, the City has the authority to escalate its response to a municipal summons. Any discharge identified as an illicit discharge was tracked with geographic information systems (GIS), entered into a database and a copy of a written investigation report was filed. The EPA reviewed database entries from 2012, a number of written illicit discharge investigation reports from 2011 and 2012 and a notice of violation issued to a local business (Lucky Dog). Investigations conducted by the Fire Marshal were entered into a separate database and quarterly reports were submitted to the City.

### Illicit Discharge Detection and Elimination (IDDE) Site Visits:

On February 6, 2013, the EPA inspectors conducted site visits at two sites within the boundaries of the City of Colorado Springs. The first site visit was a follow-up inspection for a gasoline spill incident at a Conoco gas station. The incident was reported to the City on February 5, 2013. The second site visit took place at a local dog care facility, Sunrise Kennels and Dog Training Center. The visit was in response to a report by the City of Colorado Springs Parks, Recreation and Cultural Services of a potential illicit discharge. The discharge was observed coming from a pipe on a hillside that flowed across a bike path underpass near Cottonwood Creek. The purpose of the site visits was to assess the City's response and follow-up to illicit discharge reports. During the site visits, the EPA inspectors accompanied Mr. Bouton.

- 1) Conoco gas station located at Palmer Park Boulevard and Potter Drive: On February 5, 2013 at approximately 1:30 AM, the City was informed that approximately 100 gallons of gasoline were spilled onto the pavement while an underground tank at the site was being refueled. It was estimated that 20 to 50 gallons of gasoline discharged into the MS4's storm drain system. The City coordinated with the State of Colorado's Department of Labor and Employment Oil and Public Safety Division to respond to the incident. During the follow-up inspection, Mr. Bouton and the EPA inspectors notified the gas station clerk and then proceeded to walk the site of the illicit discharge. The EPA inspectors also accompanied Mr. Bouton to inspect the storm sewer drains that received the discharge as well as the nearby Sand Creek West Fork, Fountain Creek Watershed into which the storm sewer discharged. At the time of the inspection, it was mainly dry and not continuously flowing. Some evidence of sheen was observed within the storm drain and residual chemicals from the clean-up were also observed at the site.
- 2) Sunrise Kennels and Dog Training Center located at Vincent Drive and Vincent Frontage Road: During the second site visit at the Sunrise Kennels and Dog Training Center, Mr. Bouton, accompanied by Mr. Scott Abbott and Mr. John Oswald from the City of Colorado Springs Parks, Recreation and Cultural Services and an EPA inspector, toured the facility

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along with the facility's manager. The facility's cleaning process for the kennel area consisted of removal and disposal of solid fecal material into garbage bins and the use of a water-bleach solution to clean the floor areas. The kennels for housing the animals were lined along the walls and the center of the kennel area. Cement draining channels ran along the kennels to capture the cleaning solution. The channels discharged out through the pipe and down the hillside along the back of the facility, leading to the bike path underpass. The manager of the facility indicated that he was unaware of the potential issue and that he would re-route the flow of the discharge to resolve the issue. At the time of the site inspection, there was not an active discharge from the facility into Cottonwood Creek.

Photographs taken during field inspections are included in the attached IDDE Oversight photo log.

**Construction Sites Runoff Control (Construction) Program:** The City had the authority to implement its Construction Program through city municipal codes and ordinances. The Construction Program lead was Steve Kuchster, Senior Civil Engineer with the EDR program. Project owner(s)/developer(s) would submit applications, which included drainage reports, along with grading, erosion and stormwater management plans to the EDR program. At the time of the EPA's inspection, city engineers within the EDR program were assigned to different sections of the City of Colorado Springs and would be responsible for reviewing and approving projects for those geographic areas. The plans were reviewed for adequacy of Best Management Practice (BMP) implementation using the City's Volume 2 Drainage Manual (2002), which was developed in collaboration with the Urban Drainage and Flood Control District. Once it was determined that the plan met all review criteria, it was signed off on by the city engineer who reviewed the plan and the project owner(s)/developer(s). Checklists were available to assist applicants in the development of their plans and city engineers used the checklists to evaluate the adequacy of the plans that were submitted. Once approved, the plans were entered into the EDR program's database which was linked to the construction and post-construction inspectors' database. The inspectors received notification through the database, prompting them to initiate the scheduling of inspection activities. Inspections were set up based on priority and ranged from a frequency of 14 to 30 days. At the time of the EPA's inspection, there were nine inspectors, two of which were primary senior inspectors. The training for all inspectors consisted of on-the-job training and a compliance inspection training class.

If issues were identified on construction sites during the inspections, verbal warnings to the site representative and technical assistance was utilized to try and resolve the issue(s). If the issue(s) could not be resolved using this mechanism, the City could initiate enforcement in the form non-compliance letters, stop work orders, financial assurances and municipal summons. Copies of non-compliance letters issued were maintained and incidents of non-compliance were documented in the EDR program's database. At the time of the inspection, City municipal code also allowed for the city engineers to grant waivers from water quality BMPs if it was determined that water quality impacts were minimal and water quality BMPs were impractical for a development. It was indicated during the inspection that one of the considerations used to evaluate the need for waivers was based on the development density at a site. However, when determining whether the density of development in larger common plans was eligible for a waiver, the total area of the larger common plan (disturbed and undisturbed) was used for the calculations. This resulted in underestimated development density values for active construction site areas within larger common plans.

### Construction Site Visits:

On February 6, 2013, EPA and CDPHE personnel performed multiple field site visits related to

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construction activity.

The following locations were observed during these field visits:

- 1) Flying Horse (near intersection of State Highway 83 and Flying Horse Club Drive)
- 2) Walmart construction (near intersection of North Union Blvd with Lelaray Street)
- 3) Monument Branch near the TCA School (near intersection of Voyager Pkwy and Stout Road)
- 4) Cathedral Ridge development area
- 5) Fountain Creek at Kentucky Fried Chicken
- 6) The First and Main Town Center development (near intersection of First and Main Streets)

Photographs taken at the sites are included in the attached Construction Overview photo log.

**Post-Construction: New Development / Re-development (Post-Construction) Program:** The City had the authority to implement its Post-Construction Program through city municipal codes and ordinances. The Post-Construction Program lead was also Steve Kuchster, Senior Civil Engineer with the EDR program. Activities related to post-construction were initiated when Joel Mackey, Operations and Maintenance Engineering Inspector in the EDR/Stormwater Program, received the Inspection and Maintenance Stormwater Construction Worksheet and the appropriate information had been updated in the EDR program database. Mr. Mackey performs inspections on the sites prior to a maintenance agreement being sent to the owner(s). The “as-built” documents and maintenance agreements were provided to an attorney and the Mayor for final approval to be turned over to the owner. Once turned over to the owner, the owner was then required to provide a copy of annual inspection and maintenance activities by May of each year. This information was tracked to ensure maintenance was being performed. The City’s compliance inspections were performed every 2-3 years on dates specified by the owner. Approximately once every 90 days, inspection information was entered into the EDR program’s erosion control database. The commonly used BMPs were extended detention basins, extended sand filters, rain gardens (PLDs), porous pavers, grass swales and regional ponds.

### Post- Construction Site Visits:

On February 7, 2013, the EPA performed multiple field site visits related to post-construction activity.

The following locations were observed during these field visits:

- 1) The Village at Homewood Point (907 East Colorado)
- 2) Rudy’s BBQ (315 South 31<sup>st</sup>)
- 3) Von Briggles Subdivision (600 South 21<sup>st</sup> Street)
- 4) Midland Greens (2845 Ore Mill Road)

Photographs taken at the sites are included in the attached Post-Construction Overview photo log.

**Industrial Facilities Program:** The Industrial Facilities Program was developed as part of the City of Colorado Springs’ Industrial Facilities Program document dated, August 26, 2005. Jeff Besse, Stormwater Specialist in the Department of Public Works Engineering, managed the City’s Industrial Facilities Program. The program was also supported by Lisa Ross, Senior Engineer. Ms. Ross maintained a list of industrial facilities within the MS4 that had a CDPHE industrial stormwater permitted facility. According to the industrial facilities list, there were 84 industrial facilities within the MS4.



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According to the Industrial Facilities Program document, the City's education and outreach is targeted towards "Industrial and commercial businesses in [City of Colorado Springs] CCS". The program plan illustrated that the City would develop and distribute educational materials to commercial activities within the MS4. The City distributed the materials to businesses, identified as causing or potentially causing water quality problems, as issues occurred throughout the permit term. The program document also states that the City will conduct a mailing to the following industrial facility types once per permit term: concrete, auto repair and carpet cleaners.

During the inspection, commercial auto repair facilities were visited to determine the extent of the City's outreach to facilities performing these types of commercial activities. An EPA inspector and Mr. Besse visited several auto repair related facilities to talk with the on-site manager regarding receiving stormwater related education/outreach materials from the City. The following facilities were visited:

- AutoTech Plaza (409 W. Filmore)
- Advanced Auto Parts (2930 W. Filmore)
- O'Reiley Auto Parts (433 E. Filmore)
- Jiffy Lube (3003 N. Nevada)
- Jiffy Lube (201 S. Nevada)
- Goodyear Tire and Service (125 S. Nevada)
- O'Reiley Auto Parts (141 E. Old Broadmoor)

During the discussion with the seven facilities listed above, only one facility, Goodyear Tire and Service, was not aware of and had not been contacted by the City regarding stormwater related education and outreach materials.

The Industrial Facilities Program also relied on illicit discharge reporting and would follow-up with industrial facilities under the City's IDDE program if a discharge was known to impact the MS4. While the 2005 Industrial Facilities Program document states that the CSU's Pretreatment Program and the Colorado Springs Fire Department conduct inspections, these inspections were focused on the pertinent operational issues related to each Department and not specifically to stormwater requirements. Only when a facility was believed to be impacting the MS4 was it reported to the City staff for follow-up through the City's IDDE Program. While the City did not maintain a list of permitted industrial stormwater related permits within its MS4, outreach was not conducted to educate regulated industrial facilities with stormwater related discharges unless the City was made aware that the facility was unpermitted.

**Pollution Prevention (P2) / Good Housekeeping for Municipal Operations:** Per the City's program description, "The goal of the Pollution Prevention/Good Housekeeping for Municipal Operations program is to reduce, to the maximum extent practicable, the amount and type of pollution that is generated by municipal operations or from municipally-owned property."

The program description states that, "This program focuses on the quality of stormwater runoff from City facilities and operations. Municipal Facility Runoff Control Plans are required of operations at City owned and/or operated facilities that engage in certain activities that are believed to result in water quality impacts. Examples of activities included in the program are vehicle maintenance/fueling, exposed stockpiles, and snow dumps. In 2010, there were 42 City and Colorado Springs Utilities facilities that performed these kinds of activities. As required by the permit, plans have been developed for those facilities. The plans describe and map the activities at the sites, identify pollutants,



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list BMPs being implemented, and explain inspection and reporting procedures.”

The requirements of the Municipal Operations Program were developed as part of the standard operating procedures (SOPs) for municipal activities (e.g., road maintenance) and Municipal Facility Runoff Control Plans (MFRCPs), both of which were required by the permit terms. The development, oversight and inspection of the SOPs and MFRCPs were under the direction of Jeff Besse, Stormwater Specialist. Each city operation that fell under the MFRCP program had a designated representative, referred to as the MFRCP Site Administrator, to take the lead on compliance with the program. At the staff level, implementation of the SOPs and MFRCPs included the CSU, CCS Street Division, CCS Fleet Management, CCS Parks and Recreation, the CCS Forestry Division (pesticide/herbicide application) and the Colorado Springs Police Department. The City provided a list of 42 municipally-owned sites covered by 7 separate MFRCPs (e.g., Colorado Springs Fire Department, CCS Fleet, CCS Parks and Recreation, Golf Courses, CCS Streets, CSU and the Colorado Springs Police Department). The sites inspected during the inspection were evaluated for compliance with the related plans. The EPA reviewed the following sites related to the City’s MFCRPs:

- Parks and Recreation, Patty Jewett Golf Course Maintenance Facility (1150 E. Caramillo Ave.) on February 5, 2013.
- Streets, Briargate Service Center (2385 Briargate Blvd.) on February 5, 2013.
- CSU, Pinkerton Service Center (7710 Durant Dr.) on February 5, 2013.
- Police Impound (2725 E. Las Vegas St.) on February 6, 2013.
- Streets, Outwest Complex (3640 Outwest Dr.) on February 6, 2013
- Streets, Hancock Depository (1845 Hancock Dr.) on February 6, 2013.
- CSU, Leon Young Service Center (1521 Hancock Dr.) on February 6, 2013.
- Parks and Recreation, Central Mechanics (1417 Recreation Way) on February 6, 2013.
- Fleet, CSU, Streets, and Traffic Engineering facility at the Fontanero Service Center (400 W. Fontanero Dr.) on February 6, 2013.

The City mapped its stormwater structural controls by basin, connectivity, flow direction, pipe materials and size. As of the end of 2012 the City’s MS4 consisted of 389 miles of sewer mains, 118 miles of privately owned storm sewer lines, 250 miles of ditches/channels consisting of 79 miles of armored channels and 171 miles of natural channels, 13,243 inlets and 1,459 manholes related to the storm sewer system. The City also owns/operates 72 ponds, owns 693 major outfalls and owns 1,316 minor outfalls.

The CCS Street Division managed both street sweeping and structural controls in a grid system as part of an on-going blanket work order (i.e., standing work order) for the year. The features to be maintained within the grid were maintained as time permitted the staff to complete them. The staff would also respond to citizen complaints. These complaints, which were initially documented in a “Footprint” database, ended up being entered into a “Cartograph” work management system as a work order. The staff then responded to the specific work orders. There were also standing work orders for street sweeping to sweep downtown once per month, arterial main streets once per month and residential twice per year. The structural controls were maintained at least once every three years, however, the goal for the staff was to complete each grid’s structural controls on an annual basis. Drainage channels throughout the City of Colorado Springs were maintained by both CCS staff and volunteer groups via an adopt-a-waterway program which was part of the public involvement program. Materials collected by the vector trucks were dumped at the Hancock Street Depository. The staff were trained to recognize and respond to spills and releases with their annual IDDE and MFRCP

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training.

Training was provided to CCS staff through annual IDDE training, site specific MFRCP training and on operation specific SOPs.

Photographs taken during field inspections are included in the attached C. Springs MS4 P2 Photo Log (COS00004).

### Findings and Corrective Actions Summary Table

**Program Findings Legend:**

PM – Program Management  
 MN – Monitoring  
 ID – Illicit Discharge Detection and Elimination  
 CS – Construction Site Runoff Control

IF – Industrial Facilities  
 ND – Post-Construction: New Development / Re-development  
 PP – Pollution Prevention / Municipal Operations

Finding Number – Title	Corrective Action(s)	Recommendations
Finding: 1PM – Communication and Program Priority Concerns Related to the City’s Program Reorganization		X
Finding: 1MN – Retention of Sampling and Analytical Data Records	X	
Finding: 2MN – Lack of Awareness of 40 CFR 136 Requirements and Review of Monitoring Data to Ensure These Requirements Are Met		X
Finding: 3MN – Incomplete Data Collection and Annual Reporting	X	
Finding: 4MN – CDPHE Approval Not Obtained for Monitoring Program Plan Modifications	X	
Finding: 1ID –Lack of Illicit Discharge Training	X	X
Finding: 2ID – “Potential Illicit Discharge” Record Keeping		X
Finding: 3ID –Illicit Discharge Database Operating Procedures		X
Finding: 4ID –Illicit Discharge Code Update	X	
Finding: 5ID –Illicit Discharge Mitigation Procedures	X	

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Finding: 1CS – Residential Waivers Issued for Water Quality Control Measures Without Required Justification	X	
Finding: 2CS - Neither the City nor the Developer of Flying Horse Pond Filing 26 Were Maintaining the Pond as Required in the Permit and Private Construction Procedures Allowed for the Potential of Post-Construction Control Maintenance to be Overlooked.	X	
Finding: (3CS) - The City has Allowed for At Least Two Water Quality Control Structures to be Placed in State Waters	X	
Finding: 4CS - The City Does Not Appear to Implement the Four-step Process Listed in its Drainage Criteria Manual, Volume 2, Which Includes Run-off Reduction Practices, Stabilize Drainage Ways, Provide Water Quality Capture Volume and Consider the Need for Industrial and Commercial BMPs	X	
Finding: 1ND - Extended Detention Basin (EDB) Required Design Elements Not Being Implemented	X	
Finding: 2ND - Repeat Violations of BMPs on New Construction Sites Have Not Been Escalated in Accordance With the Permit or Internal Enforcement Procedures in a Manner to Achieve Compliance with Permit Requirements	X	
Finding: 1IF – Inadequate Industrial Facilities Program Plan Implementation	X	X
Finding: 2IF – Recommendation for Industrial Facilities Program Implementation		X
Finding: 1PP – Update Municipal Facilities Runoff Control Plan (MFRCP)		
Finding: 2PP – Inadequate Operations and Maintenance Procedures	X	

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### Program Management (PM) Review Findings

#### **Finding: 1PM – Communication and Program Priority Concerns Related to the City's Program Reorganization**

During the EPA's inspection, the City personnel indicated that the City's Engineering Division had undergone a major reorganization in the 4<sup>th</sup> Quarter of 2012 which divided personnel and resources used to implement the MS4's Stormwater Program. The new structure involved the reassignment of City personnel, previously dedicated solely to the implementation of the City's Stormwater Program, into other City programs. It also increased the range of duties performed by those that were reassigned. The City's personnel indicated that the division of the staff into separate programs resulted in some communications/coordination issues. In addition, the personnel were no longer primarily focused on Stormwater program duties and priorities.

#### **Permit Requirements:**

Part I.B.3 of the Permit effective 11/01/11 – 10/31/16 and Part I.B.3 of the Permit effective 03/04/04 - 02/28/09 (administratively extended) state that "The permittee shall provide adequate finances, staff, equipment, and support capabilities to implement... the Stormwater Management Program."

#### **Corrective Actions:**

None.

#### **Recommendations:**

In order to implement the City's MS4 Stormwater Management Program, adequate support capabilities are necessary to carry out the various program components. This includes, ensuring that the staff responsible for implementing the program are allowed adequate time and resources to perform tasks related to the Stormwater Management Program.

It is recommended that the City develop a communication strategy/procedure to ensure that stormwater activities are coordinated effectively between programs. It is also recommended that the City develop a mechanism to ensure that the activities related to compliance with the Permit remain a priority and that they are not severely impacted by conflicting priorities established by the new personnel structure.

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### Monitoring (MN) Review Findings

#### **Finding: 1MN – Retention of Sampling and Analytical Data Records**

The wet weather sample monitoring and analysis for the City was implemented primarily by the USGS. At the time of the inspection, the USGS was providing summary reports of results to the City but was not submitting specific sampling information such as laboratory analytical reports or sampling information (e.g. sampling date/time, preservation method, personnel performing sampling, etc.). During the inspection, it was identified that the City did not request or maintain any of the detailed records of the sampling and analysis performed by the USGS.

#### **Permit Requirements:**

Part I.D.3b of the Permit effective 11/01/11 – 10/31/16 states, “The permittee shall establish and maintain records for all monitoring required by Part I.D.1(c) of this permit. Those records shall include the following:

- 1) The date, type, exact location, and time of sampling or measurements;
- 2) The individual(s) who performed the sampling or measurements;
- 3) The date(s) the analyses were performed;
- 4) The individual(s) who performed the analyses;
- 5) The analytical techniques or methods used
- 6) The results of such analyses; and
- 7) Any other observations which may result in an impact on the quality or quantity of the discharge as indicated in 40 [Code of Federal Regulations] CFR 122.34 (i)(1)(iii).

The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or EPA.”

#### **Corrective Actions:**

The City shall develop a procedure for obtaining and maintaining monitoring records for sampling and analysis as required by the Permit. Submit a copy of the procedure which addresses this permit requirement to the EPA and CDPHE.

#### **Recommendations:**

None.

### Monitoring (MN) Review Findings

#### **Finding: 2MN – Lack of Awareness of 40 CFR 136 Requirements and Review of Monitoring Data to Ensure These Requirements Are Met**

During the inspection, the City personnel managing the monitoring program appeared to be unfamiliar with the 40 CFR Part 136 method requirements specific to the sampling and analysis procedures being performed under the City’s monitoring plans. In addition, there was no mechanism in place for City personnel to evaluate monitoring data to ensure that the 40 CFR 136 requirements were being met.



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### Permit Requirements:

Part II.B.3a of the Permit effective 03/04/04 - 02/28/09 (administratively extended) and Part I.D.3a of the Permit effective 11/01/11 – 10/31/16 state that “Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been approved by the Division (61.8(4)(j)).” and “All sampling shall be performed by the permittee according to specific methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.”, respectively.

### Corrective Actions:

None.

### Recommendations:

It is recommended that the City implement an internal quality control mechanism and procedures to ensure that the sampling and analysis performed to meet permit requirements meets the 40 CFR 136 requirements.

## Monitoring (MN) Review Findings

### Finding: 3MN – Incomplete Data Collection and Annual Reporting

The benthic data collected as part of the City’s wet weather monitoring plan was not reported in the 2011 Annual Report. In addition, the morphological data was not collected in 2010.

Morphological data was collected in March 2011 but was not reported in the 2011 Annual Report. The 2011 Annual Report indicated that the data collected in 2011 would not be reported until the 5-year wet weather summary was submitted.

### Permit Requirements:

Part I.D.1.a. of the Permit effective 03/04/04 – 02/28/09 (administratively extended) states that “The permittee shall perform annual biological assessments. The assessments shall include three sampling elements:

- 1) Basic Water Quality Data
- 2) Physical Habitat Data
- 3) Qualitative Benthic Macroinvertebrate Community Data”

Part I.D.2. of the Permit effective 03/04/04 – 02/28/09 (administratively extended) states that “Cross-sections shall be monitored at least once each year” as related to the “Qualitative Monitoring of Stream and Riparian Zones within the MS4 and Receiving Waters- Morphological Assessment.”

Part I.F. of the Permit effective 03/04/04 - 02/28/09 (administratively extended) states that “The permittee shall prepare an annual systemwide report to be submitted by April 1 of each year, covering the previous January 1 through December 31” and that the report shall include “A summary of the data, including numeric monitoring data that is accumulated throughout the reporting year.”

Part I.D.2.a. of the Permit effective 11/01/11 – 10/31/16 states that “The permittee shall submit a Monitoring Annual Report to the Division by June 1 of each year, covering the previous January 1

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through December 31” and that the report shall include a “Summary of the monitoring program work to date...”

### Corrective Actions:

The City shall implement a mechanism to ensure that all of the required monitoring identified in the Permit and within the City’s CDPHE approved monitoring plan(s) is performed and that all data collected during the reporting year are included in the Annual Report submitted to CDPHE. The City shall submit a description of how this issue will be addressed as well as the morphological data collected March 2011 to the EPA and CDPHE.

### Recommendations:

None.

## Monitoring (MN) Review Findings

### Finding: 4MN – CDPHE Approval Not Obtained for Monitoring Program Plan Modifications

At the time of the EPA’s inspection, the City personnel could not provide documentation that they had received approval for the modifications made to the City of Colorado Springs Municipal Storm Sewer System Permit (COS-000004) Monitoring Plan prior to implementing it. The original plan was prepared 12/13/02 and revised 05/21/03 but the plan being implemented by the City was prepared 8/31/12.

Part 7, “Potential Modifications” of the City of Colorado Springs Municipal Storm Sewer System Permit (COS-000004) Monitoring Plan prepared 8/31/12 states that “ The CCS monitoring program must be afforded the flexibility to:

1. Adopt new techniques as they are developed.
2. Modify existing techniques in response to information gained through implementation of the program.
3. Modify monitoring site locations and/or analytes if data reveals the program would be enhanced by doing so.

For this program to remain flexible, it may be necessary to make minor adjustments during implementation without prior approval of the CDPHE. Examples of these changes could include changing the location of a monitoring site or modifying the sampling frequency for bacteria, all while maintaining a consistent level of effort. The CDPHE will be notified of these minor adjustments in the Annual Report.” This is not consistent with the program modification requirements of the Permit.

### Permit Requirements:

Part I.C.3 of the Permit effective 11/01/11 – 10/31/16 states,

#### “Program Modifications

- a. The approved Programs shall not be modified by the permittee without the prior approval of the Division.
- b. Modifications shall not become enforceable permit conditions until such time as the modifications are formally approved.
- c. Modification requests and/or notifications shall be signed in accordance with Part I.G.”

### Corrective Actions:

In order to comply with the Permit requirements, the City shall obtain formal approval for the City of Colorado Springs Municipal Storm Sewer System Permit (COS-000004) Monitoring Plan prepared

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8/31/12. The language referenced above from Part 7, "Potential Modifications" shall be removed or modified such that it complies with the permit requirement and ensures that all modification, including "minor adjustments", are formally approved by the CDPHE before being implemented. The City shall submit the modified plan to the CDPHE for approval along with a courtesy copy to the EPA.

**Recommendations:**

None.

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### Illicit Discharge Detection and Elimination (IDDE) Program Review Findings

#### **Finding: 1ID --Lack of Illicit Discharge Training**

The City's Illicit Discharge Detection and Elimination (IDDE) Program document, issued 10/1/2012 and revised 01/21/2013, states that "Code Enforcement has the authority to investigate and enforce wastewater discharge complaints on private property from City Code, Chapter 6, Neighborhood Vitality/Community Health."

The Colorado Springs Fire Department HMRT has a non-emergency potential spill notification system available to citizens and City personnel to call to report a potential illicit discharge. Calls received are screened for appropriate response and follow-up. Spills identified as Hazardous Material (HazMat) spills were handled by the HMRT and non-HazMat spills were referred to the CCS Code Enforcement.

On 2/6/13, the EPA inspectors performed a site visit of the call center at the Colorado Springs Police Operations Center. Lisa Mitchell, Training Manager, met with the EPA inspectors and described the process for how calls were received and distributed for response. Ms. Mitchell indicated that all non-HazMat spill calls were sent to the CCS Code Enforcement for follow-up.

At the time of the inspection, Lisa Ross, Senior Engineer, indicated that the City's program had not developed formal IDDE stormwater specific training for the CCS Code Enforcement personnel that responded to these calls.

The City's IDDE Program document identifies the Fire Marshal and the CSU Industrial Pretreatment Section as the entities responsible for performing "preventative inspections" for identifying illicit discharges. The Colorado Springs Fire Department, CSU, the Regional Floodplain Administration, the CCS Public Works and the CCS Code Enforcement were responsible for responding to IDDE issues. The Regional Floodplain Administration had no direct involvement in IDDE response. Information on spills and discharges identified by the Regional Floodplain Administration employees was forwarded on to the appropriate authority within the City by referring them to the non-emergency notification number. As indicated in the City's IDDE program document, the Colorado Springs Fire Department's HMRT and CSU responded to certain types of spills. The HMRT responded to hazardous materials spills and CSU primarily responded to spills and discharges related to their systems. Employees for both entities received general training on how to handle spills and discharges from their own programs. The CSU employees were trained on how to respond to spills from their system, such as spills with relation to sanitary sewer overflows and natural gas distribution system oil spills. The HMRT employee training consisted of procedures on how to identify and remove hazardous materials spills.

#### Fire Marshal and CSU preventive inspections:

The Fire Marshal conducted preventive inspections of permitted industrial and commercial facilities that stored, transported, dispensed, used or handled hazardous materials. The Fire Marshal's inspections primarily focused on potential fire and safety concerns. The City was notified of any IDDE concerns identified by the Fire Marshal but the identification of illicit discharges related to stormwater was not the focus of these inspections.

The CSU Industrial Pretreatment Section conducted annual inspections of permitted industrial users.

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The facilities were inspected and monitored annually for pretreatment permit compliance. Similar to the Fire Marshal inspections, the City was notified of any IDDE concerns identified by CSU but the identification of illicit discharges related to stormwater was not the focus of these inspections.

At the time of the EPA's inspection, the City did not coordinate with the Fire Marshal or CSU to ensure that consistent IDDE procedures were being implemented for the identification of illicit discharges.

The City performed annual training for City Engineering Inspectors, Stormwater Technicians and CCS Street Division staff. According to Alan Williamson, Engineering Technician II, the training consisted of a presentation which included a review of current IDDE documents and a discussion on identification and response to illicit discharges. Employees who attended the training were also provided with a list of procedures and contacts for the City's IDDE program.

The training was not mandatory and there was no mechanism in place to ensure that all City personnel involved in illicit discharge detection had received the training on an annual basis.

### **Permit Requirements:**

Part.I.B.1.c.3) c) of the Permit effective 03/04/04 – 02/28/09 (administratively extended) states, "A staff training program for field investigation and elimination of potential illicit discharges, illegal dumping and illicit connections identified by the ongoing field screening program, complaints, or other sources, shall continue to be implemented."

Part I.B.1.b.2) c) of the Permit effective 11/01/11 – 10/31/16 states, "The permittee shall continue to implement a program to train municipal staff to recognize and appropriately respond to illicit discharges observed during typical duties. The program must address who will be likely to make such observation and therefore receive training, and how staff will report observed suspected illicit discharges."

### **Corrective Actions:**

The City shall develop and implement a training program or mechanism to ensure that the employees involved in identification and response to illicit discharges within the MS4 receive adequate training on IDDE procedures. This shall include a tracking mechanism for employee training to ensure that all personnel involved in IDDE response have received the appropriate training. Submit a copy of a procedure to address this permit requirement to the EPA and CDPHE.

### **Recommendations:**

It is recommended that the current City's Illicit Discharge Detection and Elimination (IDDE) Program document, issued 10/1/2012 and revised 01/21/2013, be reviewed and updated to ensure that all entities listed within it are involved in implementing the IDDE program as indicated. Those that are not involved in the direct implementation of the program (i.e. the Regional Floodplain Administration) should be removed.

It is also recommended that the City establish procedures for coordinating with the other entities (e.g. Fire Marshal, CSU, CCS Code Enforcement, etc.) involved in identification and response to illicit discharges to ensure that illicit discharge identification and response procedures are being implemented consistently.



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### Illicit Discharge Detection and Elimination (IDDE) Program Review Findings

#### **Finding: 2ID – “Potential Illicit Discharge” Record Keeping**

According to Ryan Bouton, Engineering Technician II, no documentation was being maintained for investigations of potential illicit discharges that were later determined not to be “illicit discharges”.

#### **Permit Requirements:**

Part I.B.1.b.2) d) of the Permit effective 11/01/11 – 10/31/16 states, " A record of all reported illicit discharges and the permittee’s response shall be maintained."

#### **Corrective Actions:**

None.

#### **Recommendations:**

It is recommended that the City maintain records of all reported discharges, regardless of the outcome of the investigation, to document that all reported non-stormwater discharges have been investigated.

### Illicit Discharge Detection and Elimination (IDDE) Program Review Findings

#### **Finding: 3ID –Illicit Discharge Database Operating Procedures**

At the time of the inspection, Mr. Bouton provided an overview of Source Identification and Mapping database used by the City to track illicit discharge reports and investigations. All identified illicit discharges were tracked with GIS and entered into the database. The GIS information was used to track past spills and identify repeat offenders. Entries into the database included information such as the case number, date reported, date evaluated, event time, date entered into the database, event location (e.g., the address, city, State and zip code), quantity, reporting party and type of spill. Mr. Bouton had received training on the use of the database from a City employee that was no longer with the program. It appeared that Thomas Repp, a former City employee, had input non-IDDE investigated discharge information into the database in the past but Mr. Bouton was no longer performing that task. There were no written procedures or training documents for inputting information into the database.

#### **Corrective Actions:**

None.

#### **Recommendations:**

The City should develop a standard operating procedures or training documents to ensure that the entry of information into the database is consistent. At the time of the inspection Mr. Bouton was the primary user of the database however, consistency in data entry could become an issue should more City personnel utilize the database in the future.

### Illicit Discharge Detection and Elimination (IDDE) Program Review Findings

#### **Finding: 4ID –Illicit Discharge Code Update**

Part 2, 3.8.201.B.2 of the Discharge Prohibitions of the Article 8 Stormwater Quality Management and Discharge Control Code lists discharges from potable water sources, individual street washing and uncontaminated water from irrigation system meter pits as allowable discharges. These are not listed as allowable non-stormwater discharges within the Permit and the City did not have

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documentation of prior approval from CDPHE to list them as such.

Part 2, 3.8.201.B.4 of the Discharge Prohibitions of the Article 8 Stormwater Quality Management and Discharge Control Code states, “With written concurrence to the City Council by ordinance, resolution or motion, the City Engineer may exempt in writing other nonstormwater discharges which are not a source not of pollutants to the City’s MS4 or waters of the United States.” This is not consistent with the permit requirements for approval of additional allowable non-stormwater discharges.

### Permit Requirements:

Part I.B.1.b.1) b) of the Permit effective 11/01/11 – 10/31/16 states, “ Unless identified by either the permittee or the Division as significant sources of pollutants to the State Waters, the following sources of non-stormwater discharges are excluded from the definition of “illicit discharge”: landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration to separate storm sewers, uncontaminated pumped ground water, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, single family residential under drain systems, lawn watering, individual residential car washing, individual residential swimming pool and hot tub discharges, water-line flushing, flows from riparian habitats and wetlands, and water incidental to street sweeping (including associated sidewalks and medians) that is not associated with construction.”

Part I.B.1.b.1) c) of the Permit effective 11/01/11 – 10/31/16 states that “The initial list and additions or modification to the list must be approved in accordance with Part I.C.3 of the Permit.”

Part I.C.3 of the Permit effective 11/01/11 – 10/31/16 states, “Program Modifications

- a. The approved Programs shall not be modified by the permittee without the prior approval of the Division.
- b. Modifications shall not become enforceable permit conditions until such time as the modifications are formally approved.
- c. Modification requests and/or notifications shall be signed in accordance with Part I.G.”

### Corrective Actions:

In order to be consistent with the permit requirements, the sections of Article 8 Stormwater Quality Management and Discharge Control Code identified above, must be removed or formally approved for inclusion by CDPHE. At the time of the inspection, Ms. Ross informed the EPA inspectors that they were in the process of working with CDPHE to update the City’s Article 8 Stormwater Quality Management and Discharge Control Code to be consistent with the permit requirements. Submit a copy of the updated Article 8 Stormwater Quality Management and Discharge Control Code to the CDPHE and provide a copy to the EPA.

### Recommendations:

None.

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### Illicit Discharge Detection and Elimination (IDDE) Program Review Findings

#### **Finding: SID –Illicit Discharge Mitigation Procedures**

##### **Conoco Gas Station Site Visit:**

On 2/6/13, the EPA inspectors joined Mr. Bouton on an illicit discharge follow-up inspection at the Conoco Gas Station located on the corner of Palmer Park Boulevard and Potter Drive. The incident was reported to the City on 2/5/13 at approximately 1:30 a.m. The City was informed that approximately 100 gallons of gasoline was spilled onto the pavement while an underground tank at the site was being refueled. It was estimated that 20 to 50 gallons of gasoline discharged into the MS4's storm drain system. Mr. Bouton coordinated with the State of Colorado's Department of Labor and Employment Oil and Public Safety Division to respond to the incident and directed the responsible party(s) to perform clean-up to mitigate the discharge.

At the time of the follow-up inspection, it appeared that all clean-up activities had concluded. The EPA inspectors observed traces of the dry absorption chemical cleaning product on the pavement at the spill location (see photos 258-260 of IDDE Oversight photo log). There was also a sheen observed in a nearby storm sewer drain that had received the discharge (see photos 261 and 262 of IDDE Oversight photo log). Mr. Bouton indicated that he would follow-up with the responsible party to request additional clean-up of the site upon returning to the City office. It was brought to Mr. Bouton's attention that the weather conditions were overcast and snow was forecasted that afternoon. The EPA inspectors and Mr. Bouton left the site at 2:08 p.m. Snow began to fall in the area around 3:00 p.m., at which time Mr. Bouton had yet to contact the responsible party to instruct them to clean-up the residual materials observed at the site.

During the follow-up inspection, Mr. Bouton indicated that the City did not have any established procedures for clean-up of a site should the responsible party not comply in a timely manner with the City's requests to respond (e.g. clean-up needed prior to/during precipitation events). Due to reservations about removing the responsibility of performing clean-up activities from the responsible party(s), Mr. Bouton indicated that he was unsure whether the City would use its own resources to clean-up a spill and back charge the responsible party for instances in which the response was not timely.

#### **Permit Requirements:**

Part I.B.1.b.1) of the Permit effective 11/01/11 – 10/31/16 states that "The permittee shall continue to implement an ongoing program to detect and eliminate the source of the illicit discharges (or to confirm that the discharge no longer meets the definition of an illicit discharge) and improperly disposed materials into the MS4 in accordance with this program area and mitigate as required by I.B.1.b (2). Elimination of an illicit discharge shall include measures as necessary to address the source to prevent an ongoing discharge (e.g., cleaning up a spill, fixing a leak, removing a cross connection). The permittee shall review current City code to ensure it is adequate to meet this requirement, make revisions if necessary by October 1, 2012, and notify the Division that this requirement has been met and if the City Code was revised in the following Annual Report, due April 1, 2013."

Part I.B.1.b.3) of the Permit effective 11/01/11 – 10/31/16 states that "The permittee shall implement procedures to prevent, contain and respond to spills that may discharge or have discharged into the MS4 that are not composed entirely of stormwater except sources that are excluded from the

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definition of “illicit discharge in accordance with Parts I.B.1.b (1)(b), (c), and (d).”

### **Corrective Actions:**

The City shall develop a procedure to ensure that an illicit discharge is eliminated and include measures to address the source to prevent an ongoing discharge (e.g., cleaning up a spill, fixing a leak, removing a cross connection) as well as timeframes for response actions performed by the City to ensure that IDDE response actions are performed in a timely manner. If not already performed, City personnel shall also review its current City code to ensure it is adequate to meet these permit requirements. Submit a copy of the procedure to address this corrective action to the CDPHE and provide a courtesy copy to the EPA.

### **Recommendations:**

None.

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### Construction Site Runoff Control Program (CS) Review Findings

#### **Finding: 1CS – Residential Waivers Issued for Water Quality Control Measures Without Required Justification**

During the inspection, it was identified that, since 2008, seven water quality BMP waivers have been issued to developments. City code states that, when a city engineer determines that water quality impacts were minimal and water quality BMPs were impractical for a development, the site will be granted a waiver from the water quality BMPs based on submittal of sufficient justification. During the inspection, EPA inspectors reviewed the master development drainage plans provided to the City by development applicants for the seven residential waivers issued. The required justifications were not provided by the applicants or the city engineer to meet the waiver requirements as outlined in City code. Furthermore, issuance of these waivers does not appear to comply with requirements in the City’s MS4 permit, issued by the CDPHE.

The City provided information on the seven developments that were issued water quality BMP waivers since 2008, that were also explained to be above 2 acres in size. The information is summarized in the table below:

Development Name	Drainage Report Submittal Date	Drainage Report Issue Date
Indigo Ridge North at Stetson Ridge	11/2012	12/2012
Indigo Ranch at Stetson Ridge	05/2008	02/2010
The Mountain Preserve	10/2009	11/2009
Cathedral Ridge at Garden of the Gods Club	07/2008	12/2010
Signature Point at Garden of the Gods Club	05/2009	11/2011
Austin Ridge Redevelopment	12/2011	01/2012
Parkview at Spring Creek Filing No. 2	03/2010	07/2010

The “drainage report submittal date” represents the date that the waiver is considered and the “drainage report issue date” represents the date the waiver is finalized.

A representative from the City’s engineering group responsible for reviewing development plans explained that it was standard procedure to grant residential lot waivers (zoned R-1 6000) exempting permanent water quality feature requirements. Applicants used a mathematical calculation to determine development density based on the density of the entire proposed development, incorporating concentrated areas averaged with no-build areas. The City provided no analysis or documentation to support that the densities proposed from these calculations were protective of stormwater quality.

#### **Permit Requirements:**

The CDPHE permit in Part I (B) (1)(a)(2) and(a) states, “The permittee must implement and enforce a program to address storm water runoff from projects for which construction activities disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The permittee must: Implement and document strategies which include the use of structural and/or non-structural BMPs appropriate for the community, that address the discharge of pollutants from projects, or that follow principles of low-impact development to mimic natural (i.e., pre-development) hydrologic conditions at sites to



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minimize the discharge of pollutants and prevent or minimize adverse in-channel impacts associated with increased imperviousness. Strategies must include specific consideration to require BMPs that address specific pollutant sources associated with projects for industrial and commercial land uses determined to have an increased potential to cause an impact on storm water runoff quality. Minimum technical requirements for required structural BMPs shall be documented and be based on those specified in the Drainage Criteria Manual Volume II or equivalent and be in accordance with good engineering, hydrologic and pollution control practices...”

City Code 7.7. 906 B. 3. states, “...all sites zoned R estate (residential), R-1 6000 (Single-family residential), R-1 9000 (single-family residential), R-2 (two-family residential) and DFOZ (design flexibility overlay – base zone must be R, R-1 6000 or R-1 9000) that include total development/redevelopment areas of two (2) acres or larger will be reviewed on a case by case basis that will include an assessment of impacts from storm water runoff from the new development to State Waters and a determination of the need for any additional permanent water quality BMPs. Sites for which City Engineering determines water quality impacts to State waters are minimal and permanent water quality BMPS are impractical will be granted a waiver, based on the submittal of sufficient justification...”

City Code 7.7. 906 B. 4. states, “...whenever practical, the City of Colorado Springs promotes permanent storm water quality BMPs on all sites...”

The City Drainage Criteria Manual, Volume 2 has resolution 135-02 which has codified the manual as part of City code requirements. Section 4.1 of the manual states, “All sites zoned R (Estate), E-1 6000, R-1 9000, R-2 and DFOZ, that include total development/redevelopment areas of two (2) acres or larger will be reviewed on a case by case basis that will include an assessment of impacts from stormwater runoff from new development/redevelopment to State Waters and a determination of the need for any additional permanent water quality BMPs. Sites for which City Engineering determines water quality impacts to State Waters are minimal and permanent water quality BMPS are impractical will be granted a waiver, based on the submittal of sufficient justification...”

### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

### **Recommendations:**

None.

### **Construction Site Runoff Control Program (CS) Review Findings**

**Finding: 2CS - Neither the City nor the Developer of Flying Horse Pond Filing 26 Were Maintaining the Pond as Required in the Permit and Private Construction Procedures Allowed for the Potential of Post-Construction Control Maintenance to be Overlooked.**

During the inspection, neither the City nor the developer of the Flying Horse Pond Filing 26 was aware of the maintenance status of the pond and who had maintenance responsibility. Discussions revealed that no one had been maintaining the pond. Representatives from the City explained that the developer was responsible for constructing the pond and maintaining it. After a portion of the development draining into the pond was completed, the developer could apply for a probationary inspection, after which the City would inspect the pond and then authorize a 2-year probationary

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period. During the 2-year probationary period, financial assurances would be reduced and maintenance would be performed by the developer until a final inspection of the facility was performed at the end of the 2-year period. Representatives from the City explained that it was incumbent on the developer to request the final inspection that would remove the facility from the probationary period at the end of two years. From that point on, the City would maintain the pond. At the time of the EPA's inspection, the City relied on the developer to contact the City to ask for the probationary period to begin on a particular structure and for the final inspection to end the probationary period. If the developer did not notify the City, there was a risk that the maintenance of the structure could be overlooked (e.g., Flying Horse Pond Filing 26) with no one handling the maintenance. The request for the probationary inspection for the Flying Horse Pond Filing 26 was issued by the developer on February 4, 2008, but neither the developer nor the City initiated the final inspection in February 2010. According to City records, the City had not performed the final inspection of the pond which would release it from the developer's purview and turn it over to the City to maintain. As of February 6, 2013, no one had been maintaining the pond and the representatives of the developer explained that they had not done so for "some time".

A letter from the City to CDPHE dated August 24, 2001, summarized a discussion between the two entities regarding long-term maintenance of post-construction BMPs. Representatives from CDPHE explained that the "Colorado Springs" permit requires the development and enforcement of controls to reduce the discharge of pollutants after construction is complete. It is the Division's determination that long-term maintenance and operation must still be addressed in the City's program. The requirement to implement BMPs without addressing maintenance and operation needs, will not meet the permit requirement to reduce the discharge of pollutants after construction is complete. Therefore, Colorado Springs will be required to address the long-term operation and maintenance of all BMPs required by their permit, not just the ones incorporated into a public drainage facility. At a minimum, an enforceable ordinance should be developed requiring property owners to maintain BMPs, and requirements should be developed for developments to address long-term responsibility for BMP maintenance." During the inspection, this concern did not appear to be addressed adequately.

### **Permit Requirements:**

The CDPHE permit in Part 1(B)(1)(a)(2)(d) states, "Implement and document procedures, including procedures to enforce the requirements to maintain BMPs when necessary, to ensure adequate long-term operation and maintenance of BMPs consistent with the Permittee's program requirements. Any modification to the BMP design shall be documented prior to the modification occurring..."

The CDPHE permit in Part 1(B)(1)(d)(3)(a) states, "The permittee shall document and continue to implement procedures for inspection and enforcement of control measures at construction sites to the extent allowable under State and local law. The required documents shall include the following: procedures to ensure that BMPs are being installed and maintained in accordance with subsection (2), above, the approved plan, and that sediment sources, materials, equipment maintenance areas (including fueling) and other significant sources of pollution have been addressed..."

### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

### **Recommendations:**

None.



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### Construction Site Runoff Control Program (CS) Review Findings

#### **Finding: (3CS) - The City has Allowed for At Least Two Water Quality Control Structures to be Placed in State Waters**

During the inspection, it was observed that the Flying Horse Pond Filing 26 and the First and Main Town Center commercial development water quality control features were likely constructed in State Waters. Discussion with City engineering staff revealed that they place water quality control structures in State waters under certain circumstances. A letter from the City to CDPHE dated August 24, 2001, summarized a discussion between the two entities regarding the placement of water quality control structures in State Waters. In the letter, representatives from the CDPHE state that “Discharge is defined by the regulation to mean the introduction or addition of a pollutant into State Waters.” The letter also states “...it is the EPA’s and the Division’s interpretation of requirements that BMPs for post construction be placed prior to discharge to State Waters.” Furthermore, the letter states, “If the storm water runoff will discharge into a State Water prior to reaching BMPs, including natural drainage ways being utilized by Colorado Springs as part of their MS4, this may be a violation of the Regulation and the City’s permit... Colorado Springs’ program needs to be clarified to incorporate this requirement, and ensure that all State Waters are addressed.”

The First and Main Town Center development drainage report for Filing 16 was received by the City on February 2, 2012. In the water quality section of the drainage report, it was stated that water quality measures for this site were provided within Sand Creek Detention Pond Number 1. In the plan design memorandum, it was stated, “The detention basin located lowest in the Sand Creek Drainage Basin is referred to as Sand Creek Detention Basin Number 1. The detention basin is proposed as a regional detention basin to be located along Sand Creek north of Constitution Avenue... A water quality pool has been proposed for Sand Creek Detention Basin Number 1 to trap sediment.” During the inspection, the City provided photos of the detention basin in Sand Creek for on-site review by the EPA inspector.

The Flying Horse Pond Filing 26 also appeared to be located in State Waters. In the development drainage report it was stated, “...water quality features will be provided in the in-line regional detention basin.” City representatives explained that “in-line” means in stream.

#### **Permit Requirements:**

The CDPHE permit in Part 1(B) states, “The permittee must develop, implement, and enforce a CDPS Stormwater Management Program, in accordance with Part I.B of this permit, designed to reduce the discharge of pollutants from the MS4 to the “maximum extent practicable” (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (25-8-101 et seq., C.R.S.) and the Colorado Discharge Permit Regulations (61). Implementation of Best Management Practices (BMPs) consistent with the provisions of the CDPS Stormwater Management Program and the other requirements in this permit constitutes compliance with the standard of reducing pollutants to the MEP.”

The CDPHE permit in Part II (A)(8) states, “The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or environment.”

The City Drainage Criteria Manual, Volume 2 has resolution 135-02 which has codified the manual as part of City code requirements. Section 4.1 of the manual states, “...the intent is water quality capture volume facilities be located prior to the storm water runoff being discharged to State Waters.” Section

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2.0 of the manual also states, "...storm water runoff quality can have significant impacts on the receiving waters that affect not only the aquatic ecosystem, but also the quality of our communities."

### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

### **Recommendations:**

None.

## **Construction Site Runoff Control Program (CS) Review Findings**

### **Finding: 4CS - The City Does Not Appear to Implement the Four-step Process Listed in its Drainage Criteria Manual, Volume 2, Which Includes Run-off Reduction Practices, Stabilizing Drainage Ways, Providing Water Quality Capture Volume and Considering the Need for Industrial and Commercial BMPs**

During the inspection, it did not appear that the City was following the four-step process as described in its Drainage Criteria Manual, Volume 2. For example, extreme channel erosion was observed downstream from the Flying Horse Pond Filing 26, along Monument Branch. The erosion was observed by inspectors south of the TCA school (see photos 17 to 24 of the Construction Oversight photo log). Along Monument Branch, there were limited areas of riprap and there was an area that had a destroyed erosion control blanket. In addition, water quality capture volume was not being considered and implemented on all sites. For example, the sites with the residential waivers did not account for water quality capture volume.

### **Permit Requirements:**

The City Drainage Criteria Manual, Volume 2 has resolution 135-02 which has codified the manual as part of City code requirements. Section 4.1 of the manual states, "...This chapter contains guidance and requirements for the selection and siting of structural BMPs for new development and significant redevelopment. The guidance is provided within the context of the four-step process to be followed for new site development and significant redevelopments: Step 1 – employ runoff reduction practices, Step 2 – stabilize drainage ways, Step 3 – provide water quality capture volume, Step 4 – consider the need for industrial and commercial BMPs."

### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

### **Recommendations:**

None.

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### Post-Construction: New Development / Re-development (ND) Program

#### **Finding: 1ND - Extended Detention Basin (EDB) Required Design Elements Not Being Implemented**

Required design elements for extended detention basins were not being implemented as outlined in the City Drainage Criteria Manual, Volume 2. These design elements were necessary to achieve efficient pollutant removal and included a presedimentation forebay, inlet pipe, top stage, bottom stage, low flow channel and outlet with trash rack.

During the inspection, a representative from the City engineering group responsible for reviewing development plans confirmed that a “good portion” of the EDBs serving the MS4 did not meet the specification criteria outlined in Volume 2. The City allowed for flexibility with the design specifications of EDBs. If elevation or limited parcel size limited the ability to implement an EDB according to specifications, the City engineering group did not require the addition of other BMPs to provide for equivalent treatment.

#### **Permit Requirements:**

The CDPHE permit in Part 1(B) (1)(a)(2) states, “The permittee must implement and enforce a program to address stormwater runoff from projects for which construction activities disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. Minimum technical requirements for required structural BMPs shall be documented and be based on those specified in the Drainage Criteria Manual Volume II or equivalent and be in accordance with good engineering, hydrologic and pollution control practices; use an ordinance or other regulatory mechanism to address post- construction runoff from projects and to implement the requirements of this section, I.B.1.a(2), to the extent allowable under State or local law; implement and document procedures to determine if the BMPs required under Item (a), above, are designed and installed in accordance with program requirements...”

City Code 7.7. 1504. A. states, “...Erosion and storm water quality control plans shall require the design, implementation and maintenance of BMPs as set forth in the most recent version of the Drainage Criteria Manual, Volume 2: Stormwater Quality Policies, Procedures And Best Management Practices, and shall include plan elements as set forth in the manual...”

City Code 7.7. 1505. states, “Any land disturbance by any owner, developer, builder, contractor or other person shall comply with the basic grading, erosion and storm water quality requirements and general prohibitions as listed below. In many cases, this will require the design, implementation and maintenance of BMPs as specified in the manual, even if an erosion and stormwater quality control plan is not required...”

The City Drainage Criteria Manual, Volume 2 has resolution 135-02 which has codified the manual as part of City code requirements. Section 4.2 of the manual has EDB specification drawings and design forms that require “...a presedimentation forebay, inlet pipe, top stage, bottom stage, low flow channel, and outlet with trash rack...”

#### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

In addition to the responses for Findings 1CS, 3CS, 4CS and 1ND, please provide the EPA with a summary (in spreadsheet form) of the land development applications, greater than 1 acre, that the City approved after 2009



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for entities for which the City is responsible for providing oversight, with the following information: project size and location; the date of project approval; the presence or absence of permanent water quality BMPs; types of BMPs present; and written justification and final calculations for any waivers exempting permanent water quality feature requirements, if a waiver has been granted. For any permanent water quality BMPs that have been placed within State Waters or that allow for a discharge into State Waters prior to reaching the BMP, the response should include site photographs of current site conditions for all permanent water quality BMPs, a design summary of the water quality BMPs (including outfall design, water quality capture volume and any additional information as appropriate to describe the pollutant removal components for the BMP implemented) and the current maintenance status of the water quality BMPs (by specifically reporting if they “need maintenance” or providing the most recent date of maintenance).

### Recommendations:

None.

### Post-Construction: New Development / Re-development Program (ND) Review Findings

#### **Finding: 2ND - Repeat Violations of BMPs on New Construction Sites Have Not Been Escalated in Accordance With the Permit or Internal Enforcement Procedures in a Manner to Achieve Compliance with Permit Requirements**

Standard operating procedures titled *Colorado Springs Stormwater Inspector Enforcement Guide* outline necessary enforcement steps to be taken by City staff. The first page of this guide outlines the enforcement steps that should be taken when erosion and sediment control BMPs were not installed or maintained appropriately. The first step was a verbal notice reflecting the violations found during a routine inspection. The second step was a verbal notice during a follow-up inspection, which should be done approximately two business days following the routine inspection. Next, a letter of non-compliance is issued if deficiencies were not repaired after the routine and first follow-up inspections. The deficiencies were to be repaired immediately following the receipt of the noncompliance letter, with City staff returning to the site for a second follow-up inspection within approximately two business days. Subsequently, a stop work order “can be” issued when the deficiencies listed in the letter of noncompliance have not been completed. Additionally, this step explains that “if the deficiencies are not completed during the stop work order and within the timeframe allowed, a demand of the financial assurance is done so the City of Colorado Springs can complete the work.” A permit revocation is issued if the developer fails to comply with the stop work order and the owner must resubmit a Grading Plan or Erosion and Stormwater Quality Control Plan. A notice and Order is issued if the City needs to collect funds to abate the violation. Finally, a municipal summons is used when the developer has failed to comply with the stop work order or notice of permit revocation and order.

During inspection discussions and upon review of the enforcement database, it was evident that the City did not follow enforcement steps in a timely fashion as outlined in its own internal procedures and as required in the Permit as well as in City code.

The Villa Mirage development was found to have noncompliance issues associated with inadequate silt fencing dating back to November 25, 2008. City inspectors continued to document failure to properly implement BMPs according to erosion and sediment control plans. On April 28, 2009, a noncompliance letter was issued in response to CDPHE’s audit findings noting that the outlined enforcement steps were not being followed and escalated appropriately. On May 15, 2009, another CDPHE audit expressed the need for the City to escalate enforcement on the same developer for the same problems, so the City issued a second noncompliance letter. From May 27, 2009, through July

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16, 2009, continued violations were found at the site. On July 16, 2009, an off-site release of sediment was documented by City inspectors. On July 28, 2009, a stop work order was issued. Finally on September 28, 2009, a notice revoking the permit and order was issued. The City continued to inspect the site and found the same violations. As of February 2013, the site remained unstabilized and more than four years had elapsed since the start of a trend of noncompliance at the site. In addition, financial assurance was not acquired by the City for the Villa Mirage development during the planning process, as required by City procedures, and the City has not stabilized the site. The City has taken more than four years to address the Villa Mirage development findings. As of February 7, 2013, the site was still not in compliance.

Beginning November 19, 2007, City inspections of North Dublin Filing Number 1 development revealed failure to properly implement BMPs according to erosion and sediment control plans. After continued noncompliance findings by City inspectors, a letter of noncompliance was issued March 24, 2009. On April 28, 2009, City inspectors requested management to authorize a stop work order due to continued noncompliance. City management agreed to issue a stop work order September, 9, 2009. City inspectors continued to document site noncompliance, and on November 6, 2010, a notice to revoke the permit and associated order was issued. Using financial assurance money, contractors for the City fixed the site on February 22, 2011. The City took more than three years to bring the site into compliance.

At the Falcon Terrace at Springs Ranch Filing Number 1 development, City inspectors identified repeat BMP violations, according to erosion and sediment control plans. According to a series of inspection reports housed in the City's database, BMP violations were documented for this development from August 30, 2012 through February 1, 2013. It did not appear that the City had escalated the enforcement steps as outlined in its internal procedures. Instead, it appeared that the violations were documented during each site visit and discussed with the developer on a routine basis; however, the same types of violations were found during the follow up inspections.

### **Permit Requirements:**

The CDPHE permit in Part 1(B)(1)(d)(3) states, "...The permittee shall document and continue to implement procedures for inspection and enforcement of control measures at construction sites to the extent allowable under State and local law. The required documents shall include the following: enforcement provisions to ensure compliance with requirements as defined in CCS ordinances and rules and approved plans, and to ensure effective operation and maintenance of BMPs. Procedures must include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measures..."

City Code 7.7. 1508 states, "...Whenever the City Engineer has inspected or caused to be inspected any grading or land disturbance and has declared a nuisance to the public health, safety and welfare or if the City Engineer has determined noncompliance with this part, the City Engineer shall cause enforcement measures and/or other remedies to be undertaken..."

City Code 7.7. 1509 states, "...the City Engineer shall have enforcement measures and remedies, including but not limited to those listed below, available with respect to declaring a nuisance to the public health safety and welfare or determining noncompliance of this part..."

The City Drainage Criteria Manual, Volume 2 has resolution 135-02 which has codified the manual as part of City code requirements. Section 3.5 of the manual states, "...there are several situations where

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the City may determine that more aggressive action is necessary to get the site into compliance with its permit...Another instance that may result in more aggressive action is when the history of the contractor/owner/developer suggests that a more formal action is necessary. Problems that may warrant such action include: where the same problem is reoccurring at the site; where the site appears to be having frequent minor problems; or the individuals involved have a history of noncompliance. There are several options for formal action that are available to the City. Table CS-1 summarizes some of the more common options that include letter of noncompliance, stop work order, permit revocation, notice and order, municipal summons.”

### **Corrective Actions:**

Provide a written response to the EPA and CDPHE indicating if and how the City intends to address this issue.

### **Recommendations:**

None.

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### Industrial Facilities (IF) Program Review Findings

#### **Finding: 1IF – Inadequate Industrial Facilities Program Plan Implementation**

During the inspection one of seven facilities, visited by Jeff Besse, Stormwater Specialist in the Department of Public Works Engineering, and an EPA inspector to evaluate the City's Industrial/Commercial education and outreach, was not aware of the City's auto repair program. The EPA inspector visited the following facilities to gauge the City's outreach:

- AutoTech Plaza (409 W. Filmore)
- Advanced Auto Parts (2930 W. Filmore)
- O'Reiley Auto Parts (433 E. Filmore)
- Jiffy Lube (3003 N. Nevada)
- Jiffy Lube (201 S. Nevada)
- Goodyear Tire and Service (125 S. Nevada)
- O'Reiley Auto Parts (141 E. Old Broadmor)

Only the Goodyear Tire and Service's manager was unaware of the City's program. The manager also seemed unaware of the requirements to protect stormwater related to how to respond to major spills at the site. Mr. Besse explained the requirements and provided the manager with a copy of the City's commercial oil outreach material.

#### **Permit Requirements:**

Part I.B.1 of the Permit effective 11/01/11-10/31/16 states, "The permittee shall continue to implement a program to promote proper management of industrial sites regarding stormwater quality and industrial best management practices. The program shall provide education and outreach on pollutants in stormwater discharges to municipal systems from industrial facilities that the permittee determines are contributing or have the potential to contribute a substantial pollutant loading to the municipal storm sewer system."

In the City's Industrial Facilities Program document, dated August 26, 2005, it states that the City is targeting "Industrial and commercial businesses in CCS" for education and outreach. The program document states that the City will conduct a mailing to the following industrial facilities once per permit term: concrete, auto repair, and carpet cleaners.

#### **Corrective Actions:**

Implement the approved "Industrial Facilities Program" plan for industrial facility education/outreach activities to auto repair facilities as outlined in the City's current plan. Provide the EPA and the CDPHE with a summary, including a timeline, of how the City intends to comply with its current plan, or revise it.

#### **Recommendations:**

Review and amend the City's "Industrial Facilities Program" plan to accurately reflect the implementation of the City's program for industrial facility education/outreach (i.e., the addition of auto detailing, washing, etc).

The Colorado Water Quality Control Act, Section 25-8-501, was designed to protect the State waters by requiring a permit for the discharge of a pollutant into State waters. The City's ordinances prohibit polluted waters from being discharged into the storm sewer system. Both prohibit

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unpermitted stormwater industrial discharges (i.e., polluted waters) from entering the MS4, which discharge into State waters. Regulated and unpermitted industrial activities within the MS4, at a minimum, should be identified by the MS4 to ensure that they have received MS4 education/outreach and that they have obtained a permit from the State. The City should develop a list of industries within the MS4, identify which may need a State Colorado Discharge Permit System (CDPS) permit, who may be contributing pollutants to the City's storm sewer system and ensure that focused outreach is provided to those industries that are identified.

### Industrial Facilities (IF) Program Review Findings

#### **Finding: 2IF – Recommendation for Industrial Facilities Program Implementation**

During the inspection, Mr. Besse stated that rather than being sent to the carpet cleaning facilities directly, carpet cleaning facilities were provided information as needed, which was primarily when a company had an issue with IDDE. This was due to the frequency in which the carpet cleaning facilities change owners/operators.

#### **Permit Requirements:**

Part I.B.1 of the Permit effective 11/01/11-10/31/16 states, "The permittee shall continue to implement a program to promote proper management of industrial sites regarding stormwater quality and industrial best management practices. The program shall provide education and outreach on pollutants in stormwater discharges to municipal systems from industrial facilities that the permittee determines are contributing or have the potential to contribute a substantial pollutant loading to the municipal storm sewer system."

In the City's Industrial Facilities Program document, dated August 26, 2005, the City is targeting education and outreach towards "Industrial and commercial businesses in CCS." The program document states that the City will conduct a mailing to the following industrial facilities: concrete, auto repair and carpet cleaners once per permit term.

#### **Corrective Actions:**

None.

#### **Recommendations:**

Within the timeline outlined in the Permit, the City should identify the carpet industries within the MS4. In accordance with the City's Industrial Facilities Program document, the City should mail the outreach materials at least once during the permit term in place of or in addition to providing the materials to only the companies involved in a City response to an IDDE event.



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### Pollution Prevention (PP) / Good Housekeeping for Municipal Operations Program Review Findings

#### **Finding: 1PP – Update Municipal Facilities Runoff Control Plan (MFRCP)**

The City maintained a MFRCP for each municipal facility. During the inspection, the EPA reviewed 11 of the 42 facilities with an emphasis on evaluating the implementation of the MFRCP based upon department ownership, complexity of the site and proximity to surface water. The photographs provided for this finding can be found in the C. Springs MS4 P2 Photo Log (COS00004). The EPA reviewed the following sites:

#### Parks and Recreation, Patty Jewett Golf Course Maintenance Facility (1150 E. Caramillo Ave.)

During the inspection of the Patty Jewett Golf Course Maintenance Facility, the site and its relevant best management practices (BMPs) appeared to be installed and well maintained. The only issue noted was that the floor dry used to cleanup spilled fuel at the site was normally stored in a red container adjacent to the fueling area (photo 663); this container was empty during the inspection. According to site staff, during the winter, the facility stored the floor dry in a separate container indoors to prevent it from freezing. No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

#### Streets, Briargate Service Center (2385 Briargate Blvd.)

The site appeared to have been recently maintained (photo 664) and was overall in good condition. The site had minor staining under equipment parking areas. Discharge point number six (DP6) had a permanent BMP installed (a large grate inlet) with hay bale protection to reduce sediment from going into the inlet (photo 665). At DP6, below the outlet, rock and soil staining from what appeared to be salt was evident (photo 666). No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

#### CSU, Pinkerton Service Center (7710 Durant Dr.)

The site was in good condition in relation to its MFRCP. Three items related to material storage, equipment storage and good housekeeping were noted during the inspection. The site was storing outdoors "TransGuard Hydraulic Tract Fluid", whereby the material was spilled or dripping causing staining of the soil and retaining wall (photos 667 to 669). While a large number of vehicles and equipment were stored at the site, oil/fuel staining at the parking locations was minimal. However, one piece of equipment was observed as leaking during the inspection (photos 670 and 671). The fueling island's spill kit dry absorbent was noted as empty (photos 672 and 673). No other concerns were noted with the facility in relation to the site's implementation of the MFRCP. On February 14, 2013, photographic evidence was provided by the City illustrating the spill kit dry absorbent containers were now filled.

#### Police Impound (2725 E. Las Vegas St.)

The site was in good condition in relation to its MFRCP. Minor staining on the pervious gravel lot was noted. The site administrator noted that drip pans were not used, however containment around the vehicle was used when necessary (no such containment was observed during the inspection). The sedimentation pond was used for the site. Erosion rills were noted in the areas draining to the pond. The pond had approximately seven to ten inches of sediment in it and was noted as needing maintenance (photo 675). The storm sewer leading to the sedimentation pond also had sediment and trash/debris in it (photo 676). The EPA inspector noted that drip pans for leaking vehicles were additional BMPs that may assist the site, vice secondary containment around leaking vehicles, if oils

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and grease were noted in the sedimentation pond during rain events. No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

### Streets, Outwest Complex (3640 Outwest Dr.)

The site was in good condition. Minor staining at the deicing loading/off-loading area was noted. No other concerns were noted at the site.

### Streets, Hancock Depository (1845 Hancock Dr.)

The site was in good condition. No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

### CSU, Leon Young Service Center (1521 Hancock Dr.)

The site was in good condition in relation to its MFRCP. The only issue observed during the inspection was that one of the site's dumpster lids was open and should be closed (photo 677). No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

### Parks and Recreation, Central Mechanics (1417 Recreation Way)

Overall the facility was in good condition in relation to its MFRCP however, a few items of concern were noted by the EPA inspector. The site's discharge point number three (DP#3) was noted on the site map but the inlet had some leaves, trash and debris in it. The inlet also had a small, four to six inch polyvinyl chloride (PVC) pipe discharging into it. The pipe was reportedly from an inlet near building 1413 (Welding Shop), which was filled with leaves (photos 678 and 679). The connectivity of the pipe and the discharge point were not illustrated on the site map. The site also has a wash rack for equipment that was washed outdoors on a wash pad (photo 680). The site's MFRCP administrator was not aware of where the washwater would ultimately discharge and it was not noted on the facility's site map. The site does not list Quickcrete concrete as a potential pollutant source. During the inspection, material was noted as being stored in a building and appeared to have been spilled outdoors. Evidence of the material was on the ground adjacent to the loading area and a gray discoloration was observed on the soil for a number of feet until it ran underneath a shipping container (photos 681 to 691).

### Fleet, CSU, Streets, and Traffic Engineering facility at the Fontanero Service Center (400 W. Fontanero Dr.)

Four separate departments have operations at the Fontanero Service Center which are covered under four separate MFRCPs. The Fleet MFRCP administrator was present during the inspection and was requested to conduct and document the inspection of the Fleet area. During the inspection, the Fleet MFRCP administrator noted the discharge locations, the inlets, the locations of potential pollutants and the status of the required BMPs (secondary containment, floor dry, waste management); see photos (photos 692 and 693). The Fleet site administrator documented the inspection. During the inspection of the Fleet portion of the site, one issue of note was addressed by the site during the inspection. A CSU owned dump-truck was noted as leaking oil (photo 694). The truck was moved to a leaking vehicle storage area and a drip pan placed under it. No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

Other areas owned and operated by the CCS Street Division, CSU and the Traffic Engineering Department were also inspected by the EPA inspector. On the north side of the Traffic Engineering facility, poor housekeeping of fuels and oils (photo 695) was observed. The facility supervisor was notified and stated that he would address the issue. The EPA inspector asked for photo documentation

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illustrating it was corrected. A photo of the site, taken on February 8, 2013, was provided to the EPA on February 11, 2013 illustrating that the issue was corrected. No other concerns were noted with the facility related to the site's implementation of the MFRCP.

At the CSU Facilities Building 456 (at 416 Fontanero), on the southeast side of the facility, an inlet with two grates was missing a BMP over one of the inlets (photo 696). The inlet protection shown in the photo was not on the site map, it was reportedly left over from when the facility was being constructed. The remaining BMP had not failed but, rather than disposing of it, it was left in place. The other BMP was removed because it was no longer serviceable. No other concerns were noted with the facility in relation to the site's implementation of the MFRCP.

### Permit Requirements:

Part I.B.1.e.2.a of the Permit effective 11/01/11-10/31/16 states, "The permittee shall continue to document and implement Municipal Facility Runoff Control Plans (MFRCPs) for the following permittee-owned and/or operated facilities that do not have independent CDPS Stormwater permits. New MFRCPs shall be developed for any new qualifying facilities. Facilities may be grouped together by type, and one MFRCP may be developed for each group.

- i) vehicle maintenance facilities (maintenance includes equipment rehabilitation, mechanical repairs, painting, fueling and lubrication);
- ii) asphalt and concrete batch plants which are not already individually permitted;
- iii) solid-waste transfer stations;
- iv) exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, rotomill material."

Part I.B.1.e.2.c.iii of the Permit effective 11/01/11-10/31/16 requires the MFRCP to include a "Description of the potential pollutant sources include an evaluation of that potential..." for each site.

Part I.C 3.a of the Permit effective 11/01/11-10/31/16 requires that "The approved Programs shall not be modified by the permittee without the prior approval of the Division."

### Corrective Actions:

Update the Parks and Recreation's Central Mechanics Facility MFRCP (1417 Recreation Way). The MFRCP should include the concrete material use/storage as a potential pollutant source and the pertinent BMPs. For clarity, the MFRCP shall also include an updated site map to address connectivity of discharge point number three (DP#3) and the ultimate sewer discharge of the site's equipment washwater. Provide the EPA and CDPHE with an amended version of the site's MFRCP (including site map(s)).

Provide photo documentation for the following issues observed during the inspection and a date when they were addressed at the CSU, Pinkerton Service Center (7710 Durant Dr.):

1. The "TransGuard Hydraulic Tract Fluid" spill (photos 667 to 669).
2. The leaking/dripping equipment observed during the inspection (photos 670 and 671).

Provide a copy of the finalized complete inspection report for the Fleet Management's inspection of the Fontanero Service Center on February 6, 2013 performed with the EPA inspector. As discussed during the inspection with the EPA inspector, shall not be included on the inspection checklist that would not typically be included in an inspection at this time of the year (e.g., funding expenditures).

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Provide a copy of the work order for the Police Impound (2725 E. Las Vegas St.) lot sedimentation pond's required maintenance. Also provide the City's proposed timeline for maintenance at the sedimentation pond.

Provide all of the documentation requested above to the EPA and CDPHE for review.

### **Recommendations:**

Ensure that the City seeks authorization to modify the MFRCP(s) as required by the Permit.

The City should evaluate its procedures to reduce the discharge of salt from site activities at the Briargate Service Center (2385 Briargate Blvd.). While the site appeared to be in good condition, discharge point number six (DP6), had evidence of salt staining downstream of DP6.

### **Pollution Prevention (PP) / Good Housekeeping for Municipal Operations Program Review Findings**

#### **Finding: 2PP – Inadequate Operations and Maintenance Procedures**

The City did not implement the operations and maintenance procedures developed in compliance with the MS4 permit at facilities with an existing industrial stormwater permit. The City staff stated that an industrial stormwater permit for a facility covered the entire facility. Therefore, the MS4 program's operations and maintenance procedures were not required to cover them. This is contrary to the scope of the industrial stormwater general permit. The industrial stormwater permits are designed to regulate only industrial activities and do not permit other operations and maintenance (O&M) related activities conducted by the City staff if they are not covered as a regulated industrial activity.

The City maintains the following NPDES related industrial stormwater permits:

- Colorado Springs Airport (COR341602), 7770 Milton E. Proby Pkwy, Suite 50, Sand and Gravel Permit Stormwater Permit
- Sand Creek Recycling Center (COR341241), 3890 Colorado State Hwy 85-87 South, Sand and Gravel Permit Stormwater Permit
- Las Vegas Street WWTF (COR090069), 703 E. Las Vegas St., Stormwater Industrial Permit
- Drake Power Plant (COR090551), 700 S. Conejos St., Stormwater Industrial Permit
- Birdsall Power Plant (COR090552), 213 Nichols Blvd., Stormwater Industrial Permit
- Transit Maintenance & Storage Facility (COR009016), 1145 Transit Dr., Stormwater Industrial Permit
- Colorado Springs Airport (COR900730), 7770 Milton E. Proby Pkwy., Suite 50, Stormwater Industrial Permit

As an example, the City of Colorado Springs Airport's 2012 stormwater certification statement for its general permit coverage under the Stormwater Discharges Associated with Industrial Activities (Colorado Permit Number: COR900000) described the activities covered by the industrial permit. The certification statement dated June 27, 2012, for the industrial activities under standard industry classification (SIC) code: 4581 covered by the general permit included, "Operation of de-icing fluid collection system. Operation and maintenance of vehicles and equipment for sweeping, plowing, snow and ice removal, maintenance, act. of runways, taxiways, and aprons." Per the City staff, the recently developed O&M SOPs for City activities (e.g., the SOP for "Power Washing") were not believed to be applicable to airport activities since there was a NPDES stormwater industrial permit covering the site. Only in cases where an activity is conducted as part of a covered industrial activity (e.g., outdoor



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material storage supporting air transportation activities) does the industrial permit cover that activity. Storage of materials for regulated activity in a non-industrial operations area (e.g., landside operations) would require implementation of the City's O&M SOPs at that site, or a separate MFCRP (if appropriate).

### Permit Requirements:

Part I.B.1.e.1 of the Permit effective 11/01/11-10/31/16 states, "The program must include a list of facilities the permittee owns or operates that are subject to separate coverage under CDPS permits for discharges of stormwater associated with industrial activity. The requirements of subsection (2) and (3), below, do not apply to stormwater discharges authorized by these separate permits."

The CDPS Permit No. COR900000, Part I.A.1.a.i, allowable discharges states, "Stormwater discharges associated with industrial activity for any primary industrial activities and co-located industrial activities, as defined in Appendix C (Definitions and Abbreviations) and identified in Appendix A (Facilities and Activities covered)..."

The CDPS Permit No. COR900000, Appendix C, for Stormwater Discharges Associated with Industrial Activity states "...the discharge from any conveyance that is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. Except for the provision of 61.3(2)(c) that addresses construction activities associated with oil and gas operations or facilities, the term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122 or the CDPS program under Regulation No. 61. For the categories of industries identified in this permit, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. See 5 CCR 1002-61.3(2)(e)."

The CDPS Permit No. COR900000, Part I.A.1.a.ii, allowable discharges states, "Discharges that are not otherwise required to obtain permit authorization but are commingled with stormwater discharges that are authorized under this permit..."

The CDPS Permit No. COR900000, Part I.A.1.a.2.c. limitations on coverage include, "Discharges that are currently covered under an individual permit or an alternative general permit are not eligible for coverage under this permit."

### Required Corrective Actions:

Provide information to the EPA and CDPHE on whether the City's permitted industrial facilities are implementing the required O&M SOPs at these sites for non-industrial, municipally related activities, or if the City will draft a MFCRP covering these sites as required by the Permit.

### Recommendations:

None.



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<b>Staff Interviewed During the Inspection</b>	
<b>Name</b>	<b>Title</b>
Lisa Ross	Senior Civil Engineer/ EDRD/ Stormwater (Formerly – No longer employed with City of Colorado Springs Engineering Division)
Ryan Bouton	Engineering Tech II / Asset Management/Stormwater
Jeff Besse	Stormwater Specialist/ EDRD/Stormwater
Joel Mackey	O&M Engineering Inspector / EDR/Stormwater
Steve Bodette	Engineering Inspector/ City Engineering
Tim Mitros	Engineering Division Review and Stormwater Manager
Steve Kuehster	Senior Civil Engineer/ Engineering Development Review
Michael Kelso	Senior Engineering Inspector/ City Engineering
Todd Sturtevant	Senior Engineering Inspector/ City Engineering
Lisa Mitchell	Training Manager/ Colorado Springs Police Ops Center - Call Center
Bill Payne (via phone)	USGS (Monitoring Contact)
Alan Williamson	Engineering Technician II / City Engineering
Todd Dahlberg	Engineer / Colorado Springs Utilities (via phone on February 22, 2013)
Joesph Curro	Police Logistics Support Manager
Deryl Calvert	Environmental, Safety and Health Coordinator and the Fleet Maintenance MFRCP Site Facilitator at the Fontanero Complex
Dave Loveless	Senior Skilled Maintenance Technician, Fleet
Randy Lawson	Operations Supervisor, Fleet
Mike Rossell	Parks and Recreation – Facility Maintenance Supervisor and the Parks and Recreation MFRCP Site Facilitator at the Central Mechanics Site.
Tim Dleumer	Supervisor Parks Maintenance
Sarah Hunke	Environmental Engineer Water Services Division, Colorado Springs Utilities
Deryl Calvert	Streets MFRCP Site Facilitator at the Fontanero Complex
Joe Thornburg	Impound Supervisor and the Police Department MFRCP Site Facilitator at the Police Impound Lot
Kim King	Administration, Recreation and Cultural Services Manager
Dal Lockwood	Golf Course Manager, Golf Course MFRCP Site Facilitator at the Patty Jewett Golf Course
Bob Branum	Streets MFRCP Site Facilitator at the Patty Jewett Salt Shed
Randy Faust	Streets MFRCP Site Facilitator at the Briargate Complex
Mark Clark	Senior Analyst and the Colorado Springs Utilities MFRCP Site Facilitator at the Pinkerton Service Center
Scot Runtzel	Vactor Truck Operator / EOII
Kirk Gamez	Sweeper Operator / EOII
Tim Orcutt	Sweeper Operator / EOII – Sub Foreman
Terry Huggins	Drainage Maintenance Supervisor
Chris Howard	North District Maintenance Supervisor
Bard Lower	Operations Manager
Cole Platt	Environmental, Safety and Health Supervisor
Terry Huscher	Skilled Maintenance Technician
Jim Thomas	Manager, AutoTech Plaza
Ashley Troughton	Retail Service Manager, Advanced Auto Parts
Jeremy Niven	Store Manager, O'Reiley Auto Parts
Henry Mock	Floor Manager, Jiffy Lube
Amber Sherban	Customer Experience Manager, Jiffy Lube
Tyrone Robinson	Store Manager, GoodYear Tire and Service
Rob Avalos	Manager, O'Reiley Auto Parts

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<b>Documents Reviewed During the Inspection</b>	
(Note: May not be all-inclusive of all supplemental documentation and information received and/or reviewed related to the Colorado Spring MS4 inspection)	
<b>Document Title / Author</b>	<b>Date:</b>
MS4 Phase I Permit for the City of Colorado Springs/ CDPHE	Effective March 1, 2009
MS4 Phase I Permit for the City of Colorado Springs and Statement of Basis (fact sheet) / CDPHE	Effective November 1, 2011
City of Colorado Springs Municipal Separate Storm Sewer System Permit (COS-000004) Monitoring Plan / City of Colorado Springs	Version Prepared December 31, 2002 and Revised May 21, 2003  Version Prepared August 31, 2012
Multiple written correspondences (e.g. Email, letters, modifications requests, etc.) between the City of Colorado Springs MS4 and CDPHE, USGS and other entities	Varies
City Organizational Chart / City of Colorado Springs	August 1, 2012
Draft Engineering Division Org. Chart / City of Colorado Springs	January 16, 2013
2012 Annual Expenses document / City of Colorado Springs	None
Annual Inspection and Maintenance Reporting Form for Stormwater BMPs and As-Built for: The Village at Homewood Point, Von Briggles Subdivision, Rudy's BBQ and Midland Greens / City of Colorado Springs post-construction inspectors	Varies
Overall MS4 Program Management document / City of Colorado Springs	Revised January 2013
O & M Program Procedures / City of Colorado Springs	None
Frequency of Inspections and Inspection Priorities document / City of Colorado Springs	None
Colorado Springs Stormwater Inspector Reference Guide / City of Colorado Springs	September 3, 2009
Colorado Springs Stormwater Inspector Enforcement Guide / City of Colorado Springs	None
Sections of City Code: 7.7.906, 7.7.1101, 7.7.1102, 7.7.1103, 7.7.1104, 7.7.1105, 7.7.1501 / City of Colorado Springs Source: <a href="http://www.sterlingcodifiers.com/codebook/printnow.php">http://www.sterlingcodifiers.com/codebook/printnow.php</a>	January 2013

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Illicit Discharge Detection and Elimination (IDDE) Program / City of Colorado Springs	Issued October 1, 2012 Revised January 21, 2013
2010 and 2011 Annual Reports / City of Colorado Springs	March 12, 2012
Article 8 Stormwater Quality Management and Discharge Control Code / City of Colorado Springs Source: <a href="http://www.sterlingcodifiers.com/codebook/printnow.php">http://www.sterlingcodifiers.com/codebook/printnow.php</a>	January 2013
Draft Article 8 Stormwater Quality Management and Discharge Control / City of Colorado Springs	February 2013
CCS Municipal Stormwater Discharge Permit Program – 2010 Procedures for: Spill Response, Illicit Discharge Investigation, Training and Site Inspections (Existing Programs) / City of Colorado Springs	None
Spill Prevention and Response document / City of Colorado Springs	None
Public Education Update document submission / City of Colorado Springs	None
Internal Draft Document for IDDE Coordination between the City and the Fire Department /City Personnel/ City of Colorado Springs	None
Draft Training Material for HazMat Personnel / Colorado Springs Fire Department	Date Originated October 9, 2005
City Storm Sewer Outfalls and CDPS Permittees map / City of Colorado Springs	None
2001 Reporting Illicit Discharge/Spill Training / City of Colorado Springs	2011
Source Identification and Mapping Database / City of Colorado Springs	None
City IDDE Reports / City of Colorado Springs	2011
City issued NOV to “Lucky Dog”/ City of Colorado Springs	Not Available
Drainage Criteria Manual Volume 2 Stormwater Quality Policies, Procedures and Best Management Practices (BMPs) / City of Colorado Springs and CH2MHILL	November 1, 2002
The City of Colorado Springs Discharge Criteria Manual, Volume 2, Addendum No. 1 – Operations and Maintenance of Stormwater Best Management Practices / City of Colorado Springs	None
The City of Colorado Springs Discharge Criteria Manual, Volume 2, Addendum No. 2 – Alternative or Innovative Best Management Practices / City of Colorado Springs	None
CDPS MS4 Colorado Springs COR-000004 program descriptions / City of Colorado Springs	March 20, 2012

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Colorado Springs Airport Layout Drawing / City of Colorado Springs	May 12, 2005
CDPS General Permit COR 900000 for Stormwater Discharges Associated with Non-Extractive Industrial Activity / CDPHE	Effective: July 1, 2012
Colorado Springs Airport Permit Certification COR900730 / CDPHE	June 27, 2012
Scope of Work: Monument and Fountain Creek Watershed Water-Quality and Biological Monitoring Program January 1, 2012 to December 31, 2012	None
Inspection oversight training form (blank)	None
Map of geographic areas for plan reviewers / City of Colorado Springs	None
Copies of plans and associated inspection records for: Walmart and Flying Horse / City of Colorado Springs	Varies
Inspector checklist for routine SW inspections / City of Colorado Springs	None
List of detention ponds and designation for SW or WQ / City of Colorado Springs	None
Inventory of post-construction BMPs – OM Program New BMPs / City of Colorado Springs database	None
Grading, Erosion Control and Stormwater Quality Plan Checklist / City of Colorado Springs	None
PE Certification Checklist (permanent BMP checklist) / City of Colorado Springs	None
PE Certification Checklist for: Retention Pond (RP) / City of Colorado Springs	None
PE Certification Checklist for: Extended Detention Basin (EDB) / City of Colorado Springs	None
PE Certification Checklist for: Sand Filter Extended Detention Basin (SFB) / City of Colorado Springs	None
PE Certification Checklist for: Modular Block Porous Pavement (MBP) – No WQCV / City of Colorado Springs	None
PE Certification Checklist for: Porous Pavement Detention (PPD) / City of Colorado Springs	None
PE Certification Checklist for: Grass Swale (GS) _- No WQCV / City of Colorado Springs	None
PE Certification Checklist for: Porous Landscape Detention (PLD) / City of Colorado Spring	None
PE Certification Checklist for: Grass Buffer (GB) - No WQCV / City of Colorado Spring	None
Erosion Checklist / City of Colorado Springs	None
Stormwater Best Management Practices Inspection and Maintenance Plan (IM Plan) Procedures/Forms for: <i>Porous Landscape Detention (PLD)</i> / City of Colorado Springs	No Overall Document Date, Appendix B: May 2008
Stormwater Best Management Practices Inspection and Maintenance Plan (IM Plan) Procedures/Forms for: <i>Extended Detention Basins (EDBs)</i> / City of Colorado Springs	No Overall Document Date, Appendix B: May 2008

### Federal NPDES Storm Water Inspection – MS4

Appendix B Standard Operation Procedures for Inspection and Maintenance Sand Filter Basins (SFBs) / City of Colorado Springs	No Overall Document Date, Appendix B: May 2008
SOP – Spill Prevention and Response (Flyer) / City of Colorado Springs	None
SOP – Landscape Chemical Application SOP (Flyer) / City of Colorado Springs	None
SOP – Fertilizer, Herbicide, and Pesticide Application / City of Colorado Springs	None
SOP – NPDES Pesticide Quarterly Report / City of Colorado Springs	None
SOP – Large Outdoor Festivals and Events / City of Colorado Springs	None
SOP – Outdoor Material Storage / City of Colorado Springs	None
SOP – Parks and Open Space Maintenance / City of Colorado Springs	None
SOP – Snow Storage / City of Colorado Springs	None
SOP – Street Curb Gutter Maintenance / City of Colorado Springs	None
SOP – Street Curb Gutter Replacement and Construction / City of Colorado Springs	None
SOP – Spill Prevention and Response / City of Colorado Springs	None
SOP – Heavy Equipment Vehicle Maintenance / City of Colorado Springs	None
SOP – Outdoor Fleet Maintenance / City of Colorado Springs	None
SOP – Power Washing / City of Colorado Springs	None
SOP – New Construction Activities / City of Colorado Springs	None
SOP – Salt and Sand Storage / City of Colorado Springs	None
SOP – Snow and Ice Control / City of Colorado Springs	None
SOP – Street Sweeping / City of Colorado Springs	None
SOP – Street Sweeper Cleaning / City of Colorado Springs	None
SOP – Storm Sewer Maintenance / City of Colorado Springs	None
SOP – Storm Sewer Replacement and Construction / City of Colorado Springs	None
SOP – Vehicle Fueling / City of Colorado Springs	None
SOP – Waste Management / City of Colorado Springs	None
SOP – Waste Recyclable Transfer Stations / City of Colorado Springs	None
SOP – Municipal Parking Lots / City of Colorado Springs	None
Trash and Debris Removal Procedures / City of Colorado Springs	None
Proposed Channel Improvements Procedures / City of Colorado Springs	October 1, 2012
City of Colorado Springs Street Division Channel Cleaning Procedures /	None



### Federal NPDES Storm Water Inspection – MS4

City of Colorado Springs	
City of Colorado Springs Streets Division Storm Inlet/Storm Sewer Cleaning Procedures / City of Colorado Springs	None
Industrial Facility Program Plan / City of Colorado Springs	September 1, 2005
Targeted Industrial Facilities / City of Colorado Springs	None
Fleet Maintenance MFRCP for the Fontanero Complex / City of Colorado Springs	2010
Streets MFRCP for the Fontanero Complex / City of Colorado Springs	2010
Police Department MFRCP for the Police Impound Lot / City of Colorado Springs	December 2012
Golf Course MFRCP for the Patty Jewett Golf Course / City of Colorado Springs	December 2012
Streets MFRCP for the Briargate Complex / City of Colorado Springs	2010
Parks, Recreation and Cultural Services MFRCP for the Urban Parks and Horticulture Unit Facilities Maintenance – Maintenance Shop and Stockpiles / City of Colorado Springs	January 2010
Colorado Springs Utilities MFRCP for the Pinkerton Site / City of Colorado Springs	October 1, 2008
MFRCP May 2012 Inspection Report for the Pinkerton Work Center / City of Colorado Springs	May 1, 2012
MFRCP August 2012 Inspection Report for the Parks and Recreation Department's Maintenance Shop / City of Colorado Springs	August 1, 2012
MFRCP July 2012 Inspection Report for the Parks, Recreation, and Cultural Service's Golf Courses Patty Jewett Golf Course / City of Colorado Springs	July 11, 2012
MFRCP July 2012 Inspection Report for the Street Division's Briargate Complex / City of Colorado Springs	June 6, 2012
MFRCP July 2012 Inspection Report for the Street Division's Fontanero Complex / City of Colorado Springs	July 3, 2012
MFRCP August 2012 Inspection Report for the Fleet Management Division's Fontanero Complex / City of Colorado Springs	August 3, 2012
MFRCP December 2012 Inspection Report for the Police Impound Facility / City of Colorado Springs	December 24, 2012
Reporting Illicit Discharge / Spill Training / City of Colorado Springs	None
Colorado Springs Airport 2012 Stormwater Permit Certification Statement / City of Colorado Springs	June 27, 2012
Colorado Springs Airport Stormwater Management Plan Figure No. 3 [Outfall Map] / City of Colorado Springs	None

## Federal NPDES Storm Water Inspection – MS4

<b>Facilities / Sites Inspected During the Inspection</b>	
<b>Description / Location</b>	<b>Inspection Area</b>
Colorado Springs Police Operation Center – Call Center / 705 South Nevada Avenue/ City of Colorado Springs	Illicit Discharge Detection and Elimination
Conoco Gas Station / Palmer Park Boulevard and Potter Drive/ City of Colorado Springs	Illicit Discharge Detection and Elimination
Sunrise Kennels and Dog Training Center / Vincent Drive and Vincent Frontage Road/ City of Colorado Springs	Illicit Discharge Detection and Elimination
Outfalls within the City of Colorado Springs: MOCR02621797 / Monument Creek, MOCR02622397 / Douglas Creek, MOCR02622497 / Douglas Creek and MOCR02650397 / Monument Creek	Illicit Discharge Detection and Elimination
Flying Horse / City of Colorado Springs	Construction
Walmart construction/ City of Colorado Springs	Construction
Monument Branch near the TCA School/ City of Colorado Springs	Construction
Cathedral Ridge development area/ City of Colorado Springs	Construction
Fountain Creek at Kentucky Fried Chicken/ City of Colorado Springs	Construction
The Village at Homewood Point / 907 East Colorado / City of Colorado Springs	Post-Construction
Rudy's BBQ / 315 South 31 <sup>st</sup> / City of Colorado Springs	Post-Construction
Von Briggie Subdivision / 600 South 21 <sup>st</sup> Street / City of Colorado Springs	Post-Construction
Midland Greens / 2845 Ore Mill Road / City of Colorado Springs	Post-Construction
Fontanero Complex / 404 W. Fontanero St., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations
Police Impound Lot / 2725 E. Las Vegas St., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations
Patty Jewett Golf Course / 1150 E. Caramillo St., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations
Patty Jewett Salt Shed / 1202 E. Caramillo St., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations

## Federal NPDES Storm Water Inspection – MS4

Colorado Springs Utilities Pinkerton Service Center / 7710 Durant Dr., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations
Briargate Complex / 2385 Briargate Blvd., Colorado Springs / City of Colorado Springs	P2 / Good Housekeeping for Municipal Operations
Auto Repair Facility / 409 W. Filmore, Colorado Springs / AutoTech Plaza	Industrial Facilities
Auto Parts Retailer / 2930 W. Filmore, Colorado Springs / Advanced Auto Parts	Industrial Facilities
Auto Parts Retailer / 433 E. Filmore, Colorado Springs / O'Reiley Auto Parts	Industrial Facilities
Auto Repair Facility / 3003 N. Nevada, Colorado Springs / Jiffy Lube	Industrial Facilities
Auto Repair Facility / 201 S. Nevada, Colorado Springs / Jiffy Lube	Industrial Facilities
Auto Repair Facility / 125 S. Nevada, Colorado Springs / Goodyear Tire and Service	Industrial Facilities
Auto Parts Retailer / 141 E. Old Broadmor / O'Reiley Auto Parts	Industrial Facilities

### MS4 Inspection Photo Log

Photographs were taken by inspectors during the EPA's inspection to document observations in the field. For continuity within each program area, the photographs were assembled into their individual program areas as individual "photo logs". The photo logs for the inspection are broken out as follows below and are provided in Appendix A.

<b>Program Area</b>	<b>Photo Log Title</b>
Construction Sites Runoff Control Program	Construction Overview
Post-Construction Storm Water Management in New Development and Redevelopment	Post-Construction Overview
Illicit Discharge Detection and Elimination (IDDE)	IDDE Oversight and Colorado Springs MS4
Pollution Prevention and Good Housekeeping for Municipal Operations	C. Springs MS4 P2 Photo Log (COS00004)

# Federal NPDES Storm Water Inspection – MS4

## Appendix A: MS4 Inspection Photo Logs

City of Colorado Springs Phase I MS4 Inspection Report  
Colorado Discharge Permit System, Permit #: COS000004

Inspection Dates: February 4, 2013 – February 7, 2013



**Federal NPDES Storm Water Inspection – MS4**

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# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 3  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Earthen berm that needed to be turned around the corner (front right) and rip rap removed.



**Photo Number** 4  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Sediment discharge in street down slope from disturbed area.



# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 5  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Portable toilet that was not staked.



**Photo Number** 6  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Undisturbed areas with no perimeter controls.



# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 7  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Track out onto subdivision road from disturbed area.



**Photo Number** 8  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction Inspection - Disturbed areas by new sidewalk with no perimeter controls.





# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 9  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Construction  
Inspection - Upslope view of disturbed area which drains towards the street and sidewalk (pic 8).



**Photo Number** 10  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Pond -  
Flying horse pond -  
(facing toward pipe  
where storm flow  
enters pond).





# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 11  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Pond - Photographer standing on rip rap apron of pond, facing downstream from pond where storm flow was discharging.



**Photo Number** 12  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Pond - Photographer facing downstream from pond where storm flow was discharged. Note: channel erosion.



# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 13  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Pond -  
Photo taken facing  
toward pipe where  
storm flow entered  
pond.



**Photo Number** 14  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Flying Horse Pond -  
Close up, photo  
taken facing toward  
pipe where storm  
flow entered pond.





# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 15  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Walmart  
Construction  
Inspection -  
Concrete wash out  
with no perimeter  
berm or liner  
stabilization.



**Photo Number** 16  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Walmart  
Construction  
Inspection -  
Concrete spill on  
ground.



# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 17  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch-  
behind TCA school -  
Photo taken facing  
upstream of sewer  
line showing rip rap  
apron.



**Photo Number** 18  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch-  
behind TCA school -  
Photo taken facing  
upstream of rip rap  
apron showing  
channel erosion.





# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 19  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, behind TCA school - Close-up of bank erosion upstream of rip rap apron.



**Photo Number** 20  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, behind TCA school - Active bank erosion down stream from rip rap apron.





# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 21  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, behind TCA school - Close-up of active erosion and location of sediment blanked carved by flow.



**Photo Number** 22  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, southwest of pond and north of TCA school - Close-up of sediment point bar on channel bed.



# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 23  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, southwest of pond and north of TCA school - Photo taken facing west in Monument Branch channel.



**Photo Number** 24  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Monument Branch, southwest of pond and north of TCA school - Photo taken facing east in Monument Branch channel.



# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

**Photo Number** 25  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Neighborhood downstream of Cathedral Ridge - Discharge location of storm flow conveyed via pipe from Cathedral Ridge to open channel in neighborhood.



**Photo Number** 26  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Neighborhood downstream of Cathedral Ridge - Open channel, facing upstream.





# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 27  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Neighborhood downstream of Cathedral Ridge - Open channel, facing downstream.



**Photo Number** 28  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Neighborhood downstream of Cathedral Ridge - Close-up of discharge location of storm flow conveyed via pipe. Note ash deposition.





# Photographs for Construction Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 29  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Cathedral Ridge -  
Development area.



**Photo Number** 30  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Cathedral Ridge -  
Development area.



# Photographs for Construction Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 31  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Fountain Creek at Kentucky Fried Chicken - Discharge location of storm flow conveyed from open channel to Fountain creek (ash visible).



**Photo Number** 32  
**Inspection Date** 2/6/2013  
**Photographer** K. Sable  
**Description** Fountain Creek at Kentucky Fried Chicken - Ash across Fountain Creek across from discharge location.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 663  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Patty Jewett golf course maintenance facility: Fueling area. The red container next to fuel tank is suppose to contain dry absorbent.



**Photo Number** 664  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Briargate Service Center: Storm drain inlet (with insert) on the north side of the property taken looking to the west.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 665  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Briargate Service Center: Storm drain inlet (with hay bale protection) on the southwest side of the property taken looking to the northwest.



**Photo Number** 666  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Briargate Service Center: Outfall rock protection from the storm drain inlet shown in photo 665 on the southwest side of the property taken looking to the northwest. Note the white stain which is believed to be salt deposits discharged from the facility.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 667  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** CSU, Pinkerton Service Center:  
Taken on the eastern portion of the site looking east. Hydraulic oil stored here with significant staining. It was located at this site and recently moved (as observed by the container mark on the grassy area, photo 668).



**Photo Number** 668  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** CSU, Pinkerton Service Center:  
Close-up of the staining at this location.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 669  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Hydraulic material shown believed to cause staining in the previous photos (667 and 668) is shown in the photo's center. The container appeared to have been moved to this location from a location adjacent to the white wall in the rear of the photo.



**Photo Number** 670  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** CSU, Pinkerton Service Center: Taken in the central vehicle/equipment storage area. This equipment was observed as leaking onto the ground. Photo taken looking to the south.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 671  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Close-up of the leaking equipment shown in photo 670.



**Photo Number** 672  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** CSU, Pinkerton Service Center: Fueling station on the central southern portion of the site. Note the red dry absorbent container in the bottom right portion of the photo.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 673  
**Inspection Date** 2/5/2013  
**Photographer** D. Gwisdalla  
**Description** Close-up of the red container shown in photo 672. It was noted as being empty at the time of the inspection.



**Photo Number** 674  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Police Impound Facility: Waste storage. Also note the green sign in the impound yard, it outlines how persons at the site can protect stormwater at the site.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 675  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Police Impound Facility:  
Sedimentation pond on the western portion of the site. Note the sediment in the pond.



**Photo Number** 676  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Police Impound Facility: Stormwater drainage structure. Note the condition of rock protection.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 677  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** CSU, Leon Young Service Center: A solid waste dumpster being used without a cover.



**Photo Number** 678  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Parks and Recreation, Central Mechanics: Note the storm drain inlet at building 1413. It was unclear where this inlet flowed, it was not depicted on the site map, and the inlet was full of leaves.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 679  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Storm drain inlet shown in photo 678. Note the leaves in the drain.



**Photo Number** 680  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Parks and Recreation, Central Mechanics: Washrack for the site on the east side of the facility. The wash rack reportedly flows to the sanitary system. There is an inlet adjacent to the wash rack located at the orange pylon in the center of the photo.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 681  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Parks and Recreation, Central Mechanics: Cement storage facility note the cement bags on the ground inside the facility (on the right side of the garage door). Note the white discoloration on the ground.



**Photo Number** 682  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** White discoloration shown in photo 681. The discoloration is believed to be cement that was washed down into/towards the storm drain inlet as shown in the following photos.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 683

**Inspection Date** 2/6/2013

**Photographer** D. Gwisdalla

**Description** Overview of the location shown in photo 681-683. The flow of the cement appeared to flow in the general direction of the person standing in the center of the photo.



**Photo Number** 684

**Inspection Date** 2/6/2013

**Photographer** D. Gwisdalla

**Description** More staining on the ground down gradient of the previous photos. The site was observed by the EPA inspector to have been recently maintained and portions of the ground appeared to have been raked.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 685  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Overview of photo 684. The traces of the cement staining were observed to have flowed to the white Conex box in the center of the photo; note the green bird houses against the Conex box.



**Photo Number** 686  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** The bird houses noted in photo 685 leaning against the Conex box. The cement staining shown flowing towards and underneath the Conex box.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 687

**Inspection Date** 2/6/2013

**Photographer** D. Gwisdalla

**Description** Eastern edge of the Conex box shown in photo 685 to illustrate the location of the discharge point into the inlet from the Conex box. Note the green column in the center of the photo beyond the Conex box.



**Photo Number** 688

**Inspection Date** 2/6/2013

**Photographer** D. Gwisdalla

**Description** Parks and Recreation, Central Mechanics: Location of the outfall on the eastern edge of the property flowing into the adjacent creek. The discharge location was as shown further south of the Conex box in photo 687.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 689  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Location of the outfall on the eastern edge of the property flowing into the adjacent creek. A photo to the north back at the Conex box from discharge location adjacent to the stormwater inlet on the right of the photo (as shown in photo 691).



**Photo Number** 690  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Parks and Recreation, Central Mechanics: Outfall shown in photo 689 and directly in photo 691.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 691  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Parks and Recreation, Central Mechanics: Location of the outfall on the eastern edge of the property flowing into the adjacent creek. The discharge location was as shown further south of the Conex box in photo 687.



**Photo Number** 692  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Fontanero Service Center's Fleet Maintenance: Fueling station.



# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 693  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Fontanero Service Center, Fleet Maintenance. Note the discharge control structures with absorbent materials.



**Photo Number** 694  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Fontanero Service Center, Fleet Maintenance. Leaking equipment. Note the liquid staining underneath the dump truck. The vehicle was dripping a fluid (possibly fuel) onto the ground. The vehicle was moved immediately to the leaking vehicle storage area.





# Photographs for C. Springs MS4 P2 Photo Log (COS00004)

## Inspection Type: Stormwater-MS4

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**Photo Number** 695  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** Traffic Engineering facility at the Fontanero Service Center. Note the poor housekeeping at the site (outside door 402).



**Photo Number** 696  
**Inspection Date** 2/6/2013  
**Photographer** D. Gwisdalla  
**Description** CSU facility at the Fontanero Service Center. Stormwater inlet protection. Note one of the inlets was covered with additional protection; the other was not protected.







# Photographs for Colorado Springs MS4

## Inspection Type: MS4

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**Photo Number** 1  
**Inspection Date** 2/7/2013  
**Photographer** Monia Ben-Khaled  
**Description** Overview of outfall MOCR02621797, located at Monument Creek by Goose Gossage baseball field. The outfall discharges into Monument Creek.



**Photo Number** 2  
**Inspection Date** 2/7/2013  
**Photographer** Monia Ben-Khaled  
**Description** Overview of outfall MOCR02622397, located by Douglas Creek. The outfall discharges into Douglas Creek.





# Photographs for Colorado Springs MS4

## Inspection Type: MS4

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**Photo Number** 3  
**Inspection Date** 2/7/2013  
**Photographer** Monia Ben-Khaled  
**Description** Closeup of outfall MOCR02622397, located by Douglas Creek. The outfall discharges into Douglas Creek. The discharge appeared foamy but had no distinct smell.



**Photo Number** 4  
**Inspection Date** 2/7/2013  
**Photographer** Monia Ben-Khaled  
**Description** Overview of outfall MOCR026497, located by Douglas Creek. The outfall discharges into Douglas Creek.

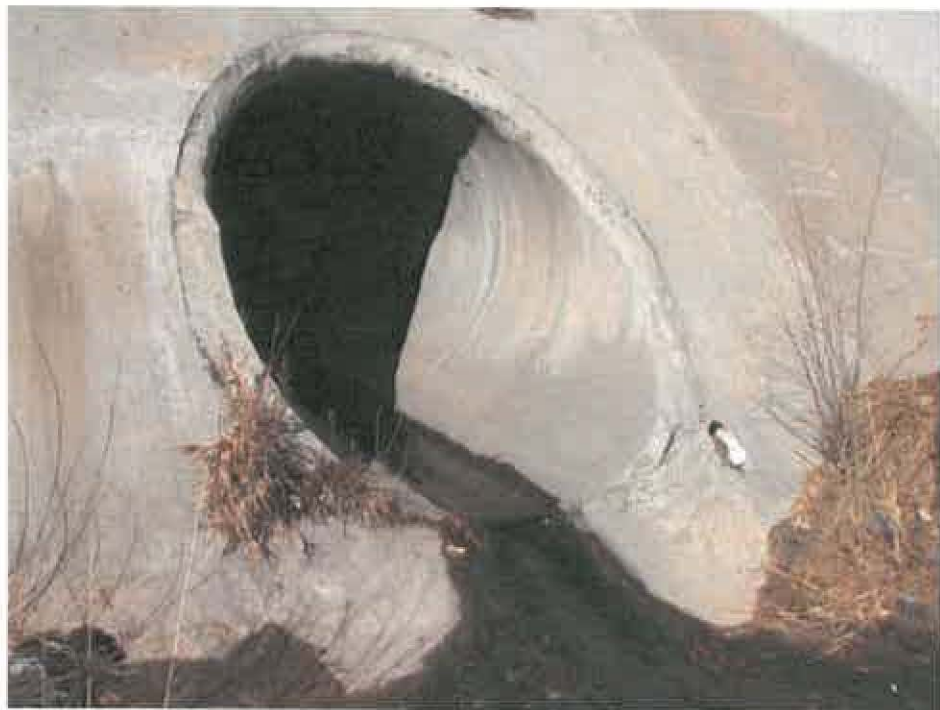


# Photographs for Colorado Springs MS4

## Inspection Type: MS4

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**Photo Number** 5  
**Inspection Date** 2/7/2013  
**Photographer** Monia Ben-Khaled  
**Description** Overview of outfall MOCR02650397, located by Douglas Creek. The outfall discharges into Douglas Creek.







# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 271

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Photo taken facing north. Channel running into basin from parking area.



**Photo Number** 272

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Curb entry for channel leading into basin from parking area.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 273  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at Homewood Point - Photo taken from southwest side of channel. Rip rap area into channel.



**Photo Number** 274  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at Homewood Point - Photo taken facing south. Rip rap area into channel.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 275

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Sediment build-up in center of channel leading to detention basin. Photo taken facing south.



**Photo Number** 276

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Sediment build-up in center of the detention basin. Photo taken facing south.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 277

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Sediment build-up in center of the detention basin. Photo taken facing east.



**Photo Number** 278

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Outlet structure facing east.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 279

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Micropond. Surface of water in the pond was frozen with leaves on top of the water.



**Photo Number** 280

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Oriface plate in outlet structure.



# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 281  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at  
Homewood Point -  
Oriface plate in outlet  
structure.



**Photo Number** 282  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at  
Homewood Point -  
Close-up photo of  
pipe (photo 283)  
leading into  
detention basin. The  
pipe appeared to be  
filled in and was not  
discharging into the  
basin.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 283

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Photo of pipe leading into detention basin. The pipe appeared to be filled in and was not discharging into the basin. Photo taken facing east.



**Photo Number** 284

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Close-up photo of pipe (photo 283) leading into detention basin. The pipe appeared to be filled in and was not discharging into the basin.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 285  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at  
Homewood Point -  
Photo of outlet facing  
south.



**Photo Number** 286  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at  
Homewood Point -  
Photo of outlet facing  
south. Note- leaf  
build-up inside of  
structure.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 287

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Close-up photo of outlet. Note- leaf build-up inside of structure.



**Photo Number** 288

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Close-up photo of outlet. Note- leaf build-up inside of structure.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 289  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at Homewood Point - Overview photo of detention basin facing north.



**Photo Number** 290  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** The Village at Homewood Point - Overview photo of detention basin with channel running into detention basin from parking area and outlet structure.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 291

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Overview photo of sediment build-up in channel entering south side of pond from parking area. Photo taken facing south.



**Photo Number** 292

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** The Village at Homewood Point - Overview photo of sediment build-up in channel entering south side of pond from parking area. Photo taken facing north.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 293  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle  
Subdivision -  
Overview of pond  
facing southeast.



**Photo Number** 294  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle  
Subdivision - Rock  
socks at entry point  
into pond from  
parking area.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 295  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle Subdivision - Rock socks at entry point into pond from parking area.



**Photo Number** 296  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle Subdivision - Additional overview of pond facing southeast.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 297  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle Subdivision - Close-up of rock socks along inlets to pond.



**Photo Number** 298  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Von Briggle Subdivision - Close-up of rock sock along inlet to pond.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 299  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Overview of  
extended detention  
basin facing east.



**Photo Number** 300  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Overview of  
extended detention  
basin facing east.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 301  
**Inspection Date** 2/7/2013  
**Photographer** Colo. Spgs. MS4  
**Description** Rudy's BBQ -  
Oriface plate on  
outlet structure.



**Photo Number** 302  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Micropond.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 303  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Sediment  
accumulation in  
center area of basin.



**Photo Number** 304  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Sediment  
accumulation in  
center area of basin.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 305  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Inlet structure into basin from parking area.  
Note: some sediment and trash accumulation.



**Photo Number** 306  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Inlet structure into basin from parking area.  
Note: some sediment and trash accumulation.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 307  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Detention basin  
facing southeast.  
Note: hole along east  
side of basin  
(towards center for  
photo).



**Photo Number** 308  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Close-  
up photo of hole in  
detention basin.



# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 309

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Rudy's BBQ - Close-up photo of hole in detention basin. Unsure of where the outlet for the hole is located.



**Photo Number** 310

**Inspection Date**

**Photographer** A. Tien

**Description** Rudy's BBQ - Close-up photo of hole in detention basin. Unsure of where the outlet for the hole is located.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

---

**Photo Number** 311

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Rudy's BBQ -  
Detention basin with  
hole along east side  
of basin (towards  
center for photo).



**Photo Number** 312

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Rudy's BBQ - Close-  
up photo of hole in  
detention basin.  
Unsure of where the  
outlet for the hole is  
located.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 313

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Rudy's BBQ - Photo taken of east side of berm along the east side of the basin. Photo taken facing west. Did not see any outlet for the hole observed on the other (west) side of the berm (photo 309).



**Photo Number** 314

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Rudy's BBQ - Additional photo of hole along east side of detention basin (photo taken with inspector's foot for scale).



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 315  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Additional photo of  
sediment  
accumulation in  
center area of basin.



**Photo Number** 316  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ -  
Overview of outlet  
structure. Photo  
taken facing  
southeast.





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 317  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Overview of inlet into basin from parking area above.



**Photo Number** 318  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Inlet pipe along west side of basin.





# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 319  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Inlet pipe along west side of basin.



**Photo Number** 320  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Rudy's BBQ - Inlet pipes along west side of basin (photo shows two pipes - one on bottom left of photo and one in upper right of photo along wall). Photo taken facing northwest.



# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 321  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - Southeast side of porous landscape detention pond with outlet structure. Photo taken facing northwest.



**Photo Number** 322  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - Southeast side of porous landscape detention pond with outlet structure. Photo taken facing northwest.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 323  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - Southeast side of porous landscape detention pond with outlet structure. Photo taken facing west.



**Photo Number** 324  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - West side of porous landscape detention pond. Discharge from asphalt area above received through opening in wall (top right of photo).





# Photographs for Post-Construction Overview

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 325  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - West side of porous landscape detention pond. Discharge from asphalt area above received through opening in wall (top right of photo).



**Photo Number** 326  
**Inspection Date** 2/7/2013  
**Photographer** A. Tien  
**Description** Midland Greens - Overview of porous landscape detention pond facing east.



# Photographs for Post-Construction Overview

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 327

**Inspection Date** 2/7/2013

**Photographer** A. Tien

**Description** Midland Greens -  
Overview of porous  
landscape detention  
pond facing east.







# Photographs for IDDE Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 257

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Conoco Site Visit-  
Photo of underground  
tank refueling  
location. Note:  
pavement staining  
on bottom section of  
photo (dark  
pavement area).



**Photo Number** 258

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Conoco Site Visit-  
Photo of gasoline  
spill location. Note:  
staining on  
pavement.



# Photographs for IDDE Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 259  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Conoco Site Visit-  
Photo of gasoline  
spill area. Note  
staining on  
pavement and  
residual white dry  
clean-up chemicals  
remaining on site.



**Photo Number** 260  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Conoco Site Visit-  
Photo of gasoline  
spill area. Note  
staining on  
pavement and  
residual white dry  
clean-up chemicals  
remaining on site.



# Photographs for IDDE Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 261  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Conoco Site Visit-  
Photo of MS4  
stormwater inlet. It  
was reported that  
gasoline from the  
spill at the gas  
station (seen in  
background) flowed  
down into this  
stormwater inlet  
location.



**Photo Number** 262  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Conoco Site Visit-  
Close-up photo of  
sheen material in  
MS4 stormwater  
inlet. It was reported  
that gasoline from  
the spill at the gas  
station flowed down  
into this stormwater  
inlet location.





# Photographs for IDDE Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 263  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Conoco Site Visit-  
Photo of MS4  
stormwater inlet  
discharge location  
into the Sand Creek  
West Fork, Fountain  
Creek Watershed. It  
was reported that  
gasoline flowed  
down into this  
stormwater outlet  
location. Note:  
discolored/staining  
from outlet.



**Photo Number** 264  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Sunrise Kennels and  
Dog Training Center  
Site Visit - Close- up  
of pipe (center of  
photo) with evidence  
of discharge along  
the hillside behind  
the facility.



# Photographs for IDDE Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 265

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Sunrise Kennels and Dog Training Center Site Visit - Hillside behind the facility. Fence surrounding the facility can be seen at the top of the hill. Note: evidence of past discharge channel running down center of hillside.



**Photo Number** 266

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Sunrise Kennels and Dog Training Center Site Visit - Hillside behind the facility. Note: evidence of discharge along hillside and onto pavement on bottom left of photo.



# Photographs for IDDE Oversight

Inspection Type: Colo. Spgs. MS4

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**Photo Number** 267  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Sunrise Kennels and Dog Training Center Site Visit - Evidence of discharge along pathway behind hillside.



**Photo Number** 268  
**Inspection Date** 2/6/2013  
**Photographer** A. Tien  
**Description** Sunrise Kennels and Dog Training Center Site Visit - Evidence of discharge off of path and towards Cottonwood Creek (seen in background of photo). Could not be determined whether past discharge had actually made it to the creek.





# Photographs for IDDE Oversight

## Inspection Type: Colo. Spgs. MS4

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**Photo Number** 269

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Sunrise Kennels and Dog Training Center Site Visit - Evidence of discharge along hillside from a facility next to the Sunrise Kennels and Dog Training facility. No evidence that discharge flowed beyond hillside/pathway to Cottonwood Creek.



**Photo Number** 270

**Inspection Date** 2/6/2013

**Photographer** A. Tien

**Description** Sunrise Kennels and Dog Training Center Site Visit - Pipe and evidence of discharge along hillside from a facility next to the Sunrise Kennels and Dog Training facility. No evidence that discharge flowed beyond hillside/pathway to Cottonwood Creek.



