

Received

MAY 07 2019

Water Quality Control

## CDPS MS4 Phase II

# STORMWATER MANAGEMENT

## PROGRAM DESCRIPTIONS

### FOR NON-STANDARD PERMIT HOLDERS (COR-070000)

Agency Name	Pueblo School District No. 60
Permit Certification Number	COR - 0 7 0000
MS4 Location Description: List all Cities and Counties Permitted MS4s are located within	Cities: Pueblo Counties: Pueblo
Map	<p><b>Attach</b></p> <p>A location map for the MS4 (hard copy only) must be submitted. The boundaries of permit coverage must be indicated. The map must be of sufficient detail so that the exact boundaries, by street or other demarcation, can be determined.</p> <p>The map must show the district/facility boundaries or service area, as applicable. If multiple separate locations are permitted (e.g., multiple campuses, parks, etc.), a map for each location must be provided. For any locations that are partially within an urbanized area, the location map must show the urbanized area boundaries. Urbanized Area information and maps are available online at: <a href="http://www.cdphe.state.co.us/wq/PermitsUnit/stormwater/municipal.html">www.cdphe.state.co.us/wq/PermitsUnit/stormwater/municipal.html</a></p>
CDPS Program Descriptions	Attach

**Certification:** The following certification must be signed by the Legally Responsible Person. The signer must be either a principal executive officer, ranking elected official or other duly authorized employee.

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

Name (printed): DALE JOHNSON

Title: MAINTENANCE AND OPERATIONS SUPERVISOR

Signature: Dale Johnson

Date: 4-29-19



Dale Johnson <dale.johnson@pueblocitieschools.us>

## October 2018 Pupil Counts from the Colorado Dept. of Education

1 message

**Bruce Richards** <bruce.richards@pueblocitieschools.us>  
To: Dale Johnson <dale.johnson@pueblocitieschools.us>

Mon, Mar 11, 2019 at 2:55 PM

Dale,

I pulled official data from CDE and trimmed it down to just what you asked for. At that point we had more than a thousand kids at three of the high schools (all but Central).

Bruce

School	Pupil Count
Belmont Elementary School	519
Bessemer Elementary School	277
Beulah Heights Elementary School	417
Bradford Elementary School	416
Carlile Elementary School	227
Centennial High School	1,065
Central High School	743
Chavez/Huerta K-12 Preparatory Academy	917
Columbian Elementary School	346
Corwin International Magnet School	591
East High School	1,012
Eva R Baca Elementary School	284
Fountain International Magnet School	381
Franklin School Of Innovation	404
Goodnight Elementary School	695
Haaff Elementary School	352
Heaton Middle School	677
Heritage Elementary School	340
Heroes Academy Prek-5	242
Heroes Middle School	254
Highland Park Elementary School	484
Irving Elementary School	389
Minnequa Elementary School	387
Morton Elementary School	484
Northmoor Preschool	21
Paragon Learning Center	89
Park View Elementary School	390
Pueblo Academy Of Arts	678

Pueblo Charter School For The Arts & Sciences	450
Pueblo Sch. For Arts & Sciences At Fulton Heights	179
Pueblo Youth Service Center	11
Risley International Academy Of Innovation	337
Roncalli Stem Academy	440
South High School	1,042
South Park Elementary School	365
Sunset Park Elementary School	482

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**Bruce Richards**  
Supervisor, Student Enrollment & Data  
Pueblo City Schools  
(719) 253-6014

# Schools and Facilities

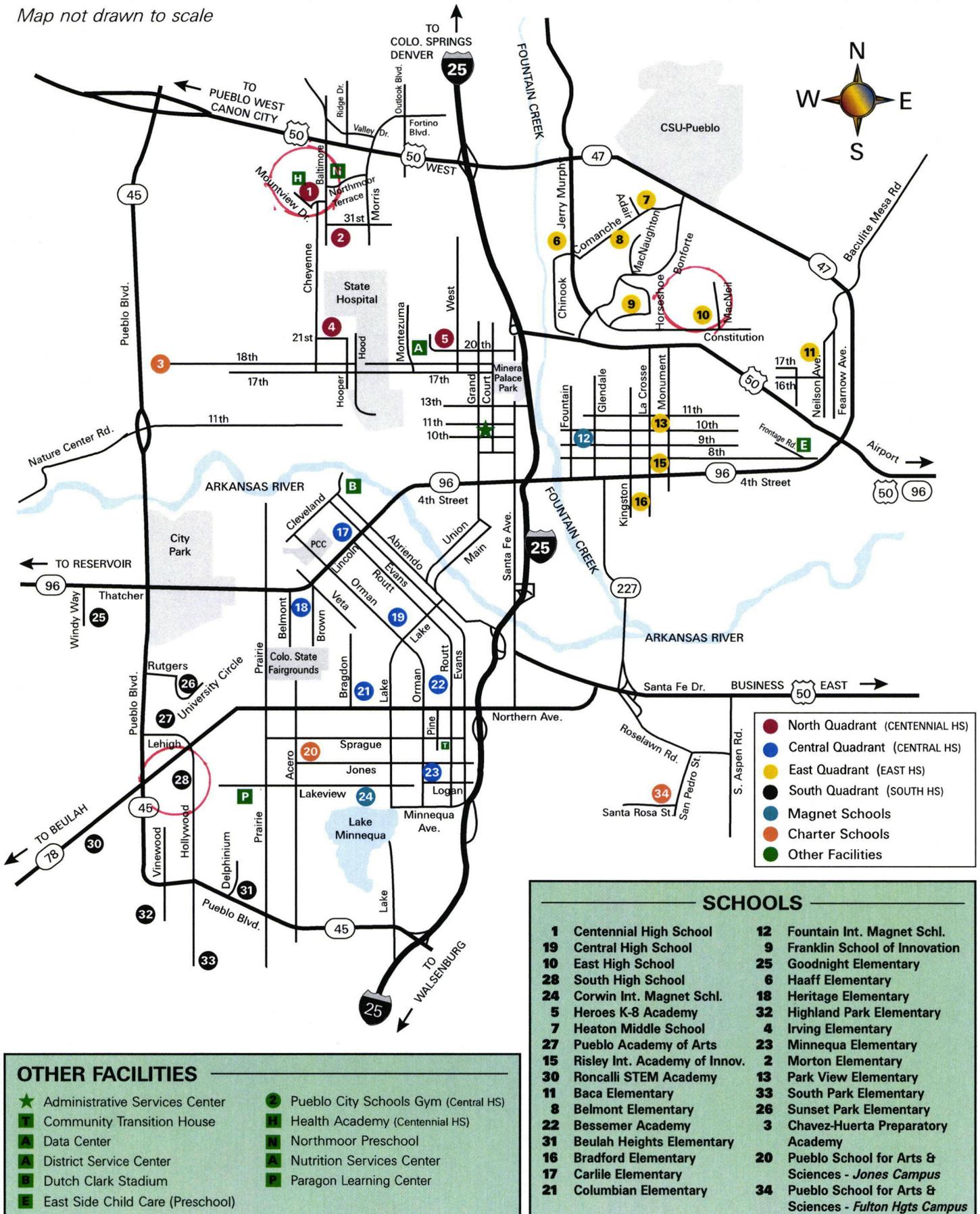
**PUEBLO CITY SCHOOLS**

PUEBLO, COLORADO

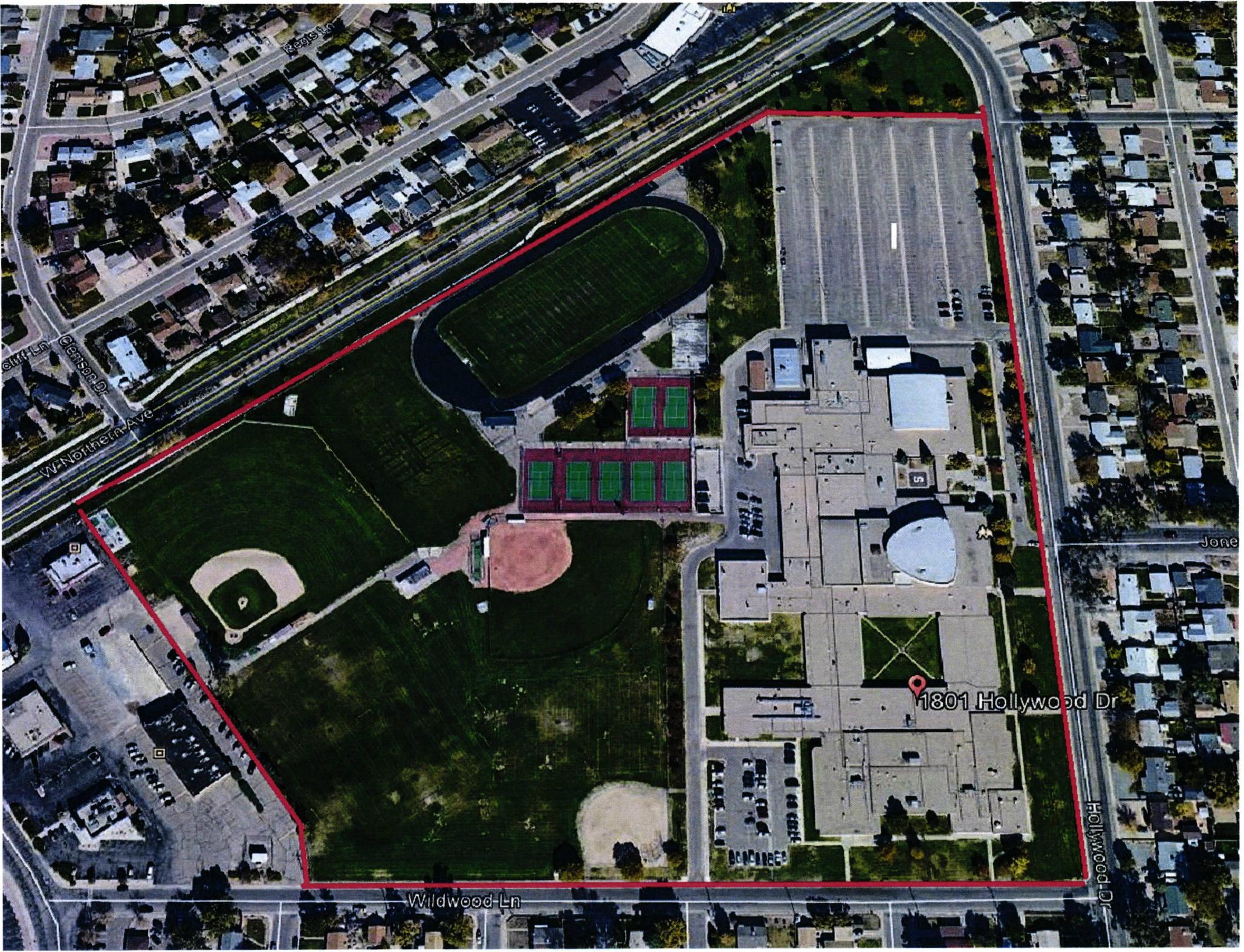
[www.pueblocitieschools.us](http://www.pueblocitieschools.us)

as of July 2, 2018

Map not drawn to scale



Please see other side for addresses and phone numbers



1801 Hollywood Dr

Wildwood Ln

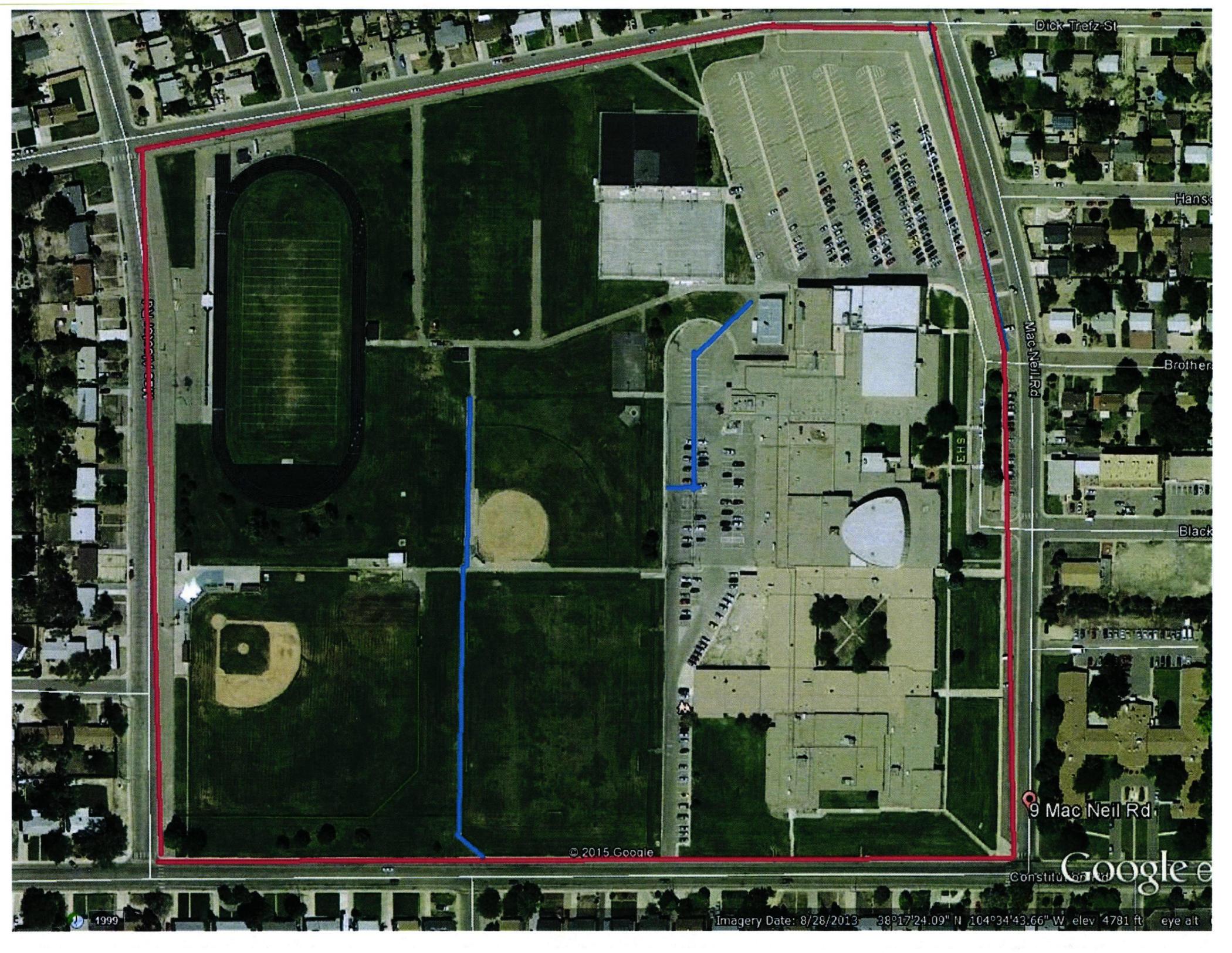
Hollywood Dr

W Northern Ave

Clemson Dr

Regis Ln

Jone



Dick Trefz St

Hansel St

Brother St

Black St

MacNeil Rd

9 Mac Neil Rd

Constitution Rd

MacNeil Rd

EHS

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## **TABLE OF CONTENTS**

**Instructions**

**MCM1: Public Education & Outreach**

**MCM 2: Public Participation/Involvement**

**MCM 3: Illicit Discharge Detection & Elimination**

**MCM 4: Construction Site Runoff Control**

**MCM 5: Post-Construction Stormwater Management**

**MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations**

## CDPS Stormwater Management Program Descriptions Instructions

### A. Applicability

This template is applicable for **renewal permittees** covered under the Non-Standard MS4 general permit COR-070000. This template is **not** applicable to Standard MS4s permitted under the COR-080000 and COR-090000 general permits.

### B. Filling out the Template

This template is intended to be filled out electronically, with additional lines added to the sections as descriptions are entered. Text in **blue** provides direct guidance on filling out the template, and should be given special attention.

### C. Submitting the Program Description

A complete program description, including the original signed certification on page 2, must be submitted to the Water Quality Control Division with this application.

The submittal must include an original signature. E-mailed or faxed copies will **not** be accepted.

### D. Completeness

The form must be completed accurately and in its entirety, or it will be deemed incomplete. This template is intended to be a summary of all of the content for the CDPS Stormwater Management Program Submittal required by Part I.A.7 of the Non-Standard MS4 general permit, COR-070000. The descriptions provided must be detailed enough for the Water Quality Control Division to determine the permittee's general strategy for complying with the required items in each of the six CDPS Stormwater Management Program Minimum Control Measures (Parts I.B.1-6 of the general permit).

### E. Cited Permit Requirements

Subsection B of this template for each of the six Minimum Control Measures includes citations of the specific permit requirements.

MS4 NAME	<b>PUBLIC EDUCATION &amp; OUTREACH</b>	STORMWATER DISCHARGES ASSOCIATED WITH NON- STANDARD MS4s
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**A. Program Perspective:** The goal of the Public Education and Outreach Program is to educate the users of the permitted facilities to promote a reduction in pollutants in stormwater runoff and to help prevent illicit discharges.

**B. Permit Requirements**

*The permittee must implement a program to educate the public that uses their facilities. The program must include outreach activities about steps that the public can take to reduce pollutants in stormwater runoff and illicit discharges from the permittee’s facilities. Pollutant sources targeted must include those actually present at the facilities, which may include items such as pet waste, litter, disposal of items such as oil to the ground or storm sewers, etc.*

***The permittee must meet the following minimum requirements:***

- a) *Target the following specific populations, if present:*
  - i) *General Public: Educate the general public that uses the facilities on stormwater pollutant sources and illicit discharges they may produce while using those facilities. Examples include disposal of litter and picking up pet waste.*
  - ii) *Tenants: Educate any commercial or industrial tenants, such as vendors, stores, and restaurants, that operate within the permitted area about their stormwater pollution sources and illicit discharges. Examples of activities to address include proper disposal of waste and good housekeeping practices.*
- b) *Document the specific populations listed in subsection (a) above that are covered, and the outreach activities that will be conducted during the permit term.*
- c) *Implement specific activities and maintain materials, such as web pages, signs, etc, to ensure implementation of the outreach activities.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2. of the permit.

Complete a separate table, below, for each public education program implemented. Add additional tables, as necessary. For each program, provide the following information:

- i) **Target Audience:** What specific audience will be reached by the education programs? For example, a program to promote picking up dog waste may target residents if brochures are distributed to homes, or target dog walkers if signs are posted in parks. If tenants are present at the permitted facility, at least one program element must address pollutants associated with those tenants.

**NO**

**ALCOHOLIC BEVERAGES**

**SKATEBOARDS**

**GOLF PRACTICE**

**PETS**

**MOTORIZED VEHICLES**

**ALLOWED ON  
SCHOOL  
DISTRICT #60  
PROPERTY**

*Please...*

**DO NOT  
LITTER**



*Por Favor...*

**NO  
ARROJAR  
BASURAS**



*The Management of this facility uses  
Natural & Organic Fertilizers*



*Nature  
Safe*  
Natural & Organic Fertilizers

**Pueblo City Schools  
Facilities Department**

COARSE

COARSE

# Nature Safe®

## 27-0-2

### Blended with UFLEXX®

#### GUARANTEED ANALYSIS

Total Nitrogen (N) .....	27.00%
0.05% Ammoniacal Nitrogen	
3.30% Water Insoluble Nitrogen	
23.00% Urea Nitrogen*	
0.65% Other Water Soluble Nitrogen	
Soluble Potash (K <sub>2</sub> O) .....	2.00%
Calcium (Ca) .....	1.00%

#### DERIVED FROM

Urea, meat meal, sulfate of potash and blood meal.

\*This product contains 23.00% urea nitrogen stabilized with Dicyandiamide and N (n-butyl) thiophosphoric triamide.

#### DIRECTIONS FOR USE

Apply 1.85 to 3.70 lbs. per 1,000 sq. ft. for 0.50 - 1.00 lb. actual N per 1,000 sq. ft. Three to four applications per year are recommended.

Amount	Scotts RB	Scotts 2000	Lesco	Prizelawn	Vicon	Lely
1/2 Lb.	J	J	G	L	18"-25"	4-25'
1 Lb.	L	L	J	N	26-25'	5-25'

The spreader settings are conservative and should only be used as a guide for calibrating your spreader. Ground speed for Vicon and Lely settings was 4.5 mph.

Not for use in organic crop and organic food production.

#### GENERAL INFORMATION

The 0.70% of Water Soluble Nitrogen of Nature Safe 27-0-2 will provide green-up, in up to 7-10 days. The 23.00% Urea Nitrogen of UFLEXX is stabilized and will release for up to 6-8 weeks.

General Use Fertilizer. Our products contain ingredients safely recycled from animal sources.

UFLEXX® is a registered trademark of Koch Agronomic Services, LLC.

Information regarding the contents and levels of metals in this product is available on the Internet at <http://www.aagfco.org/metal.htm>.  
Sport Turf Directions for Use for Phosphate and Nitrogen: See documents SI 191, Recommendations for N, P, K & Mg for Golf Courses & Athletic Field Fertilization Based on Mehlich I Extractant (<http://edis.ifas.ufl.edu/S5484>) or BMP's for Enhancement of Environmental Quality on Florida's Golf Courses (<http://www.dep.state.fl.us/water/nonpoint/docs/nonpointgolfmp07.pdf>).  
Lawn Maintenance Companies: Directions for Use for Phosphate and Nitrogen.  
See document Best Management Practices for Protection of Water Resources in Florida, June 2002, Florida Green Industries ([http://www.dep.state.fl.us/central/Home/Meetings/Training/FI\\_GreenBMP\\_Book\\_Final.pdf](http://www.dep.state.fl.us/central/Home/Meetings/Training/FI_GreenBMP_Book_Final.pdf)).  
Lawn/Garden Directions for Use for Phosphate and Nitrogen: Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn/garden, and sweep any product that lands on the driveway, sidewalk, or street, back onto your lawn/garden.  
In Virginia, this lawn/turf fertilizer contains phosphorus and is only for non-agricultural use on (i) turf during its first growing season, (ii) on turf areas being repaired or renovated, and (iii) on turf where a soil test performed within the last 3 years indicates a phosphorus deficiency. This fertilizer is not for the routine maintenance of turf.

Nature Safe®  
27-0-2

27-0-2  
Nature Safe®

COARSE

## COARSE (SGN 220-230)

Guaranteed By:  
Darling Ingredients Inc.  
251 O'Connor Ridge Blvd, Suite 300  
Irving, TX 75038 U.S.A.  
(800) 743-7413  
[naturesafe.com](http://naturesafe.com)

Net Weight 50 LBS.  
(22.68 KG)

Covers 13,500 - 27,000 sq. ft.  
Do Not Feed to Animals



UPC  
CODE

20398

02/19/2019 02:04 PM

Nature Safe®

Your Choice for Soil and Plant Nutrition



F1024

DARLING  
INGREDIENTS



## SAFETY DATA SHEET



### 1. Identification

Material name

Recommended Use:

Restrictions:

Version #

Revision Date

CAS #

Manufacturer

#### Nature Safe 27-0-2 Blended with UFLEXX

Fertilizer

None Known

01

1/21/2016

N/A

Darling Ingredients Inc.  
251 O'Connor Ridge Blvd.  
Suite 300  
Irving, TX  
75038  
United States



WARNING

Irritant (skin, eyes and nose)

Telephone numbers - 24 hour  
emergency assistance

Telephone numbers - General  
assistance

E-mail

1-800-800-4841

1-800-800-4841  
[info@darlingii.com](mailto:info@darlingii.com)

### 2. Hazards Identification

#### Emergency overview

##### HEALTH HAZARDS

Practically non-toxic

##### FLAMMABILITY HAZARDS

Dust accumulations in an enclosed space may present an explosion hazard.

##### REACTIVITY HAZARDS

Stable

#### Potential health effects

##### Routes of exposure

##### Eyes

Inhalation, ingestion, skin and eye contact

If contact with eyes, flush eyes with plenty of water for at least 15 minutes lifting upper and lower eye lids occasionally. Get medical attention if irritation persists.

##### Skin

Prolonged or excessive skin contact with this product may cause mild skin irritation. May cause an allergic reaction in some individuals.

##### Inhalation

Under normal condition, inhalation is not expected to be a problem. However, respirator tract irritation may occur if exposed to dust.

##### Ingestion

Ingestion of large amounts may cause gastrointestinal disturbances. May cause allergic reactions in some individuals.

#### Recommendations to physicians:

Treat symptoms and eliminate overexposure.

### 3. Composition/information on ingredients

Components:	CAS#	Percent
Animal byproduct, sulfate of potash, urea, vegetable byproducts	N/A	100%
<b>Chemical Family:</b>		
Proteinaceous animal byproducts, vegetable byproducts, mineral additive	N/A	100%
<b>Formula:</b>		
Animal Byproducts	68131-124	40-50%
Vegetable Byproducts	n/a	0-5%
Urea	57-13-6	45-50%
Sulfate of Potash	7778-80-5	3-5%
Organic Nitrogen (dicyandiamide)	461-58-5	Proprietary
N-(n-Butyl)-thiophosphoric triamide	94317-64-3	Proprietary

**Synonyms:**

Unknown

**Composition comments**

Values do not reflect absolute minimums and maximums: these values are typical which may vary from time to time.

This Safety Data Sheet is intended to communicate potential health hazards and potential physical hazards associated with the products(s) covered by this sheet, and is not intended to communicate product specification information. For product specification information, contact your DarPro representative.

### 4. First aid measures

**First aid procedures**

**Eye contact**

Flush eyes immediately with large amounts of water. Get medical attention if irritation persists.

**Skin contact**

Wash area thoroughly with soap and water. Get medical attention if irritation develops or persists.

**Inhalation**

High dust concentrations may cause mucous membrane irritation. If irritation persists or breathing difficulty occurs, get medical attention .

**Ingestion**

Routine use of this product is not expected to cause any situation which could lead to ingestion. If this product is swallowed call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents ( milk or water), to someone who is unconscious, having convulsions or unable to swallow.

**Notes to physician**

Treat symptomatically.

## 5. Fire-fighting measures

<b>Flammable properties</b>	Material should not burn in a fire unless it contains a substantial fat/oil/feather component. Concentrated dust in an enclosed space can pose an explosive threat.
<b>Extinguishing media</b>	Use water spray, dry chemical, carbon dioxide or fire-fighting foam for Class A or B fires to extinguish fire.
<b>Suitable extinguishing media</b>	
<b>Protection of firefighters</b>	Combustion may produce COx and other decomposition products such as cyanuric acid, cyanic acid, biuret, ammonia, hydrogen cyanide, oxides of sulfur and nitrogen.
<b>Specific hazards arising from the chemical</b>	
<b>Fire fighting equipment/instructions</b>	Evacuate area and fight fire from a safe distance.  Use water spray to cool adjacent structures and to protect personnel.    Firefighters must wear NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

## 6. Accidental release measures

<b>Environmental precautions</b>	Dry clean-up by sweeping and/or scooping.
<b>Waste disposal method</b>	Totally biodegradable. Dispose of recovered materials per local state and federal requirements.
<b>Precautions to be taken in handling and storing</b>	Keep dry to avoid biological decomposition.

## 7. Handling and storage

<b>Handling</b>	Good personal hygiene practices such as properly handling contaminated clothing, using wash facilities before entering public areas and restricting eating, drinking and smoking to designated areas are essential for preventing personal chemical contamination. Do not breath dust. Avoid contact with skin or eyes.
<b>Storage</b>	Store in tightly closed containers in a cool, dry isolated, well-ventilated area away from heat, sources of ignition and incompatibles.  Empty containers may contain material residue. Do not reuse without adequate precautions.  Do not eat, drink or smoke in areas of use or storage.

## 8. Exposure controls/personal protection

<b>Exposure limits</b>	Not available
<b>Engineering controls</b>	Ventilation and other forms of engineering controls are the preferred means for controlling exposures.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Keep away from eyes. Eye contact can be avoided by using chemical safety glasses, goggles and/or face shield. Have eye washing facilities readily available where eye contact can occur.
<b>Skin protection</b>	Wash hands with soap and water after handling. Protective gloves recommended.
<b>Respiratory protection</b>	Use dust masks in enclosed spaces.

## 9. Physical and chemical properties

<b>Physical State Form</b>	Powder
<b>Color</b>	Tan brown particles with blue particles
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	Characteristic
<b>Physical State Form</b>	Not available
<b>Vapor Pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Boiling Point</b>	Decomposes
<b>Melting point</b>	Decomposes
<b>Solubility (water)</b>	Partially soluble to Insoluble
<b>Specific gravity</b>	0.5
<b>Relative density</b>	Not available
<b>Flash point</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>VOC</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Viscosity</b>	Not available
<b>Percent volatile</b>	Not available
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Molecular weight</b>	Not available
<b>Molecular formula</b>	Not available
<b>Other Data</b>	
Chemical family	Protein and Mineral
Density	N/A
Electrostatic properties	
Conductivity	Not available
<b>Cloud point</b>	Not available

## 10. Stability and reactivity

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Avoid unventilated areas, heat, open flames, sparks and ungrounded electrical equipment where dust may be present.
<b>Incompatible materials</b>	Do not mix with oxidizing agents, avoid contact with ammonium nitrate fertilizers
<b>Hazardous decomposition products</b>	Thermal degradation may produce oxides of sulfur, carbon dioxide, nitrogen oxides cyanuric acid, ammonia, cyanic acid, hydrogen cyanide, biuret
<b>Possibility of hazardous reactions</b>	Not anticipated under normal conditions.

## 11. Toxicological information

<b>Routes of exposure</b>	Inhalation, ingestion, skin and eye contact
<b>Numerical measures of toxicity</b>	N/A
<b>Eye contact</b>	Get medical attention if eye irritation persists.
<b>Skin contact</b>	Get medical attention if skin irritation develops or persists.
<b>Inhalation</b>	If irritation persists or breathing difficulty occurs, get medical attention .
<b>Ingestion</b>	Routine use of this product is not expected to cause any situation which could lead to ingestion.

## 12. Ecological information

<b>Eco toxicity</b>	This product is a plant food, however large spills could possibly kill vegetation or cause illness to animals. Contamination of waterways may cause fish kills.
<b>Persistence and degradability</b>	Readily biodegradable in the environment
<b>Bioaccumulation/ Accumulation</b>	This material is not expected to bio accumulate in animals.
<b>Mobility in environmental media</b>	Not classified in terms of mobility in air, soil and water.

## 13. Disposal considerations

<b>Disposal instruction</b>	<p>This material, as supplied, when discarded or disposed of, is not a hazardous waste according to Federal Regulations (40 CFR 261). Under the Resource Conservation and Recovery Act. (RCRA), it is the responsibility of the user of the material to characterize and determine, at the time of disposal, whether the material is a hazardous waste subject to RCRA.</p> <p>Dispose of in accordance to applicable Federal , State and Local Regulations</p>
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## 14. Transport information

<b>General</b>	US DOT, IATA, IMO, ADR:  U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101. NON-REGULATED
<b>Canada</b>	TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.
<b>Air</b>	INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as Dangerous Goods, by rules of IATA:
<b>Maritime</b>	INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.
<b>European</b>	EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.
<b>UN number (United Nations hazardous material #)</b>	Not a hazardous material

## 15. Regulatory information

### US federal regulations

All ingredients are on the TSCA inventory, or are not required to be listed on the TSCA inventory.

This material does not contain toxic chemicals (in excess of the applicable de minimis concentration) that are subject to the annual toxic chemical release reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372).

Check local, regional or state/provincial regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to report may result in substantial civil and criminal penalties.

### State regulations

Based on available information this product does not contain any components or chemicals currently known to the State of California to cause cancer, birth defects or reproductive harm at levels which would be subject to Proposition 65. Reformulation, use or processing of this material may affect its composition and require re-evaluation.

## 16. Other information

### NFPA ratings

Health: 1  
Flammability: 1  
Instability: 0

### Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you or your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS.

### Issuer date Completed by

1/21/2016  
Darling Ingredients Inc. - Research, Technology and Governmental Affairs

## **It's raining, It's pouring—Where is our Storm Water Going?**

The Stormwater Education Program for youth was initiated in April 2005 to teach about the Earth's water cycle, the storm water system of Pueblo County, and the ways that storm water runoff, and subsequently, our rivers, is being polluted by human activities. This program is supported with the expertise and funding from the City of Pueblo Storm Water Utility.

The presentation objectives are to inform students about health hazards of litter and polluted run-off and encourage them to decrease or eliminate the amount of and solid wastes they contribute. Fulfill state educational standards and requirements related to environmental literacy and general science important to CSAP success.

The Federal Clean Water Act Requires that stormwater discharges from certain types of facilities be authorized through stormwater discharge permits (40CFR122.26). The purpose of the regulation is to reduce the amount of pollutants entering streams, lakes, and rivers as a result of runoff from residential, commercial and, industrial areas.

In November 1990, the US Environmental Protection Agency (EPA) issued the National Pollutant Discharge Elimination System (NPDES) Phase I Stormwater Permit for controlling stormwater from large and medium municipalities (population greater than 100,00) which in Colorado included the City of Lakewood, City of Aurora, City and County of Denver, City of Colorado Springs and the Colorado Department of Transportation (CDOT). Statewide, the regulation also covered stormwater discharges from certain industrial activities and construction sites disturbing areas greater than 5 acres of land.

In December 1999, the Phase I regulations expanded to include small municipalities, which have a population greater than 50,000 and/ or the central place and adjacently settled surrounding areas (urban fringe) have a population greater than 50,000. This new program became Phase II of the (NPDES) National Pollutant Discharge Elimination System Stormwater Program, which includes provisions for construction activities disturbing an area equal to or greater than on acre but less than 5 acres.

A storm drain, which can be located on a street gutter or a parking lot, is an inlet that captures storm water runoff and channels it into a system of pipes to alleviate flooding. Storm drains in Pueblo connect directly to the Wildhorse Dry Creek, Bessemer Irrigation Ditch, East Dry Creek, Fountain Creek, Arkansas River, Thomas Phelps Creek and Williams Creek.

Some of the examples of pollution in storm water drains that pollute our streams and rivers from driveway, sidewalk and parking lot runoff are Paint Thinners, Paint, Pesticides, Used Motor Oil's, Antifreeze, Furniture polishes and Stains, Household Cleaners and Weed Killers. These types of pollutants are called non-point source pollution. The origin of the pollutants cannot be pinpointed and so thus it is given this name.

These types of pollutants also affect watersheds. These are areas of land from which rainwater and melted snow drain into a particular river, stream, lake or ground water, all storm water drains filter here. They are multidimensional and have natural lines that transcend county/ city lines. No matter where you live, you live in a watershed.

Water quality is destroyed as water drains to the lowest point in a watershed. Along the way it picks up tiny particles of soil, oil, road salt, animal manure, excess fertilizers, pesticides and other pollutants. Blue green algae grows well in the water when nutrients are available. These nutrients come from fertilizers, which run from the land into to lake and streams and blocks out the natural sunlight needed to sustain a balanced aquatic environment.

The Water Shed Protection Approach is a strategy for effectively protecting and restoring aquatic systems and protecting human health. The main focus of this strategy is the water quality and ecosystems problems are best solved at the watershed level rather than at the individual water body or discharge level. Major features of the approach are targeting priority problems, integrating solutions that make use of the expertise of multiple agencies, measuring success through monitoring and other data gathered.

At a minimum, the permit will require that the permit operator (the City of Pueblo) develop, implement and enforce a stormwater management program to reduce the discharge of pollutants to the maximum extent practicable (MEP) to protect water quality and satisfy the appropriate water quality requirements of the Water Quality Control Act. (Colorado Code of Regulations (CCR) 51.8(11)(a)(I)). This will be accomplished by implementing programs to address the six minimum control measures that are (1) Public Education and Outreach (2) Public Participation/Involvement. (3) Illicit Discharge Detection and Elimination. (4) Construction Site Stormwater runoff (5) Post Construction Stormwater Management. (6) Pollution Prevention/Good Housekeeping for Municipal Operations.

The school district annually meets its best management practices (BMP) and by meeting the minimum six control measures with the implementation of It's Raining, It's Pouring- Where is the Storm Water Going. Presented by the Pueblo City County Health Department using a tabletop model, which shows how human activities contribute to land and stormwater pollution and is available and coordinated with all fourth grade teachers throughout the district. In addition fourth grade students continue investigating interactions between land and water where all students learn about water cycle, landforms soil composition, and erosion. Middle School students continue sixth through eighth grade oceanography curriculum, where all students learn about water cycles including river systems, aquifers and water conservation.

**Are tenants present at the permitted facility, such as vendors, stores, or restaurants?**

**NO**

**YES:** Include at least one program element in a table below that addresses pollutant sources associated with the tenants. Examples include providing education on used oil disposal for vendors or preventing discharges of power washing water from cleaning sidewalks and awnings of stores.

ii) **Pollutant Sources Addressed:** Make an assessment of what sources of stormwater pollution may be present at your permitted facilities. Education program must address pollutant sources actually present at your facilities. List the pollutant sources that will be addressed by each education program. For example, a program to mark storm sewer inlets with “Drains to Creek” signs would address illegal dumping of waste. Other sources may include litter, pet waste, used fryer oil from restaurants/vendors, fertilizer and yard waste from residents, etc.

iii) **Specific Activities Conducted:** Briefly describe the specific activities that will be conducted, including dates when applicable, or state that the program is ongoing. For example:

- “Distribute brochures on proper waste disposal to all tenants in 2009”
- “Maintain existing web site: ongoing”
- “Maintain existing stenciling on all storm sewer inlets stating ‘Do not Dump, Drains to Creek’: ongoing”
- “Conduct stream cleanup day with students/public, annually starting in 2010”

iv) **Educational Materials/Resources Maintained:** List the materials that will be maintained for the program. Examples include brochures, trail signs, inlet markers/stencils, web pages, billboards, etc.

<b>1. Public Education Program Name:</b>	
<b>i) Target Audience:</b>	General Public, Facility Rentals
<b>ii) Pollutants Addressed:</b>	Pet Waste and Litter Signage
<b>iii) Specific Activities Conducted:</b> <i>Provide years for implementation, or state “ongoing”</i>	Ongoing (See attached examples)
<b>iv) Educational Materials/Resources Maintained:</b> <i>Provide dates for development, or state “ongoing”</i>	ongoing

<b>2. Public Education Program Name:</b>	
<b>i) Target Audience:</b>	
<b>ii) Pollutants Addressed:</b>	

<b>iii) Specific Activities Conducted:</b> <i>Provide years for implementation, or state "ongoing"</i>	
<b>iv) Educational Materials/Resources Maintained:</b> <i>Provide dates for development, or state "ongoing"</i>	

<b>3. Public Education Program Name:</b>	
<b>i) Target Audience:</b>	
<b>ii) Pollutants Addressed:</b>	
<b>iii) Specific Activities Conducted:</b> <i>Provide years for implementation, or state "ongoing"</i>	
<b>iv) Educational Materials/Resources Maintained:</b> <i>Provide dates for development, or state "ongoing"</i>	

<b>4. Public Education Program Name:</b>	
<b>i) Target Audience:</b>	
<b>ii) Pollutants Addressed:</b>	
<b>iii) Specific Activities Conducted:</b> <i>Provide years for implementation, or state "ongoing"</i>	
<b>iv) Educational Materials/Resources Maintained:</b> <i>Provide dates for development, or state "ongoing"</i>	

**ADD ADDITIONAL TABLES AS NEEDED**

**D. Measurable Goals**

No new permit requirements are included for the Public Education and Outreach Program. Therefore, inclusion of measurable goals should not be necessary, as the elements described in Part C, above, should constitute full program implementation and a commitment to continue these elements.

MS4 NAME	<b>PUBLIC PARTICIPATION / INVOLVMENT</b>	STORMWATER DISCHARGES ASSOCIATED WITH NON- STANDARD MS4s
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**II. PUBLIC PARTICIPATION/INVOLVMENT**

**A. Program Perspective**

Public participation/involvement is often discussed in the context of the public education measure because they share a common goal – reaching out to citizens to improve awareness and achieve program compliance. The distinction between the two programs is that public participation/involvement provides a conduit for citizens to participate in the development and implementation of the publicly funded stormwater program.

**B. Permit Requirements**

*The permittee must provide a mechanism and processes to allow for ongoing public and staff review and input of the CDPS Stormwater Management Program.*

***The permittee must meet the following minimum requirements:***

- a) Implement processes to ensure public feedback and information requests are directed to the proper permittee contacts, documented, and responded to as appropriate.*
- b) Provide one or more of the following feedback mechanisms:*
  - i) Publish and maintain a web page providing information on the permittee’s CDPS Stormwater Management Program, including directions for providing feedback.*
  - ii) Publish and distribute, or post in a public place, notice of the permittee’s CDPS Stormwater Management Program and directions for obtaining more information and providing feedback.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2. of the permit.

Check all of the methods below that you use to publicize contact information and direct inquiries to appropriate staff. Provide the required additional information for reach method checked.

<input type="checkbox"/> <b>Web Page:</b> Maintain a web page that briefly describes your CDPS Stormwater Management Program and provides contact information for staff and/or contractors that can respond to public inquiries/comments.	
Year of Implementation (or list as “ongoing”):	
Web Address for page (if already implemented):	

<input type="checkbox"/> Brochures: Distribute brochures that provide contact information for staff and/or contractors that can respond to public inquiries/comments. Brochures must be readily available to the general public and tenants that use your facilities.	
Year of Distribution (or list as “ongoing”):	
Location of Distribution (e.g. mailed, place in public areas, etc.):	

<input checked="" type="checkbox"/> Signage/Public Postings: Post information that provides contact information for staff and/or contractors that can respond to public inquiries/comments. All postings must be in locations readily available to the general public and tenants that use your facilities.	
Year(s) of Posting (or list as “ongoing”):	Ongoing , see attached
Method of Posting (e.g. mailed, place in public areas, etc.):	Post publication in school office, to notify the general public and staff pf the school district Strom Water Management Program.

<input checked="" type="checkbox"/> Alternative Contact Information Distribution: Provide contact information for staff and/or contractors that can respond to public inquiries/comments in a publication readily available to the general public and tenants that use your facilities. Examples include contact directories, yellow pages, event calendars that are widely distributed (e.g., calendars distributed by school districts), regularly distributed newsletter with contact information, etc.	
Year(s) of Distribution (or list as “ongoing”):	Ongoing,
Publication used:	Contacts available through School District Web Site

<input type="checkbox"/> Other Method(s): Describe any additional/alternative methods used to provide contact information for staff and/or contractors that can respond to public inquiries/comments.	
Description of Method(s) Used:	
Year(s) of Distribution and/or Implementation (or list as “ongoing”):	

**Add additional tables for “Other Methods,” if necessary.**

**D. Measurable Goals**

No new permit requirements are included for the Public Education and Outreach Program. Therefore, inclusion of measurable goals should not be necessary, as the elements described in Part C, above, should constitute full program implementation and a commitment to continue these elements.

MS4 NAME	ILLICIT DISCHARGE DETECTION AND ELIMINATION	STORMWATER DISCHARGES ASSOCIATED WITH MS4s
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**A. Program Perspective**

The goal of the Illicit Discharge Detection and Elimination Program is, to the maximum extent practicable, to reduce the frequency and environmental impact of illicit discharges in which pollutants are intentionally or accidentally discharged into the storm sewer system.

**B. Permit Requirements**

*The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges, as defined below, into the permittee’s MS4. Illicit discharges do not include discharges or flows from emergency fire fighting activities, or other activities specifically authorized by a CDPS permit.*

***The permittee must meet the following minimum requirements:***

- a) Develop and maintain a current storm sewer system map, showing the location of all of the permittee’s storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls.*
- b) Develop, document, and implement a plan to detect and address illicit discharges to the system. The plan must include:
 
  - i) Procedures for tracing the source of an illicit discharge;*
  - ii) Procedures for removing the source of the discharge, including procedures to refer discharges to a city or county for enforcement when appropriate; and*
  - iii) Procedures to document occurrences of illicit discharges and how they were responded to.**
- c) Develop and implement a program to train permittee 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.*

***Illicit Discharges*** include any discharge to an MS4 that is not composed entirely of stormwater, except:

- Discharges specifically authorized by a CDPS permit.*
- Discharges resulting from emergency fire fighting activities.*
- the following categories of non-stormwater discharges or flows, unless the permittee identifies them as significant contributors of pollutants to the permittee’s MS4: landscape irrigation, lawn watering, diverted stream flows, irrigation return flow, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, springs, flows from riparian habitats and wetlands, water line flushing, discharges from potable water sources, foundation drains, air conditioning condensation, water from crawl space pumps, footing drains, individual residential car washing, dechlorinated swimming pool discharges, and water incidental to street sweeping (including associated side walks and medians) and that is not associated with construction.*

- *occasional incidental non-stormwater discharges similar to those in the above paragraph, (e.g., non-commercial or charity car washes, etc.) as determined and documented by the permittee, if approved by the Division, These nonstormwater discharges must not be reasonably expected (based on information available to the permittee) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs, etc.). The permittee must document in their program any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2 of the permit.

1. Outfall map - Describe the status of your outfall map; i.e., has it been completed as required by the previous permit? Briefly describe the process that has been implemented for updates to the map when new outfalls are constructed.

Add Description Here

2. Illicit Discharge Detection and Elimination Plan – Briefly describe plans and procedures in place for the following required actions:
  - Tracing the source of illicit discharges
  - Removing the source of illicit discharges
  - Documenting occurrences of illicit discharges and how they were responded to.

Add Description Here

3. Staff/Contractor Education – List program(s) to educate appropriate staff and contractors on observing, reporting, and responding to illicit discharges. You may provide a cross reference to the Municipal Operations program if this program element is covered there. Briefly describe the type (e.g., classroom, web based, briefings, etc.) and frequency of training program(s) conducted. If training has not been fully implemented, provide a measurable goal in Part D, below.

Add Description Here

Continue to provide annual awareness to maintenance and custodial staff.

**D. Measurable Goals**

The permit includes a new requirement to train staff and contractors on observing, reporting, and responding to illicit discharges. Measurable Goals are required, as per Part I.C of the permit, unless this new permit requirement is already being met. Additional measurable goals should not be necessary if the elements described in Part C, above, constitute full program implementation and a commitment to continue these elements for all additional permit requirements.

**Check Box 1 or 2, below. The Table in Part 3 must be filled out if you check Box 2.**

- 1. A staff/contractor education program, as listed in Part C.3, above, has already been developed and implemented.

**(It is not necessary to complete Part 3 below if you check this box.)**

- 2. A staff/contractor education program, as listed in Part C.3, above, has **NOT** already been fully developed and implemented and **I will comply with the following Measurable Goal.**

**(You must complete Part 3 below if you check this box.)**

- 3. **Staff/Contractor Education Measurable Goal:** The Measurable Goal has been provided. Include the year when written procedures for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee’s municipal operations will be fully developed

<i>Add Description Here</i>
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MS4 NAME	CONSTRUCTION SITES RUNOFF CONTROL	STORMWATER DISCHARGES ASSOCIATED WITH NON- STANDARD MS4s
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**A. Program Perspective**

The goal of the Construction Sites Runoff Control Program is to reduce, to the maximum extent practicable, sediment and other construction-related pollutants from entering the municipal separate storm sewer system.

**B. Permit Requirements**

*The permittee must develop, document, and implement a program to reduce the discharge of pollutants to the MS4 from construction activities owned and/or operated by the permittee that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The program must reduce pollutants in discharges of stormwater runoff and also reduce pollutants in, or prevent when required in accordance with the I.B.3, non-stormwater discharges that have the potential to result in water quality impacts (e.g., construction dewatering, wash water, etc.), to the MS4. The program must require adequate design, implementation, and maintenance of BMPs.*

*If the Division waives requirements for stormwater discharges associated with a small construction activity in accordance with Regulation 61.3(2)(f)(ii)(B) (the “R-Factor” waiver), the permittee is not required to develop, implement, and/ or enforce its Construction Sites program to reduce pollutant discharges from such a site.*

***The permittee program must meet either the requirements in Option 1, subsection (a), or the requirements in Option 2, subsection (b), below. The requirements of Option 1 must be met for any areas discharging to the Cherry Creek Reservoir Drainage Basin.***

- a) **Option 1** - *Develop, document, and implement a program to follow the requirements of a city and/or county local program(s). Under this option, the permittee would be in violation of this permit if they fail to comply with the local program(s). The following requirements must be met under this option:*
  - 1) *Document the local program(s) that will be followed for the permitted area. If different programs will be followed in different areas, this must be clearly described.*
  - 2) *Require compliance, through contracts or other enforceable mechanisms, with all requirements of the local program(s). Have procedures in place and documented to ensure that contractors and staff comply with the requirements. Procedures must include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measures.*
  - 3) *Submit construction plans and documentation for review by the local program(s), as required by those local programs.*
  - 4) *Allow for site inspections by the local program(s), as required by the local program.*

- b) **Option 2** – *Develop, document, and implement the permittee’s own program that meets all of the following requirements:*
- 1) *Require compliance, through contracts or other enforceable mechanisms, with all requirements of the program.*
  - 2) *Develop, document, and implement requirements for construction site operators to implement appropriate erosion and sediment control BMPs. The permittee must develop or reference specific design criteria for site planning and BMPs.*
  - 3) *Develop, document, and implement requirements for construction site operators to implement BMPs to control waste such as discarded building materials, concrete truck washout, chemicals, litter, sanitary waste, and other non-stormwater discharges including construction dewatering and wash water, at the construction site that may cause adverse impacts to water quality.*
  - 4) *Develop, document, and implement a Compliance Assessment program, including:*
    - i) *Procedures for site plan review which incorporate consideration of potential water quality impacts.*
    - ii) *Procedures for construction site compliance assessment, including:*
      - A) *site inspections; and*
      - B) *receipt and consideration of information submitted by the public.*
    - iii) *Procedures and mechanisms to track and provide the Annual Report information required in Part I.F.6(a) of the permit.*
  - 5) *Develop and implement a Compliance Assurance program, including:*
    - i) *Procedures for enforcement of control measures that include documented procedures for response to violations of the permittee’s program requirements. Procedures must include specific processes and sanctions adequate to minimize the occurrence of, obtain compliance from, chronic and recalcitrant violators of control measures.*
    - ii) *An education and training program for staff and contractors that includes, at a minimum, information for construction site operators unfamiliar with the program requirements.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2. of the permit.

The permit allows for two alternatives for complying with the requirements of the Construction Sites Program, as cited in Parts (a) and (b) of the “Permit Requirements” section, above. You are required to comply with one of these two requirements.

**Check the box for either Option 1 or Option 2 to indicate which of the two alternative permit requirements will be complied with, and provide the required information in the table for the option chosen.** Address the existing program elements, including those developed during the first permit term.

**Option 1 - Meet the requirements of I.B.3(a) of the permit:**  
*“Develop, document, and implement a program to follow the requirements of a city and/or county local program(s). Under this option, the permittee would be in violation of this permit if they fail to comply with the local program(s).”*

**IT IS NOT NECESSARY TO COMPLETE THE INFORMATION IN THIS TABLE IF YOU CHOOSE “OPTION 2”, BELOW**

*If Option 1 is selected, you must provide the following information:*

<p><b>1. Local Program(s) to be Followed:</b></p>	<p>List below the City and/or County Program(s) that will be complied with. If multiple programs are listed, indicate which programs apply to which of your facilities/locations.</p> <p>Add list here: City of Pueblo MS4 program</p>
<p><b>2. Contract/Regulatory Mechanism:</b> You are required to have contracts or other enforceable mechanisms in place that require contractors to comply with the local program(s) listed in row 1, above.</p>	<p>Check the appropriate box (and provide a description if box (ii) is checked) to indicate the mechanism used to meet this requirement.</p> <p><input checked="" type="checkbox"/> i. The requirements are included in construction contracts.</p> <p><input type="checkbox"/> ii. An alternative mechanism is utilized, and is described below.</p> <p>Add description here if box ii is checked:</p>
<p><b>3. Processes and Sanctions:</b> You are required to have a process to address contractors that are out of compliance with local programs. The process must minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measures.</p>	<p>Check the appropriate box (and provide a description if box (ii) is checked) to indicate the process used meet this requirement.</p> <p><input checked="" type="checkbox"/> i. Contractors are fully subject to the enforcement provisions and sanctions of the local program(s). For example, the contractor obtains permits and is subject to fines and stop work orders issued by the city or county.</p> <p><input type="checkbox"/> ii. Contractor compliance is addressed by my agency (the permittee). The process implemented by my agency to obtain compliance is described below. For example, issuing monetary penalties or stopping work when contractors are found to be not in compliance with the local program.</p> <p>Add description here if box ii is checked:</p>

**Option 2 - Meet the requirements of I.B.3(b) of the permit:**

*“Develop, document, and implement the permittee’s own program”*

**IT IS NOT NECESSARY TO COMPLETE THE INFORMATION IN THIS TABLE IF YOU CHOOSE “OPTION 1”, ABOVE**

*If Option 2 is selected, you must provide the following information:*

<p><b>1. Contract/Regulatory Mechanism:</b> You are required to have contracts or other enforceable mechanisms in place that require contractors to comply with your program</p>	<p>Check the appropriate box (and provide a description if box (ii) is checked) to indicate the mechanism used meet this requirement.</p> <p><input type="checkbox"/> i. The requirements are included in construction contracts.</p> <p><input type="checkbox"/> ii. An alternative mechanism is utilized, and is described below.</p> <p>Add description here if box ii is checked:</p>
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<b>Option 2 Table (continued)</b>	
<b>2. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs and materials handling BMPs:</b>	List below the design criteria, BMP manuals, or fact sheets used to guide construction site operators in the selection and design of appropriate BMPs, stabilization methods and materials handling practices. For all items, provide the title and date of adoption/revision
	Add description here:
<b>3. Requirements for construction site operators to control waste including discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste:</b>	Describe below your process for requiring construction sites to implement BMPs to control waste such as discharged building materials, concrete truck washout, chemicals, litter, sanitary waste, and other non-stormwater discharges.
	Add description here:
<b>4. Procedures for site plan review which incorporate consideration of potential water quality impacts:</b>	<u>i. Site Plan Development</u> : Briefly describe below your requirements for construction site operators to develop stormwater control site plans based on the minimum design criteria
	Add description here:
	<u>ii. Site Plan Review</u> : Briefly describe below your site plan submittal, review, and preliminary approval process (e.g., is a checklist used?). Describe your system to track status of stormwater control site plans. Describe procedures for ongoing review of site plans during active construction (e.g., how are plans reviewed after construction starts and is additional approval required for revisions?)
	Describe how consideration of potential water quality impacts is achieved (e.g., stormwater permit required, which requires a plan, which requires that water quality impacts be considered; water quality impacts are required to be addressed by development code; etc.).
<b>5. Procedures for consideration of information submitted by the public:</b>	Add description here:
	Describe how inquiries are processed (i.e., received by, or forwarded to the MS4 Stormwater Program) and responded to. Describe how complaints are tracked and documented.
<b>6. Procedures to Track Annual Reporting Requirements:</b>	Add description here:
	Describe procedures used for tracking total number of construction sites covered, number of inspections performed, and enforcement actions.

<b>Option 2 Table (continued)</b>	
<b>7. Procedures for site inspection and enforcement of control measures:</b>	<b>i. Inspections:</b> Describe procedures used for inspections, and list any manuals or other documentation used by your staff that includes inspection procedures. Include a description of how inspections are documented; how the frequency of inspections is determined; how sites are prioritized for inspections, if past experiences with construction site operators influence frequency; and how sites and inspections are tracked. Describe procedures for regularly scheduled compliance inspections, complaint response inspections, and reconnaissance inspections, as applicable to your program.
	Add description here:
	<b>ii. Enforcement:</b> Describe procedures used for enforcement, and list any manuals, response guides, or other documentation used by your staff that dictates how and when a response to non-compliance is carried out and how those enforcement actions are tracked. Describe enforcement tools used (e.g., withholding permits, inspections, plan review, C.O., letter of non-compliance, stop work, permit revocation, notice of violation, monetary fines, summons). Describe how enforcement actions are escalated as needed to prevent repeat violations associated with chronic or recalcitrant violators. If procedures are not already fully implemented to address chronic and recalcitrant violators, provide a measurable goal in Part D, below.
Add description here:	
<b>8. Training and Education for Staff and Construction Site Operators:</b> This program element must, at a minimum, include an informational program for construction site operators unfamiliar with the MS4's (reviewing authority's) regulatory requirements.	Describe how training/education is implemented. Describe the use of any fact sheets, pre-development documents, permit applications, pre-construction meetings, web sites, etc. that outline the MS4 (and/or State) construction requirements pertaining to stormwater.
	Add description here:

**D. Measurable Goals**

Inclusion of measurable goals should not be necessary, as the elements described in Part C, above, should constitute full program implementation and a commitment to continue these elements.

MS4 NAME	POST-CONSTRUCTION STORMWATER MANAGEMENT	STORMWATER DISCHARGES ASSOCIATED WITH MS4s
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**A. Program Perspective**

The goal of the Post-Construction Stormwater Management program is to implement planning procedures and enforcement mechanisms to reduce, to the maximum extent practicable, stormwater impacts resulting from areas of new development and significant redevelopment.

**B. Permit Requirements**

*The permittee must develop, document, and implement a program to address stormwater runoff from the permittee's new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that, following new development and/or redevelopment, permanent water quality controls are in place that would prevent or minimize water quality impacts.*

***The permittee program must meet either the requirements in Option 1, subsection (a), or the requirements in Option 2, subsection (b), below. The requirements of Option 1 must be met any areas discharging to the Cherry Creek Reservoir Drainage Basin.***

- a) ***Option 1*** - Develop, document, and implement a program to follow the requirements of the city and/or county program(s) (local program(s)). Under this option, the permittee would be in violation of this permit if they fail to comply with the local program(s). The following requirements must be met under this option:
  - 1) *Document the local program(s) that will be followed for the permitted area. If different programs will be followed in different areas, this must be clearly described.*
  - 2) *Require that permanent water quality controls are developed and implemented in compliance with all requirements of the local program(s).*
  - 3) *Ensure the long-term operation and maintenance of permanent water quality controls, in accordance with the local program(s).*
  - 4) *Submit construction and long-term operation and maintenance plans and documentation for review by the local program(s), as required by those local programs.*
  - 5) *Allow for site inspections, both during construction and following construction, by the local program(s), as required by the local program.*
  
- b) ***Option 2*** - Develop, document, and implement the permittee's own program that meets all of the following requirements:
  - 1) *Develop, document, and implement strategies which include the use of structural and/or non-structural BMPs for new development and redevelopment projects. The BMPs shall address the discharge of pollutants, and/or maintain or restore hydrologic conditions at sites, to minimize the discharge of pollutants and prevent in-channel impacts associated with increased imperviousness. The permittee must develop or reference specific design criteria for selection, implementation, and maintenance of controls.*

- 2) *Develop, document, and implement procedures to review post-construction BMP plans and designs prior to construction to ensure compliance with the requirements in subparagraph (1), above.*
- 3) *Develop, document, and implement procedures, including inspections, to determine if the controls required under subparagraph (1), above, are being installed according to specifications.*
- 4) *Develop, implement, and document procedures to ensure adequate long-term operation and maintenance of controls, including inspection procedures for all controls.*
- 5) *Develop, document, and implement procedures and mechanisms to track long-term BMPs implemented in accordance with the program. Tracking must address the location and the adequacy of long term operation and maintenance activities for the BMPs.*
- 6) *Develop, document, and implement procedures and mechanisms to track and provide the Annual Report information required in Part I.F.6 (b) of the permit.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2. of the permit.

The permit allows for two alternatives for complying with the requirements of the Post-Construction Stormwater Management Program, as cited in Part (a) and (b) of the “Permit Requirements” section, above. You are required to comply with one of these two requirements.

**Check the box for either Option 1 or Option 2 to indicate which of the two alternative permit requirements will be complied with, and provide the required information in the table for the option chosen.** Address the existing program elements, including those developed during the first permit term.

**Option 1 - Meet the requirements of I.B.4(a) of the permit:**  
*“Develop, document, and implement a program to follow the requirements of the city and/or county program(s) (local program(s)). Under this option, the permittee would be in violation of this permit if they fail to comply with the local program(s).”*

**IT IS NOT NECESSARY TO COMPLETE THE INFORMATION IN THIS TABLE IF YOU CHOOSE “OPTION 2”, BELOW**

*If Option 1 is selected, you must provide the following information:*

<b>1. Local Program(s) to be Followed:</b>	List below the City and/or County Program(s) that will be complied with. If multiple programs are listed, indicate which programs apply to which of your facilities/locations. Add list here: City of Pueblo Storm Water MS4 Management Program.
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**Option 2 - Meet the requirements of I.B.3(b) of the permit:**  
*“Develop, document, and implement the permittee’s own program”*

**IT IS NOT NECESSARY TO COMPLETE THE INFORMATION IN THIS TABLE IF YOU CHOOSE “OPTION 1”, ABOVE**

*If Option 2 is selected, you must provide the following information:*

<p><b>1. Design Criteria and Standards:</b></p>	<p>List below any SOPs or Design Criteria required, such as Urban Drainage Flood Control District’s Volume 3 –BMP Manual, or plan review checklists, for the selection and design of appropriate structural and non-structural BMPs appropriate for the community. List any planning tools such as Master Plans, Comprehensive Plans, Zoning Plans and regional BMPs.</p> <p>Add description here:</p>
<p><b>2. Review and Approval Procedures:</b></p>	<p><u>i. Plan Review:</u> Briefly describe below your process for review and approval of permanent water quality control plans. Describe your system to track status of plans.</p> <p>Add description here:</p> <p><u>ii. Field verification:</u> Describe below how the correct installation of BMPs is confirmed, and the enforcement procedures used when BMPs have not been built as approved.</p> <p>Add description here:</p>
<p><b>3. Tracking:</b></p>	<p>Describe below how permanent BMP locations and maintenance history are tracked.</p> <p>Add description here:</p>
<p><b>4. Ensuring long-term operation and maintenance of BMPs</b></p>	<p>Describe below your procedures to ensure BMPs are maintained in operating condition.</p> <p>Add description here:</p>
<p><b>5. Monitoring long-term compliance:</b></p>	<p>Describe below your inspection programs, including routine and complaint response inspections.</p> <p>Add description here:</p>
<p><b>6. Procedures to Track Annual Reporting Requirements:</b></p>	<p>Describe below procedures used for tracking total number of sites for which BMPs were required, number of sites/BMPs inspected to ensure compliance with long-term maintenance and operation requirements, and types of enforcement actions used.</p> <p>Add description here:</p>

#### **D. Measurable Goals**

Inclusion of measurable goals should not be necessary, as the elements described in Part C, above, should constitute full program implementation and a commitment to continue these elements.

MS4 NAME	<b>POLLUTION PREVENTION/ GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS</b>	STORMWATER DISCHARGES ASSOCIATED WITH MS4s
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**A. Program Perspective**

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 from the operations conducted by or for the MS4.

**B. Permit Requirements**

*The permittee must develop and implement an operation and maintenance program that includes a training component for employees, and contractors when applicable, and has the ultimate goal of preventing or reducing pollutants in runoff from the operations conducted by or for the permittee. The program must also inform employees/contractors of impacts associated with illegal discharges and improper disposal of waste from the permittee’s operations. The program must prevent and/or reduce stormwater pollution from the permittee’s facilities, or their contracted facilities located within the permitted area, such as streets, roads, parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, snow disposal areas, and waste transfer stations, and from the permittee’s, and/or their contractors’, activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of facilities, and stormwater system maintenance, as applicable.*

**The permittee must:**

- a) *develop and maintain written procedures for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee’s operations. The program must specifically list the operations (i.e., activities and facilities) that are impacted by this operation and maintenance program. The program must also include a list of any industrial facilities the permittee owns or operates that are subject to separate coverage under the State’s general stormwater permits for discharges of stormwater associated with industrial activity;*
- b) *develop and implement procedures to provide training to employees and contractors as necessary to implement the program under Item 1, above.*

**C. Program Elements:** Address both new and existing education programs, including those developed during the first permit term that you will continue to implement/maintain. By using existing, ongoing program elements to meet the permit requirements, the MS4 is committed to continuing each of these program elements. Any changes would require use of the program modification process as outlined in Part I.E.2 of the permit.

1. Implementation of an operation and maintenance program - Describe your Pollution Prevention and Good Housekeeping program.

<p><i>Add Description Here</i> Ongoing maintenance/housekeeping program (see attached)</p>
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2. Employee Training program - Describe your program(s) to educate employees and contractors on implementing procedures for the Pollution Prevention and Good Housekeeping program.

<i>Add Description Here</i>
Annual training in the spring when we conduct Asbestos Awareness, Bloodborne Pathogens and Hazard Communications.

#### D. Measurable Goals

The permit includes a new requirement to develop written procedures for the operation and maintenance program. The previous permit required that the program be implemented, but did not specifically require written procedures. Measurable Goals are required, as per Part I.C of the permit, unless this new permit requirement is already being met. Additional measurable goals should not be necessary if the elements described in Part C, above, constitute full program implementation and a commitment to continue these elements for all additional permit requirements.

**Check Box 1 or 2, below. The Table in Part 3 must be filled out if you check Box 2.**

1. Written procedures, as listed in Part C.1, above, for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee's municipal operations, have already been developed.

**(It is not necessary to complete Part 3 below if you check this box.)**

2. Written procedures and lists for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee's municipal operations have **NOT** already been fully developed and I **will comply with the following Measurable Goal.**

**(You must complete Part 3 below if you check this box.)**

3. **Pollution Prevention/ Good Housekeeping Measurable Goal:** The Measurable Goal has been provided. Include the year when written procedures for the implementation of an operation and maintenance program to prevent or reduce pollutants in runoff from the permittee's municipal operations will be fully developed.

<i>Add Description Here</i>

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Organics  
Chemicals  
Fuel

### Good Housekeeping

Secondary containment  
Employee training

### Related Procedures

Heavy Equipment and Vehicle  
Maintenance  
Material Storage  
Parks and open Space  
Maintenance  
Spill Prevention and Response  
Vehicle Fueling

# Fertilizer, Herbicide, and Pesticide Application

## Description

It is important to properly handle, apply, and clean up all fertilizers, herbicides, pesticides, and other landscaping chemicals. These chemicals could cause water pollution. Excessive fertilizer application can also contribute to algae blooms and deplete oxygen from waterways.

Refer to the Related Procedures listed in the sidebar for additional information.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### General

- Employees should fully understand their right to know what chemicals they are using through the availability of on-site Material Safety Data Sheets.
- Follow label directions when applying, storing, handling, mixing, recycling, and disposing of chemicals and empty containers.
- Use care to transfer, mix or dispose of chemicals. Never perform these activities near storm drains or drainage areas.
- Have spill cleanup materials available in case of a spill and clean up chemical spills promptly with dry methods, if possible. Refer to the Spill Prevention and Response procedure.

## Application

- Staff performing chemical applications must wear all appropriate protective garments.
- All chemicals shall be used strictly in accordance with their labels and all applicable federal, state, and local laws, regulations, and ordinances.
- Always follow the manufacturer's recommendation on handling and applying the chemicals.
  - Many chemicals should not be applied right before or during rain storms or while the area is being irrigated.
  - Many chemicals should not be applied right before or during high-wind events.
  - Apply only the recommended amounts of chemicals. Over-applying chemicals may "burn" leaves and could lead to thatch buildup and excessive mowing.
- Be careful not to overspray chemicals onto an impervious surface, such as a sidewalk or roadway. These chemicals will wash into the storm drain inlet during the next rainstorm.
- Clean up all over-sprayed chemicals.
- Do not apply landscape chemicals to frozen ground.
- When watering landscaped areas after fertilizer application, do not allow water to runoff into streets and into storm drains.

## Chemical Storage

- Materials shall be stored in accordance with all current federal, state and local laws, regulations and ordinances.
- Chemicals shall be stored in an enclosed, secure building.
- Recycle or dispose of all spent or excess chemicals properly and promptly.
- Establish chemical inventory controls to minimize storage and disposal of excess chemicals.
- Follow the Outdoor Material Storage procedure.

## Application Equipment

- Sprayers shall be used to apply only materials that are suitable for spraying.
- Spreaders shall be used to apply only materials that are available in granular forms.
- Fertilizers and pesticides should be loaded into application equipment over impervious surfaces, so that any spills can be easily cleaned.
- Properly calibrate application equipment to ensure the proper amount of chemical is applied.
- Keep application equipment clean; do not allow a buildup of chemicals.
- Fuel all equipment following the Vehicle Fueling procedure.

- Maintain (including washing) all equipment by following the Heavy Equipment and Vehicle Maintenance procedure.

### **Employee Training**

- It is recognized that additional training and certifications exist that describe procedures for chemical application, handling, and storage. The appropriate employees and supervisors must have this certification.
- Train applicable employees who are involved with fertilizer, herbicide, and pesticide application on this written procedure. Information regarding proper storage practices and how to prevent and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who are involved with fertilizer, herbicide, and pesticide application activities.

### **Records**

The following records could be used to document activities performed:

- Chemical Applicator Certification
- Records of employee training with sign-in sheet.

### **References**

*City of Centennial SOP: Landscaping Chemical Application SOP*, August 2007.

*City of Golden SOP: Chemical Application and Management Plan*, No Date.

*Colorado Department of Transportation, Fertilizer, Herbicide, and Pesticide Application and Storage*, April 2009.

*Mesa County, Municipal Operation and Maintenance Program*, July 4, 2005.

### **Optional Additional Resources**

Municipal codes and ordinances that relate to fertilizer, herbicide, or pesticide application.

## For More Information

Name  
Address  
City, State  
Phone  
e-mail

## Possible Pollutants

Organics  
Trash  
Septage

## Good Housekeeping

Dumpster/Waste Management  
Employee/Contractor Training  
Proper cleanup and disposal procedures  
Dry cleaning methods

## Related Procedures

Power Washing  
Spill Prevention and Response  
Street Sweeper Cleaning and Waste

# Large Outdoor Festivals and Events

## Description

Large outdoor festivals and events operated and controlled by the regulated municipality have the potential to impact stormwater quality. Potential contaminants may include trash, septage, and organics.

A large event would meet all of the following criteria:

- Portable toilets
- Trash receptacles
- Food and beverage vendors
- Street closures

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### Trash Collection and Removal

- Provide adequate trash receptacles for vendors and guests.
- Monitor and respond to leaking waste containers.
- Empty trash receptacles to prevent overflow.
- Store waste containers under cover or on grassy areas, if possible.
- Do not wash out trash receptacles unless wash water will be discharged to the sanitary sewer.
- Walk the outdoor festival and event area during and after every large event to pick up loose trash and debris. Properly dispose of this material.
- Sweep the roadway and parking lots after the large festival or event.
- Follow the Power Washing procedure for clean up procedures.
- Follow the Spill Prevention and Response procedures. Have spill kits available and ensure that vendors understand that it is prohibited to dump any pollutants into the storm sewer system.



### **Portable Toilet Service**

Portable toilets are used at most large outdoor festivals and events. All portable toilet waste is classified as septage. The municipality will use a licensed waste hauler to dispose of their waste for any large outdoor festival or event that has portable toilets. The units will be removed as soon as the festival or event is completed so that they do not become a nuisance or vandalized.

### **Food and Beverage Vendor Waste**

Waste generated by food and beverage vendors is regulated by the Colorado Retail Food Rules and Regulations.

### **Employee Training**

- Train applicable employees who perform trash collection and street sweeping and issue leases/permits for large outdoor festivals and events on this written procedure. Information on how to respond to spills will be presented during the training.
- Periodically conduct refreshed training on the SOP for applicable employees who perform trash collection and street sweeping activities.

### **Records**

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

### **References**

*City of Greeley, Department of Public Works: Street Sweeping Program, June 2008.*

*Mesa County, Municipal Operation and Maintenance Program, July 4, 2005.*

*Partners for a Clean Environment. Stormwater Protection: Special Event BMPs. Spring 2009.*

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Sediment  
Chemicals  
Organics  
Trash

### Good Housekeeping

Waste Management  
Employee/Contractor Training  
Proper Cleanup and Disposal  
Procedures

### Related Procedures

Heavy Equipment and Vehicle  
Maintenance  
Parks and Open Space  
Maintenance  
Spill Prevention and Response  
Street, Curb, and Gutter  
Replacement and  
Construction  
Utilities and Storm Sewer  
System Replacement and  
Construction  
Vehicle Fueling

# New Construction Activities for Municipalities

## Description

This fact sheet covers new construction activities disturbing less than one acre not subject to a CDPS Construction permit. New construction includes, but is not limited to buildings, structures, capital improvements, roadways, and recreational components such as trails, restrooms, and other structures. Procedures provided are general in nature and can be applied to any scale or type of municipal construction.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

- Obtain all applicable federal, state, and local permits for construction projects.
  - The Colorado Stormwater Construction General permit applies to construction sites disturbing one acre or more, or less than one acre but part of a larger common plan of development.
  - A larger common plan of development is defined as a **contiguous area** where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
  - A dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite.
  - A U.S. Army Corp of Engineers (USACE) Section 404 Permit may be needed if the work will be conducted in or impact waters of the United States, including wetlands, washes, drainages, ditches, creeks, streams, and rivers.
- Applicable sediment and erosion controls may be installed, such as inlet protection, silt fence, sediment traps, erosion control logs, check dams, and vehicle tracking control. Sediment and erosion controls will be

- installed and maintained in accordance with approved design criteria and/or industry standards.
- Material stockpiles will not be stored in stormwater flow lines. Temporary sediment control will be used during temporary, short-term placement while work is actively occurring.
- Where feasible, grading activities should be scheduled during dry weather.
- Best management practices will be periodically inspected and maintained as necessary.
- Waste containment for concrete washout, masonry, paint, trash and other potential pollutants will be available when these activities are being conducted.
- Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices, and spill prevention and response.

### **Employee Training**

- Train applicable employees who perform new construction activities on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform new construction activities.

### **Records**

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

### **References**

*City of Centennial SOP: New Construction SOP, August 2007.*

*Mesa County, Municipal Operations and Maintenance Program, July 2005.*

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Metals  
Toxins  
Solvents (degreasers, paint thinners, etc.)  
Antifreeze  
Brake fluid and brake pad dust  
Battery acid  
Motor oil  
Fuel (gasoline, diesel, kerosene)  
Lubricating grease

### Good Housekeeping

Drip pans  
Tarps  
Covered outdoor storage areas  
Secondary containment  
Proper disposal of used fluids  
Spill cleanup materials  
Dry cleanup methods  
Employee training

### Related Procedures

Heavy Equipment and Vehicle Maintenance  
Material Storage  
Spill Prevention and Response  
Vehicle Fueling

## Outdoor Fleet Maintenance

### Description

Although it is recommended that fleet maintenance activities be conducted indoors or under cover, it is sometimes necessary to perform fleet maintenance outdoors (e.g., equipment is too large to fit inside the maintenance building, temporary repairs need to be made before the equipment can be moved to the maintenance building, breakdowns, service calls).

Some potential pollutants typically associated with outdoor fleet maintenance activities include oil, antifreeze, brake fluid and cleaner, solvents, batteries, and fuels. Consult the [Spill Prevention and Response](#) procedure and the [Vehicle Fueling](#) procedure for additional information on those topics.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

### Procedures

#### Fleet Maintenance

- Fleet maintenance should be performed inside whenever possible.
- If indoor maintenance is not possible, ensure maintenance is performed in a location where contact with stormwater is minimized, through berming and appropriate routing of drainage.
- Provide inlet protection (berms, weighted inlet covers, etc.) for all adjacent inlets when work is occurring in close proximity to a storm drain inlet.
- Have absorbent pads and drip pans accessible to capture leaks and spills during maintenance activities.
- Keep equipment clean and do not allow excessive build-up of oil and grease.

- Perform regular preventative maintenance to minimize the occurrence of leaks and major repairs.
- Recycle and/or dispose of all wastes properly and promptly.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches. Sweep and pick up trash and debris as needed.
- Clean up spills promptly using dry methods (do not hose down). Consult the Spill Prevention and Response procedure for more information. Cleanup is completed only after absorbent and rags are disposed of properly.

### Body Repair and Painting

- Whenever possible, conduct all body repair and painting work indoors.
- Use dry cleanup methods such as vacuuming or sweeping to clean up all metal filings, dust, and paint chips from grinding, shaving, and sanding. Dispose of the waste properly. Debris from wet sanding can be allowed to dry overnight, then swept and vacuumed. Liquid from wet sanding should not be allowed to enter the storm drain. Never discharge these wastes to the storm or sanitary sewer systems.
- Minimize waste from paints and thinners by carefully calculating paint needs based on surface area and using the proper sprayer cup size.
- Clean spray guns in a self-contained cleaner. Do not dispose of cleaner waste in the storm drain.
- Use sanding tools equipped with vacuum capability (if available) to pick up debris and dust.

### Material Management

- Store maintenance materials and waste containers (e.g., used oil and antifreeze) in labeled containers under cover or in secondary containment (e.g., double-walled tanks). Chemicals should not be combined in containers.
- All hazardous wastes must be labeled and stored according to hazardous waste regulations.
- Carefully transfer fluids from collection devices to designated storage areas as soon as possible. Do not store the transferred fluids adjacent to the containers.
- Store new batteries securely to avoid breakage and acid spills.
- Store used batteries indoors or in secondary containment to contain potential leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.

- Do not wash or hose down the storage area except in areas where the wash water will only enter the sanitary sewer drain as an approved discharge. Use dry clean-up methods as often as possible.
- Keep lids on waste barrels and containers, and store them indoors or under cover to reduce exposure to rain.
- Periodically inspect and maintain all pretreatment equipment, including sumps, separators, and grease traps to ensure proper functioning.

### Parts Cleaning

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available, use drip pans or other containment to capture parts cleaning fluids.
- Use steam cleaning or pressure washing of parts whenever possible instead of solvent cleaning.
- When steam cleaning or pressure washing is used, only discharge wastewater to an oil/water separator connected to the sanitary sewer.
- When using solvents, rinse and drain parts over the designated solvent tank so that fluids will not drip or spill onto the floor. Use drip boards or pans to catch excess solutions and divert them back to the tank. Allow parts to dry over the hot tank.
- Recycle cleaning solution when it becomes too dirty to use. Never discharge cleaning waste to the storm or sanitary sewer systems.

### Vehicle and Equipment Washing

- Vehicles should be washed, whenever possible, in the municipality's vehicle and equipment wash area/bay or taken to a commercial car wash.

### Employee Training

- Train applicable employees on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform outdoor vehicle maintenance.

### Records

The following records could be used to document activities performed:

- Record of any major spills and the action taken.
- Records of employee training with sign-in sheet.
- Heavy equipment and vehicle maintenance logs.

## References

- Center for Watershed Protection, *Municipal Pollution Prevention/Good Housekeeping Practices: Version 1.0*, September 2008.
- City of Centennial SOP: *Vehicle and Equipment Storage SOP*, August 2007.
- City of Centennial SOP: *Vehicle Maintenance SOP*, August 2007.
- City of Centennial SOP: *Vehicle Washing SOP*, August 2007.
- City of Golden. *Fleet Maintenance Standard Operating Procedure*, July 29, 2007.
- City of Lafayette Standard Operating Procedure: *Vehicle and Equipment Maintenance Repair*, March 2009.
- City of Lafayette Standard Operating Procedure: *Vehicle and Equipment Washing*, March 2009.
- Mesa County, *Municipal Operation and Maintenance Program*, July 4, 2005.
- Partners for a Clean Environment. *Stormwater Protection: Vehicle Repair*. Spring 2009.
- USEPA Menu of BMP: *Municipal Vehicle and Equipment Maintenance*,  
[cfpub.epa.gov/npdes/stormwater/menuofbmps/](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/), accessed May 27, 2009.
- USEPA Menu of BMP: *Municipal Vehicle and Equipment Washing*,  
[cfpub.epa.gov/npdes/stormwater/menuofbmps/](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/), accessed May 27, 2009.

## Optional Additional Resources

- Municipal codes and ordinances that relate to fleet maintenance.
- Chemical purchasing policies.
- Guidelines for staff to dedicate a percentage of their time to vehicle and equipment maintenance.
- Specific directions on how to use the municipality's vehicle wash area.
- Spill Prevention Control and Countermeasures Plan.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Organics  
Chemicals  
Sediment  
Fuel

### Good Housekeeping

Secondary containment  
Employee training

### Related Procedures

New Construction  
Fertilizer, Herbicide, and  
Pesticide Application  
Material Storage  
Snow and Ice Control  
Snow Storage  
Vehicle Fueling

# Parks and Open Space Maintenance

## Description

Parks and open space maintenance activities involve the operation of equipment such as mowers and tractors; disposal of waste from mowing, planting, weeding, raking, pruning and trash collection; application of pesticides, herbicides and fertilizers, cleaning and maintenance of park amenities such as play equipment, restrooms, and structures; and snow removal.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### General

- Repair damage to landscaped areas or mulch or vegetate bare areas to minimize erosion.
- Remove (sweep or shovel) materials such as soil, mulch and grass clippings from parking lots, streets, curbs, gutters and sidewalks.
- Collect and dispose of trash.
- Do not attempt to clean up any unidentified or possibly hazardous materials found on or around landscaped areas during maintenance; notify the supervisor immediately upon discovery of hazardous materials.
- Refer to the Fertilizer, Pesticide, and Herbicide Application procedure for information on the application of landscape chemicals.

## Maintenance

- Wastewater from power washing signs, structures, or bleachers cannot be discharged into the storm sewer system. Refer to the [Power Washing](#) procedure for more information.
- A Permit must be obtained from the Colorado Department of Public Health and Environment for washing outdoor structures including stadium seating and bleachers.
- When painting park equipment, use a drop cloth and clean up any spills immediately. Do not leave open containers on the ground where they may accidentally tip over.
- Sweep parking lots with a street sweeper, or if using a hand sweeper, collect the sweeping debris and dispose of it in the trash. Never wash ambient dust from parking lots into the storm drain.

## Mowing

- Remove paper, debris, and trash from the landscaped and surrounding areas prior to mowing.
- Collect grass clippings and leaves. Do not blow or wash them into the street, gutter or drainage ways.
- Properly recycle or dispose of organic wastes after mowing, weeding, and trimming.

## Irrigation

- Repair broken sprinkler heads as soon as possible.
- Only irrigate at a rate that can infiltrate into the soil to limit run-off.

## Landscape Equipment

- Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas.
- Leave clippings on grassy areas or dispose of in trash or by composting. Do not hose off mowers over paved areas that drain to the storm drain system.
- Fuel all equipment following the [Vehicle Fueling](#) procedure.
- Maintain (including washing) all equipment by following the [Heavy Equipment and Vehicle Maintenance](#) procedure.
- Do not allow grease from the grease zirks on mowers to fall onto areas where they can be washed into the storm drain.

## Snow Removal

- Conduct snow and ice removal operations using the Snow and Ice Control procedure.
- Store all salt or sand that will be used on walks inside or under a roof or in a covered container.

## Other Activities

- Utilize pet waste stations with bags and trash receptacles.
- All portable toilets should be staked down in flat, secure locations where they are less likely to be knocked or blown over. All portable toilets should be in a location that would retain any spillage opposed to washing into storm sewer or waterway. Ensure routine maintenance and cleaning is conducted.

## Employee Training

- Train applicable employees who are involved with parks and open space maintenance activities on this written procedure. Information regarding proper storage practices and how to prevent and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who are involved with parks and open space maintenance activities.

## Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

## References

*City of Centennial SOP: General Landscaping Maintenance SOP, August 2007.*

*City of Centennial SOP: Open Space Grounds Keeping SOP, August 2007.*

*City of Greeley SOP: Vegetation Management Program SOP, No Date.*

*City of Lafayette SOP: Grounds Maintenance SOP, No Date.*

*Partners for a Clean Environment, Parks and Golf Course Maintenance, No Date.*

## Optional Additional Resources

Municipal codes and ordinances that relate to parks and open space management, such as a noxious weed ordinance.

List of municipal properties to manage and frequency of management.

Instructions on how to operate equipment.

Integrated pest management techniques.

Landscape planning.

Procedures for using non-municipal (e.g., volunteer) personnel.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Fine-grained sediment  
Oil  
Paint  
Trash

### Good Housekeeping

Waste Management  
Employee/Contractor Training  
Proper Cleanup and Disposal  
Procedures

### Related Procedures

Spill Prevention and Response  
Street Sweeper Cleaning and  
Waste

## Power Washing

### Description

Wastewater from power washing must not be allowed to enter the storm sewer system and must be disposed of properly. Power washing combined with proper wastewater collection can prevent or reduce fine-grained sediment particles, anti-freeze, oil, paint, or trash from polluting stormwater.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

### Procedures

#### General

- Use dry methods for surface pre-cleaning, such as using absorbent on small oil spots and sweeping up trash, debris, dirt, and used absorbent before power washing.
- Minimize the amount of water used during power washing activities.
- Avoid using cleaning products that contain hazardous substances (e.g., hydrofluoric acid, muriatic acid, sodium hydroxide, bleach) that can turn wastewater into hazardous waste.

#### Wastewater Collection

- Identify the locations of all storm drains in the area and place inlet protection or drain covers at all locations, as needed.
- Locate high and low spots on the property to determine the area where wastewater will be pooled for collection.
- Equipment to contain and collect wastewater generated by power washing includes: vacuum pumps, booms, berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, oil and water separators, holding tanks, portable sump pumps, hoses, and absorbent pads.

- Avoid mixing non-hazardous wastewater with wastewater known to contain hazardous substances or hazardous levels of pollutants. Mixing these wastes may increase the characteristic and/or total volume of waste, resulting in more expensive disposal and additional regulatory requirements.
- Place an oil-absorbent mat or pad on top of collected wastewater to help reduce the amount of oil re-deposited on the surface of the collection area.
- Wastewater can be filtered through an oil absorbent boom or oil/water separator and a filter to decrease the concentration of oil in the liquid and the amount of solids in the wastewater.
- Once wastewater has been collected, visible solids remaining in the collection area after liquids have evaporated must be swept up and properly disposed to prevent future discharges to the storm sewer system.

### Wastewater Disposal

- Do not dispose of power washing wastewater into the storm sewer system.
- Power washing wastewater may be disposed of in an inside drain connected to the sanitary sewer system with the permission of the wastewater treatment plant (may require a permit) and the facility owner where the work is being performed. Collected wastewater can also be discharged to the sanitary sewer system at the power washer's place of business with the permission of the wastewater treatment plant, or can be taken directly to a wastewater treatment plant.
- Do not remove sewer manhole covers to dispose of wastewater to the sanitary sewer system without prior approval.
- Power washing wastewater may be discharged to landscaped areas if it is not harmful to vegetation, there is no ponding, and there is no runoff from the site to the storm sewer system.

### Employee Training

- Train applicable employees who perform power washing activities on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform power washing.

### Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.
- List of power washing activities and departments responsible for conducting power washing.

### References

City of Fort Collins, Regulatory and Government Affairs Division, *Power Washing Guidance*, No Date.

City of Golden, *BMPs for Pressure Washing*, January 2004.

Partners for a Clean Environment, *Water Protection Guide: Pressure Washers*, No date.

Colorado Department of Public Health and Environment, *Discharge of Process Wastewater from Power Washing Operations*, No Date.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Sediment  
Toxics

### Good Housekeeping

Dry cleanup methods  
Employee training

### Related Procedures

Heavy Equipment and Vehicle  
Maintenance  
Material Storage  
Salt and Sand Storage  
Snow Storage  
Spill Prevention and Response  
Vehicle fueling

## Snow and Ice Control

### Description

Deicers can contaminate surface and ground water and damage vegetation adjacent to roadways. Salt will change the chemical balance of local waterways and sand can be picked up by stormwater resulting in higher dissolved and suspended sediment loads in waterways. Sand also presents an air quality concern.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

### Procedures

#### Plowing

- Inspect plowing equipment for leaks prior to use. Follow the Heavy Equipment and Vehicle Maintenance procedure for responding to leaking vehicles.
- Take care when connecting or releasing plow shovels and clean up any hydraulic fluid that may leak onto the pavement.
- Wash snow removal equipment only at approved washing stations following the Outdoor Vehicle Maintenance procedure.
- Do not pile snow in front of storm sewer inlets to allow inflow of snowmelt runoff.

#### Deicer Application

- Apply only the recommended amount of deicer to roadways.
- Spreaders should be calibrated at the beginning of each season and inspections for maintenance or repair should be conducted after each storm.
- As soon as weather conditions allow, follow-up with street sweeping to remove remaining deicer from roadways.



## Ice Cutting

- Gutters and storm sewer inlets should be cleared of ice to allow drainage of snowmelt or ice-melt.

## Employee Training

- Train applicable employees who are involved in snow and ice control on this written procedure. Information regarding proper storage practices and how to prevent and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who are involved in snow and ice control.

## Records

The following records may be used to document activities performed:

- Record of any major spills and the action taken.
- Records of employee training with sign-in sheet.

## References

*City of Centennial SOP: Snow Removal SOP, August 2007.*

*City of Golden, Snow and Ice Control Action Plan, Winter 2008-2009.*

*City of Greeley: Snow and Ice Control Plan, No Date.*

*City of Lafayette SOP: Salt Chemical Storage SOP, March 2009.*

*Mesa County, Municipal Operations and Maintenance Program, July 2005.*

## Optional Additional Resources

Municipal codes and ordinances that relate to snow and ice control.

Chemical purchasing policies.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Sediment  
Organics  
Oil  
Grease

### Good Housekeeping

Secondary containment  
Employee training

### Related Procedures

Heavy Equipment and Vehicle Maintenance  
Material Storage  
Salt and Sand Storage  
Snow and Ice Control  
Spill Prevention and Response  
Street Sweeping  
Vehicle Fueling

## Snow Storage

### Description

Snow may have to be stored during major winter storms to increase street accessibility. It is possible for pollutants such as sediment, organics, oil, and grease to be concentrated at snow storage locations and to impact stormwater quality.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

### Procedures

#### Snow Storage

- Snow should be stored away from storm sewer inlets and waterways.
- When possible, snow should be stored on a pervious surface to allow infiltration.
- Snowmelt runoff should be routed through a best management practice (e.g., stormceptor, extended detention basin, oil/water separator, vegetated buffer) prior to reaching a waterbody.
- Sweep or vacuum impervious snow storage areas once snow has melted.

### Employee Training

- Train applicable employees who are involved with snow storage on this written procedure. Information regarding proper storage practices and how to prevent and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who are involved with snow storage activities.

### Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.



## References

*City of Centennial SOP: Snow Removal SOP, August 2007.*

*City of Golden SOP: Snow Storage SOP, No Date.*

*City of Lafayette SOP: Snow Disposal SOP, March 2009.*

## Optional Additional Resources

Municipal codes and ordinances that relate to snow storage.

Designated snow storage areas.

Include a specific distance (e.g., 100 feet) that the snow storage pile must be away from any inlet or waterway.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Chemicals  
Toxics  
Oil  
Paint  
Fuel

### Good Housekeeping

Waste Management  
Employee/Contractor Training  
Proper cleanup and disposal procedures

### Related Procedures

Fertilizer, Pesticide, and Herbicide Application  
Heavy Equipment and Vehicle Maintenance  
Material Storage  
Materials Management  
Outdoor Vehicle Maintenance  
Vehicle Fueling

# Spill Prevention and Response

## Description

Due to the type of work and the materials involved, many activities that occur either at a municipal facility or as part of municipal operations have the potential for accidental spills. Some municipal facilities operate under Spill Prevention Control and Countermeasures (SPCC) plans that include procedures for spill response. Proper spill response planning and preparation enables employees and contractors to effectively respond to problems and minimize the discharge of pollutants to the storm sewer system.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### Spill Prevention

- Keep work areas neat and well organized.
- Maintain a Material Safety Data Sheet (MSDS) for each hazardous chemical. Follow the Outdoor Material Storage procedures.
- Provide tight fitting lids for all containers.
- Keep containers clearly labeled. Labels should provide name and type of substance, stock number, expiration date, health hazards, handling suggestions, and first aid information.
- Store containers, drums, and bags away from direct traffic routes to prevent accidental spills.
- Inspect storage containers regularly for signs of leaking or deterioration.
- Replace or repair leaking storage containers.
- Use care to avoid spills when transferring materials from one container to another.

- Use powered equipment or get assistance when moving materials to and from a storage area. Use care to prevent puncturing containers with the equipment.
- Do not wash down or hose down any outdoor work areas or trash/waste container storage areas except where wash water is captured and discharged into the sanitary sewer (if approved).
- Conduct periodic inspections to ensure that materials and equipment are being handled, disposed/recycled, and stored correctly.
- Provide adequate spill kits or lockers with sufficient equipment and supplies necessary for each work area where the potential for spills or leaks exists.
- Inspect each spill kit or locker regularly and after each spill response. Replace any spent supplies or repair any equipment that is worn or not suitable for service.
- Stock adequate personal protective equipment.

## Spill Response

### *Safety*

Consider safety at all times. Anticipate and avoid all likely hazards. Never approach, contact, or sample an unknown substance. If a highly toxic or flammable substance is discovered, staff should leave the immediate area and contact the appropriate identified response authority, such as the fire department. If there is any question about a substance, contact the appropriate identified response authority or other designated representative.

### *Procedures*

- Stop the leading edge of the spill. Block or divert the spill to avoid discharge to the storm sewer system and to minimize the area requiring cleanup.
- Determine the source of the spill and stop the spill at its source by closing a valve, plugging a leak, or setting a container upright. Transfer material from a damaged container.
- Identify the material and volume spilled. Contact the appropriate identified response authority or other designated representative if you cannot identify the material and its properties.
- Refer to the MSDS to determine appropriate personal protective equipment, such as gloves and safety glasses and appropriate cleanup methods.
- Clean up spills immediately to prevent spreading of wastes by wind, rain, and vehicle traffic and potential safety hazards.
- Use sand absorbents or socks, pillows, or pads to quickly capture spilled liquid and properly dispose of all clean-up materials. Use dry clean-up methods only.
- Complete all necessary reports.

## Spill Reporting

- A spill of any chemical, oil, petroleum product, or sewage that enters waters of the state of Colorado (that include surface water, ground water, and dry gullies and storm sewers leading to surface water) must be reported immediately to the Colorado Department of Public Health and Environment.
- Release of a substance into a storm drain, or onto a parking lot or roadway as part of a storm sewer leading to surface water, is reportable. However, if the material can be contained and cleaned within the storm sewer system to the degree that a subsequent flow in the storm sewer will not flush the substance to waters of the State, it may not need to be reported.
- Contact the appropriate identified response authority within the municipality or other designated representative and be prepared to provide details needed to report the spill to the necessary agencies.
- Detailed spill reporting guidance can be found at <http://www.cdphe.state.co.us/op/wqcc/Resources/Guidance/spillguidance.pdf> and <http://www.cdphe.state.co.us/hm/spillsandreleases.htm>

## Employee Training

- Train applicable employees who perform spill prevention and response on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform spill prevention and response activities.

## Records

The following records could be used to document activities performed:

- Records of any major spills and the action taken.
- Records of employee training with sign-in sheet.

## References

*City of Centennial, Department of Public Works: Good Housekeeping*, No Date.

*City of Centennial, Department of Public Works: Materials Management*, No Date.

*City of Centennial, Department of Public Works: Spill Prevention and Control*, No Date.

*City of Golden, Stormwater Quality Pollution Prevention Guide for Municipal Operations: Parks Department Golf Course*, January 2004.

*City of Lafayette, Spill Clean Up*, No Date.

Colorado Department of Public Health and Environment, *Environmental Spill Reporting*, January 2009.



Mesa County, *Municipal Operation and Maintenance Program*, July 4, 2005.

USEPA Menu of BMP: *Spill Response and Prevention*,  
[cfpub.epa.gov/npdes/stormwater/menuofbmps/](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/), accessed July 5, 2009.

### **For More Information**

Name  
Address  
City, State  
Phone  
e-mail

### **Possible Pollutants**

Fine-grained sediment  
Organics  
Oil  
Saw-cut slurry  
Trash

### **Good Housekeeping**

Dumpster/Waste Management  
Employee/Contractor Training  
Proper cleanup and disposal procedures  
Dry cleaning methods

### **Related Procedures**

Spill Prevention and Response  
Street Sweeping  
Street Sweeper Cleaning and Waste

# Street, Curb, and Gutter Maintenance

## Description

Street, curb, and gutter activities include concrete and asphalt installation, maintenance, repair, and replacement; bridge maintenance; and painting and striping. Procedures involving the maintenance of streets, curbs, and gutters have the potential to impact stormwater quality. Materials involved in these activities should be used efficiently and disposed of properly.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### General

- Protect storm drain inlets and drains with curb socks, rock berms, inlet protection, or drain covers/ mats prior to any maintenance activity.
- When saw cutting ensure that no slurry enters the storm drain, let the slurry dry, sweep it up, and properly dispose of the sweepings.
- Do not perform concrete or asphalt patch work during wet conditions whenever possible.
- Leaking material containers should be properly discarded and replaced.
- Store materials in containers under cover when not in use and away from any storm drain inlet.
- Monitor equipment for leaks and use drip pans as necessary.
- Sweep or vacuum the roadway once maintenance activities are complete.

### Bridge Maintenance

- Do not transfer or load any materials directly over waterways.
- Secure lids and caps on all containers when on bridges.
- Suspend drop cloths or nets below any bridgework where wastes, scraps, or drips might be spilled into a waterway.

### Concrete Maintenance

- Minimize the drift of chemical cure on windy days by using the curing compound sparingly and applying it close to the concrete surface.
- Ensure there is a concrete truck washout area available or require the contractor to wash out at the batch plant.
- Whenever possible, recycle concrete rubble; otherwise, dispose of it as solid waste.

### Asphalt Maintenance

- Sweep to minimize sand and gravel from new asphalt from getting into storm drains, streets, and creeks.
- Do not allow asphaltic concrete grindings, pieces, or chunks used in embankments or shoulder backing to enter any storm drain or watercourses. Apply temporary perimeter controls. Install silt fence until the structure is stabilized or permanent controls are in place.
- Whenever possible, recycle broken asphalt. If impossible, dispose of as solid waste.
- Drainage inlet structures shall be covered with inlet protection during application of seal coat, tack coat, slurry seal, and/or fog seal.

### Painting and Striping

- If possible, schedule painting and striping projects during dry weather.
- Use thermoplastic or epoxy markings in place of paint whenever feasible.
- The pre-heater for thermoplastic striping and the melting tanks used during pavement marking must be filled carefully to prevent splashing or spilling of materials. Leave 6 inches at the top of pre-heater and the melting tanks to allow room for material to move and splash when vehicles are deadheaded.

### Employee Training

- Train applicable employees who perform street, curb, and gutter maintenance on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform street, curb, and gutter maintenance.

### Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

### **References**

City of Centennial, *Department of Public Works: Asphalt and Concrete Program*, No Date.

City of Centennial, *Department of Public Works: Asphalt Program*, No Date.

PACE, *Stormwater Best Management Practices: Street Maintenance*, No Date.

### **Optional Additional Resources**

Concrete truck washout BMP specifications.

Gravel road maintenance procedures.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Metals  
Hydrocarbons  
Toxins

### Good Housekeeping

Drip pans  
Secondary containment  
Automatic shutoff nozzles  
Signs  
Spill response plans  
Spill cleanup materials  
Dry cleanup methods  
Employee training

### Related Procedures

Heavy Equipment/Vehicle  
Maintenance  
Outdoor Fleet Maintenance  
Spill Prevention and Response

## Vehicle Fueling

### Description

Spills of gasoline and diesel fuel on the ground or on vehicles during fueling can wash into a storm drain and cause water pollution.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state and federal codes, laws, and regulations.

### Procedures

#### General

- Fuel vehicles at approved locations (municipal fueling station or offsite fueling station).
- Provide spill kits near the municipal fueling location.
- If fuel is stored in an above-ground tank, store fuel in enclosed, covered tanks with secondary containment (e.g., concrete barrier or double-walled tanks).
- All fuel tanks will be inspected per State and Federal regulations.
- Periodically inspect municipal fueling locations for the following:
  - For above-ground tanks, inspect tank foundations, connections, coatings, tank walls, and piping systems. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank.
  - Check for spills and fuel tank overfills due to operator error.
- Clean up any leaks or drips. Clean up is not completed until the absorbent is swept up and disposed of properly.
- Report leaking vehicles to fleet maintenance.

## Vehicle Fueling

- Follow all posted warnings.
- Ensure that the nozzle is properly inserted in the filler neck of the vehicle before dispensing any fuel.
- Remain by the fill nozzle while fueling to ensure the nozzle stays in place.
- Do not top off the tank of the vehicle once the nozzle has shut off the fuel.
- Follow the procedures outlined in the Spill Prevention and Response Procedure to respond to any leaks or spills.
- Clean fuel dispensing areas with absorbent material.
- Never use water to clean up a spill.

## Mobile Fuel Truck

- Provide inlet protection (e.g., berms, weighted inlet covers) for nearby storm drain inlets when transferring fuel and fueling a vehicle.
- Use secondary containment when transferring fuel from the tank truck to the fuel tank. All gas cans must be placed in the secondary containment box/pan and remain on the ground when fueling.
- Use a funnel to transfer fuel to vehicles and equipment. After the transfer is complete, the funnel should be dried with a rag or placed in a container to avoid dripping fuel on the ground.

## Employee Training

- Train applicable employees who fuel vehicles on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who fuel vehicles.

## Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

## References

Center for Watershed Protection, *Municipal Pollution Prevention/Good Housekeeping Practices: Version 1.0*, September 2008.

*City of Centennial SOP: Vehicle Fueling*, August 2007.

*City of Lafayette Standard Operating Procedure: Vehicle and Equipment Fueling*, March 2009.

Mesa County, *Municipal Operation and Maintenance Program*, July 4, 2005.

USEPA Menu of BMPs: Municipal Vehicle Fueling,  
[cfpub.epa.gov/npdes/stormwater/menuofbmps/](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/), accessed June 18, 2009.



### **Optional Additional Resources**

Municipal codes and ordinances that relate to vehicle fueling.

Locations of approved offsite fueling stations.

Locations of nearby spill kits.

Spill Prevention Control and Countermeasures Plan.

### For More Information

Name  
Address  
City, State  
Phone  
e-mail

### Possible Pollutants

Construction Debris  
Organics  
Oil and Grease  
Trash  
Metals  
Paint  
Toxins

### Good Housekeeping

Dumpster/waste management  
Employee/Contractor Training  
Proper cleanup and disposal procedures  
Dry cleaning methods  
Stormwater retrofits

### Related Procedures

Large Outdoor Festivals and Events  
Outdoor Material Storage  
Spill Prevention and Response  
Street Sweeper Cleaning and Waste

# Waste Management

## Description

- All solid and liquid wastes must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste.
- When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

## Procedures

### General

- Provide cover, if feasible, for all waste storage areas including keeping dumpster lids closed.
- Provide a low containment berm, if feasible, around waste storage areas.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- Follow the Spill Prevention and Response procedure to respond to and clean up any spills or leaks.
- Clean storage areas when necessary using dry clean up methods (except in areas where the wash water will enter the sanitary sewer and is an approved discharge).
- Return dumpsters to the supplier when cleaning is necessary or if the dumpster is leaking.
- Properly handle and dispose of all hazardous wastes. See the Outdoor Material Storage procedure for more information.

### Solid Waste

- Solid waste that cannot be recycled should be disposed of in the trash dumpster.

- Recycled solid wastes, including the following:
  - Glass
  - Plastic containers
  - Cardboard and Paper
  - Organic material
  - Scrap metal
  - Wood debris
  - Used batteries
  - Used oil filters
  - Light bulbs
- Follow the Street Sweeper Cleaning and Waste procedure for proper disposal of street sweepings.

### Liquid Waste

- Never place liquids in a dumpster.
- If unable to recycle, old latex paints should be mixed with floor dry or other adsorbent material to solidify prior to disposal in the trash.
- If unable to recycle, enamels and other oil-based paints should be applied to cardboard, newspaper, or similar materials and allowed to dry prior to disposal in the trash.
- Recycle liquid wastes, including the following:
  - Used oil
  - Used antifreeze
  - Used solvents

### Employee Training

- Train applicable employees who dispose of wastes on this written procedure. Information on how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who dispose of wastes.

### Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.

### References

*City of Centennial SOP: Good Housekeeping and Material Management, August 2007.*

*City of Lafayette Standard Operating Procedure: Waste Management and Disposal, March 2009.*



*City of Lafayette Standard Operating Procedure: Waste and Trash, March 2009.*

*Mesa County, Municipal Operation and Maintenance Program, July 4, 2005.*

### **Optional Additional Resources**

- Frequency of trash and recycling pick ups.
- List of Recycling Sites
  - [www.colorado-recycles.com](http://www.colorado-recycles.com)
  - [www.1800cleanup.com](http://www.1800cleanup.com)
- List of Companies Accepting Hazardous Waste