Best management practices for industrial facility permittees

Industrial facilities can use best management practices during construction of the facility and when operating the facility. Best management practices are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollution entering CDOT's storm drain system. BMPs also include treatment, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from material storage. BMPs include structural and nonstructural controls.

Resources for BMPs during construction of a facility

- EPA Storm Water Phase II Menu of BMP's http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm
- International Stormwater BMP Database www.bmpdatabase.org
- International Erosion Control Association www.ieca.org/resources/TS6ErosionSedimentControl.asp

Resources for BMPs during operation of a facility

- Industrial and Commercial Handbook www.cabmphandbooks.com/Industrial.asp
- Industrial Facilities Best Management Practices www.ci.santa-cruz.ca.us/pw/Stormwater2004/Att16.pdf
- Best Management Practices for Industrial Storm Water Pollution Control www.emd.saccounty.net/Documents/Info/Sacramento%20 Industrial%20BMP%20Manual%20Nov.pdf

For more information on CDOT Utility Permits: www.dot.state.co.us/UtilityProgram/



For more information on CDOT Access Permits: www.dot.state.co.us/AccessPermits/index.htm

For more information on CDOT's Water Quality Program:

Contact: Rick Willard

Environmental Programs 4201 East Arkansas Avenue Shumate Building Denver, CO 80222

303-757-9343

Richard.Willard@dot.state.co.us

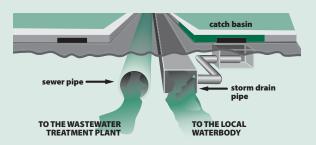
CDOT's stormwater program website: www.cdoth2o.com

CDOT MS4 Helpline: 303-918-7535

CDOT Illicit Discharge Hotline: 303-512-4H20 (4426)



Water Quality Program INDUSTRIAL FACILITIES PROGRAM



Stormwater runoff enters the storm drain system, which is different from the wastewater system. Stormwater runoff drains to waterways untreated.

What is stormwater runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like roads and sidewalks prevent stormwater from naturally soaking into the ground.



Why is stormwater runoff a problem?

Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into CDOT's storm drain system or directly into a stream, river, lake, wetland, or reservoir. Anything that enters CDOT's storm drain system is discharged untreated into the waterways we use for fishing, swimming, and providing drinking water.

CDOT has a permit from the Colorado Department of Public Health and the Environment (CDPHE) to discharge stormwater from our storm drain system. The permit states that only stormwater (and a few other allowable discharges like landscape irrigation overflow) can be discharged from CDOT's storm drain system. Pollutants, such as dirt; fertilizers; pesticides; and oil and grease, antifreeze; and other automotive fluids are strictly prohibited from being disposed of in CDOT's storm drain system.

As part of the permit, CDOT has several different programs to prevent pollutants from entering the storm drain system. The programs are:

- Construction sites program
- New development and redevelopment program
- Illicit discharges program
- Industrial facilities program
- Public education and involvement program
- Pollution prevention and good housekeeping program
- Wet weather monitoring program





CDOT has a program to identify and eliminate any discharge to their storm drain system that is not composed entirely of stormwater (unless authorized by another permit from CDPHE). Allowable discharges into CDOT's storm drain system include the following:

- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration to separate storm sewers
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- Individual residential swimming pool and hot tub discharges
- Individual residential street washing
- Water-line flushing
- Flows from riparian habitats and wetlands
- Flows from emergency fire fighting activities
- Water incidental to street sweeping (including associated side walks and medians) and that is not associated with construction

Industrial facilities program

CDOT issues Utility Permits to those utility companies, industry, or others wishing to install, adjust, relocate, remove, or maintain utilities in CDOT's right-of-way. CDOT issues Access Permits for building access from private property (driveways) to state highways (driveways). These two permits are issued and inspections are conducted through CDOT's six regional offices located throughout Colorado. CDOT's Water Quality Program tracks and maintains a record of any permittee that ties into CDOT's storm drain system.

CDOT's Industrial Facilities Program is focused on educating those industrial facilities that discharge stormwater into CDOT's storm drain system. Under this program, CDOT also educates industrial facilities on the proper management of *potential* pollutants that could enter the CDOT storm drain system.

Industrial facilities include a site that includes any of the following activities for any of the following categories of industries:

Activities

- Manufacturing, processing, raw materials storage
- Industrial plant yards
- Access roads/rail lines used to carry raw materials, manufactured products, waste materials, or byproducts
- Material handling
- Refuse site
- Application or disposal of process waste waters
- Storage and maintenance of materials handling equipment
- Residual treatment, storage, or disposal
- Shipping and receiving areas
- Manufacturing buildings
- Storage areas used (including tank farms) for raw materials and immediate and final products
- Areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater

■ Categories of Industries

- Manufacturing
- Food and kindred products (SIC 20)
- Tobacco products (SIC 21)
- Textile mill products (SIC 22)
- Apparel and other textile products (SIC 23)
- Lumber and wood products (SIC 24)
- Furniture and fixtures (SIC 25)
- Paper and allied products (SIC 26)

- Printing and publishing (SIC 27)
- Chemicals and allied products (SIC 28)
- Petroleum and coal products (SIC 29)
- Rubber and miscellaneous plastics (SIC 30)
- Leather and leather products (SIC 31)
- Stone, clay, and glass products (SIC 32)
- Primary metal industries (SIC 33)
- Fabricated metal products (SIC 34)
- Industrial machinery and equipment (SIC 35)
- Electronic and electric equipment (SIC 36)
- Transportation equipment (SIC 37)
- Instruments and related products (i.e., search/ navigation, measuring and controlling, medical, photographic, watches) (SIC 38)
- Miscellaneous manufacturing industries (i.e., jewelry, silverware, musical instruments, toys, sporting goods, office/art supplies, caskets, brooms, floor coverings, signs) (SIC 39)
- Mining: metal, coal, oil and gas, nonmetallic minerals (SIC 10–14)
- Oil and gas exploration, production, processing, or treatment operations
- Transportation facilities which involve vehicle maintenance, equipment cleaning, and airport deicing, including
- Railroad transportation (SIC 40)
- Local and interurban passenger transit (SIC 41)
- Trucking and warehousing (except farm products and refrigerated warehousing) (SIC 42)
- Postal service (SIC 43)
- Water transportation (SIC 44)
- Air transportation (SIC 45)
- Petroleum bulk stations and terminals (SIC 5171)
- · Hazardous waste, treatment, storage or disposal
- Landfills, land application sites, and open dumps that receive industrial wastes
- Recycling facilities, metal scrap yards, battery reclaimers, salvage yards, automobile junkyards for used motor vehicle parts or scrap and waste materials
- Steam electric power generating facilities including coal handling sites
- Wastewater treatment works for municipal and domestic sewage or biosolids having a design flow of 1 MGD or more (except farm lands and domestic gardens)
- Construction activity resulting in a disturbance of 5 acres or more, including clearing, grading, and excavation



CDOT defines a utility or utility facility as any privately, publicly, or cooperatively owned line, facility, or system producing, transmitting, or distributing the following

- Communications
- Cable television
- Power
- Electricity
- Light
- Heat gas
- Oil
- Crude products
- Water steam
- Waste
- Stormwater not connected with highway drainage
- Other similar commodity

