

# **Appendices**



## Appendix A

# **U.S. Environmental Protection Agency**

## **National Pollutant Discharge Elimination System (NPDES)**

### **Construction Site Storm Water Runoff Control**

#### **Regulatory Text**

(i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.

(ii) Your program must include the development and implementation of, at a minimum:

- A. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
- B. Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;
- C. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- D. Procedures for site plan review which incorporate consideration of potential water quality impacts;
- E. Procedures for receipt and consideration of information submitted by the public, and
- F. Procedures for site inspection and enforcement of control measures.

#### **Guidance**

Examples of sanctions to ensure compliance include nonmonetary penalties, fines, bonding requirements, and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local (ESC) requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority

sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf).

[http://cfpub.epa.gov/npdes/stormwater/menuofbmps/con\\_site.cfm](http://cfpub.epa.gov/npdes/stormwater/menuofbmps/con_site.cfm)

**Appendix B**

**Erosion and Sediment Control Inspection List**



**City of Casper**  
**Erosion and Sediment Control Inspection List**

The Contractor or Agent shall inspect all BMPs at a minimum of once every two (2) weeks and after each significant storm event.

Project Name:

Project Address/Location:

Date:

Time:

Temp:

Weather (rain, snow, wind, etc.):

Inspected by:

Construction Activities	Construction Sequence		
	Today	Planned for This Week	Planned for Next Week
Grading			
Excavation			
Utility Construction			
Foundations			
Structural Work			
Asphalt Paving			
Landscaping			

Erosion and Sediment Control Measures								
BMP	Practice Used		To Be Constructed		Requires Maintenance		Needs Replacement (Not Functional)	Comments
	Yes	No	Yes	No	Yes	No		
Preservation of Vegetation								
Temporary Seeding								
Permanent Seeding								
Sod								
Mulch								
Geotextiles								
Soil Retention								
Chemical Stabilization								
Outlet Protection								
Inlet Protection								
Stream Bank Stabilization								
Diversion Swale								
Sediment Basin								
Silt Fencing								
Erosion Control Fencing								
Stabilized Exits								
Dust Control								
Street Sweeping								



**Appendix C**

**City of Casper Municipal Code Chapter 12.20**



## CHAPTER 12.20

### EROSION AND SEDIMENT CONTROL\*

#### Sections:

12.20.005	Purpose.
12.20.010	Definitions.
12.20.030	Erosion and sediment control - Permit requirements.
12.20.040	Exempt activities.
12.20.055	Erosion and sediment control - Permit application.
12.20.065	Erosion and sediment control - Plan requirements.
12.20.080	Erosion and sediment control - Fee and security requirements.
12.20.100	Erosion and sediment control permit—Issuance, expiration, extension, renewal.
12.20.110	Inspection requirements.
12.20.120	Building permit denial conditions.
12.20.130	Unauthorized work prohibited.
12.20.140	Stop work or permit suspension or revocation conditions.
12.20.150	Hazardous siltation or pollution - Notice and remedial measures.
12.20.170	Violation – Notice - Remedy and enforcement authority.
12.20.190	Violation - Penalty.

\*Prior history: Prior code Sections 17-1 – 17-14 and Ord. 22-04.

#### **12.20.005 Purpose.**

The purpose of this chapter is to:

- A. Develop a recognition that construction activities related to building, utility and street improvements intensify soil erosion during wind and surface water runoff events;
- B. Minimize soil erosion from wind and surface water runoff due to construction activities; and
- C. Develop methods and procedures to be designed and implemented for erosion and sediment control. (Ord. 10-94 § 1 (part), 1994)

#### **12.20.010 Definitions.**

For the purpose of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

- A. “City manager” means the city manager of the city of Casper, or his appointed designee.
- B. “Best management practices (BMP’s)” means schedules of activities, prohibitions of practices, procedures, and other management practices to prevent or reduce the pollution of water or air in the city. Best management practices (BMP’s) include treatment requirements, operating procedures, and practices for erosion and sediment control.
- C. “Construction activity” means any clearing, grading or excavation work which will disturb any ground surface area.

- D. "Permit" means an erosion and sediment control permit issued in accordance with this chapter which allows the permittee to do construction activity under the terms and conditions set forth in the permit.
- E. "De minimis" means of minimum impact.
- F. "Disturbed area" means that area of the land's surface disturbed by any work or activity upon the property by means including but not limited to: grading; excavation; stockpiling soil, fill, or other materials; clearing; vegetation removal; removal or deposit of any rock, soil, or other materials; or other activities which expose soil. Disturbed area does not include the tillage of land that is zoned agricultural or the tillage of a parcel zoned PUD (Planned Unit Development) that permits agricultural uses. It also does not include performance of emergency work necessary to prevent or ameliorate an immediate threat to life, property, or the environment. Any person performing such emergency work shall immediately notify the city manager of the situation and the actions taken. The city manager may, however, require such person to obtain an erosion and sediment control permit to implement remedial measures to minimize erosion resulting from the emergency.
- G. "Excavation" means the act of removing earth material by mechanical means, including, but not limited to, the removal or destruction of natural topsoil, vegetation or natural groundcover.
- H. "NPDES" means National Pollutant Discharge Elimination System.
- I. "One acre" means that the land disturbance is equal to one acre (not necessarily contiguous) in size. Disturbances less than one acre of total land area that are part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres, are included in the one acre requirements.
- J. "Permittee" means the person who is granted an erosion and sediment control permit under this chapter.
- K. "Person" means any individual person, developer, contractor, partnership, corporation, association, estate, trust, or two or more individuals having a joint or common interest in property.
- L. "Security" means bond, irrevocable letter of credit, cashier's check, cash, certificate of deposits, or other acceptable means of security approved of by city.
- M. "Site" means any lot or parcel of land, or continuous combination thereof under the same ownership, where construction work is performed or permitted.
- N. "Stabilization" means the actions necessary to prevent windborne or water-related erosion on disturbed earthwork, by either temporary or permanent methods. (Ord. 22-04 § 1-5 (part), 2004)

### **12.20.030 Erosion and sediment control--Permit requirements.**

It is unlawful for any person to do any construction activity that disturbs areas one acre or greater in size within the corporate limits of the city, except as exempted by Section 12.20.040 of this chapter, or cause the same to be done, without first obtaining a permit for such construction activity from the Community Development Office. (Ord. 22-04 § 6 (part), 2004)

### **12.20.040 Exempt activities.**

A permit is not required for the following construction activity work;

- A. An excavation below finished grade for basements and footings of a single-family residential building, retaining wall, or other structure authorized by a valid building permit;
- B. Municipal landfill sites controlled by other local, state, or federal regulations;
- C. Construction activities performed by the city or a joint powers board of which the city is a member;
- D. Construction activities related to trenching, excavation, and backfilling of underground utilities which are funded and administered by the city or joint powers boards;
- E. Construction activities which create a “de minimis” amount of erosion and sediment control problem as determined by the city manager. (Ord. 22-04 § 7-8 (part), 2004)

### **12.20.055 Erosion and sediment control--Permit application.**

Persons desiring to perform construction activities in the city shall acquire and fill out an erosion and sediment control application from the Community Development Office. The erosion and sediment control application shall contain the following information items:

- A. The name, mailing address, and telephone number of the property owner and permittee;
- B. The name, address, and telephone number of the person or permittee performing construction activities on the site;
- C. The legal description of the parcel where construction activities are to be performed;
- D. The valuation of the security required under this chapter;
- E. The permit fee required under this chapter and established by resolution;
- F. A detailed description of the work to be performed at the site;
- G. Signature of the permittee for whom the construction activities are being performed;
- H. A statement of whether a general NPDES storm water permit has been issued by the Wyoming Department of Environmental Quality. (Only required

when construction activities exceeds 5 acres in size.) (Ord. 22-04 § 9 (part), 2004)

### **12.20.065 Erosion and sediment control--Plan requirements.**

Persons wishing to perform construction activities shall prepare an erosion and sedimentation control plan. The plan shall contain the following items:

A. Site Description. The site description shall be broken down into the following elements:

1. A description of the nature of the activity;
2. Estimates of the total area of the site that is expected to be disturbed by excavation;
3. A description of the intended sequence of major activities which disturb soils for major portions of the site. Major activities shall include but not be limited to all excavation and backfill operations;
4. A description of when and how best management practices shall be incorporated into the work. Technical specifications of the best management practices, materials, and resources shall be provided with the erosion and sediment control plan.
5. Certification by a licensed civil engineer, that the best management practices proposed for the disturbed area shall be sufficient to reduce erosion and control sediment control for all disturbed areas one (1) acre (not necessarily contiguous) or greater in size.
6. Drawings that show disturbed areas within the construction zone and the institution of best management practices to minimize erosion and control sediment control.

B. Best management practices for erosion and sediment control.

1. Each plan shall include a description of the best management practices (BMP's) that will be implemented at the construction site, as well as the party that will be responsible for implementing the BMP's. BMP measures shall constitute one or more of the listed practices:
  - a. Temporary seeding;
  - b. Mulching;
  - c. Geotextiles;
  - d. Chemical stabilization;
  - e. Permanent seeding and planting;
  - f. Preservation of natural vegetation;
  - g. Sod stabilization;
  - h. Stream bank stabilization;
  - i. Soil retaining measures;
  - j. Installing fencing at right angles to the prevailing wind at a spacing that does not exceed a ratio of 10:1 (width to height);
  - k. Diversion swale / berm;
  - l. Outlet protection;

- m. Sediment basin;
- n. Silt fencing;
- o. Inlet protection;
- p. Street sweeping;
- q. The height of soil piles for residential construction shall not exceed four feet in height. In all cases soil piles shall be controlled by best management practices to control erosion and sediment from leaving the construction site whether by wind erosion or erosion by precipitation.

Plans prepared for acquiring a national pollutant discharge elimination system (NPDES) general storm water permit from the Wyoming Department of Environmental Quality may be submitted to the city manager in lieu of preparing a separate plan for the city. Persons shall be required to obtain an erosion and sediment control permit, pay the necessary fees, and acquire the necessary securities to perform construction activities even if a NPDES permit is issued by the Wyoming Department of Environmental Quality.

Watering of construction areas shall not constitute an approved BMP for erosion and sediment control. Other BMP's shall be provided to the city engineer's office for their approval prior to implementation on the construction site.

The permittee shall install additional BMP's as necessary when the construction site is abandoned for more than one week, unless written authorization is granted by the city manager.

2. Guidance for the adoption of best management practices to be used for erosion and sediment control may be obtained from the following sources:
  - a. EPA documents titled: Guidance Manual for Developing Best Management Practices (BMP); National Menu of Best Management Practices (BMPS) for NPDES Storm Water Phase II; Storm Water Management Fact Sheet; Record Keeping; Storm Water Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices; Storm Water Management for Construction Activities; Summary Guidance on Developing Pollution Prevention Plans and Best Management Practices and other such publications as they may be supplemented, amended, or deleted from time to time.
  - b. Erosion and Sediment Control Measures adopted by the Wyoming Department of Transportation;

- c. Urban Drainage And Flood Control District, Denver, Colorado, Volume 3, Best Management Practices, as it may be amended, updated, supplemented or deleted from time to time.
- d. Such other sources of information as are determined reliable by the city manager. (Ord. 22-04 § 10-11 (part), 2004)

**12.20.080 Erosion and sediment control--Fee and security requirements.**

- A. Prior to issuance of an erosion and sediment control permit, as provided by this chapter, the permittee is required to post with the city a performance security, cash, letter of credit, or other approved security in the amount of five cents per square foot, for the total area included in the permit, with a minimum security amount of one thousand dollars.
- B. The cash, performance security, letter of credit, or other approved security or portion remedy thereof, shall be released after one year following the date of final completion of implementation of BMP's on the construction site, or as determined by the city manager.
- C. All persons applying for an erosion and sediment control permit shall be charged an inspection and review fee as established by resolution.
- D. The permittee shall purchase and maintain such performance security specified in subsection A of this section, which will provide protection from claims set forth below which may arise out of, or result from permittee's performance under the issuance of an erosion and sediment control permit, whether it is to be performed or furnished by permittee, or by anyone directly or indirectly employed by permittee to perform or furnish any of the work within the disturbed site, or by anyone for whose acts any of them may be liable:
  - 1. Claims for damages, other than to the work itself because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
  - 2. Shall contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least thirty days prior written notice has been given to owner; and
  - 3. Shall remain in effect until at least on year after permittee completed the work and all defective work is corrected, removed, and replaced, and owner provides a written notice of release. (Ord. 22-04 § 12 (part), 2004)

**12.20.100 Erosion and sediment control permit--Issuance, expiration, extension, renewal and maintenance.**

- A. Upon compliance with the terms of this chapter, and any rules and regulations promulgated hereunder, the city manager shall issue an erosion and sediment control permit.
- B. Every permit issued under this chapter shall expire and become null and void if the construction activity authorized is not commenced within one year from the date of such permit. In the event a permit expires, the city shall return any security required if necessary.
- C. Any permittee holding an unexpired permit may apply for an extension of the permit. Such extension may be granted for a period not to exceed one year and shall not be extended unless the security required is in full force and effect for the period of the extension.
- D. Any expired permit may be renewed by the original permittee after expiration. No new fee shall be required provided no changes have been made or will be made to the original plans and specifications for the earthwork. No expired permit shall be renewed unless the security required is posted with the city at the time of renewal.
- E. Issuance or denial of an erosion and sediment control permit shall be made as soon as possible, but not later than fifteen calendar days after receipt of an application for permit.
- F. The property owner shall be responsible for the maintenance of all permanent sediment and erosion control measures enacted pursuant to this chapter. All temporary sediment and erosion control measures shall be removed after work on the site has been completed and the measures are no longer needed. Should any property owner fail to adequately maintain the permanent sediment and erosion measures or remove the temporary measures, the city may, after notifying the owner of the required maintenance and/or removal and the owner failing to perform such maintenance and/or removal, enter the affected property and perform or cause to be performed the required work and assess the actual cost for such work against the property owner, and/or the property itself.
- G. If the permittee does not successfully complete all required work or violates any requirement of the permit or this chapter, the city may take corrective measures and charge the cost of such to the permittee. Such costs shall include the actual cost of any work deemed necessary by the city plus reasonable administrative and inspection costs and penalties. If the total of such costs exceeds the security, the permittee shall be responsible for payment of the remaining balance within thirty calendar days of receipt of an accounting of such from the city.
- H. Shall remain in effect for all lots in a subdivision, unless a valid building permit has been issued for an individual lot. All site plan security shall remain in place until all required sediment and erosion control, drainage, and landscaping has been completed and approved. (Ord. 22-04 § 13-15 (part), 2004)

### **12.20.110 Inspection requirements.**

All construction activities for which a permit is required shall be subject to periodic inspections by the city manager to assure compliance with the approved permit. A final inspection will be conducted at the request of the permittee after the construction activity is completed, or, in the event a site is developed in phases, after each phase is completed. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices, and all erosion-control measures have been completed in accordance with the approved permit. In any case, no final approval shall be given until permanent soil stabilization has been accomplished and permanent vegetation established to the point where no significant soil erosion or sedimentation takes place. (Ord. 10-94 § 1 (part), 1994)

If the city manager determines that soils are leaving a disturbed area by wind or water erosion, such person may, in writing, direct the permittee on the site to install any sediment and/or erosion controls that are deemed necessary to minimize said sediment from migrating off site, including the issuance of stop work orders and/or suspension or revocation of any permit. (Ord. 22-04 § 16 (part), 2004)

### **12.20.120 Building permit denial conditions.**

No building permit or occupancy permit shall be issued for structures on the land described in the permit during any period in which the permittee refuses to complete the terms of the permit, or pay the cost thereof, or is in default of correcting any deficiencies in the program. (Ord. 22-04 § 17 (part), 2004)

### **12.20.130 Unauthorized work prohibited.**

It is unlawful for any permittee who has obtained a permit to do or cause to be done any construction activity authorized by such permit in a manner contrary to that authorized by the permit. (Ord. 22-04 § 18 (part), 2004)

### **12.20.140 Stop work or permit suspension or revocation conditions.**

- A. It shall be the duty and the obligation of the permittee to ensure that construction activities conducted under the authority of a permit authorized by this chapter are done in accordance with the permit and, if applicable, meet all of the requirements of the national pollutant discharge

Elimination system (NPDES) one (1) acre and larger construction permit or five (5) acre and larger construction permit as required by the state of Wyoming Department of Environmental Quality.

- B. In the event any construction activities are being done contrary to the terms of this chapter, or contrary to the terms of any permit authorizing such construction, the city manager may, in addition to any other remedies provided, order the construction activity stopped by notice in writing served upon the permittee engaged in doing the construction work and such permittee shall immediately stop such work or take corrective measures as specified by the city manager to comply with the terms of the permit or provisions of this chapter.
- C. The city manager may suspend or revoke any permit issued under the provisions of this chapter whenever the permit is issued in error, or on the basis of incorrect information supplied, or when the construction work for which the permit is issued is being done in violation of the terms of this chapter, or any rules and regulations promulgated hereunder. (Ord. 22-04 § 19 (part), 1994)

#### **12.20.150 Hazardous siltation or pollution--Notice and remedial measures.**

In the event the earthwork, or soil erosion, or siltation, or pollution of any surface water caused by the construction activity, constitutes an immediate hazard to the life, health, or safety of persons or property, the city manager may order the immediate cessation of any construction activities causing such hazard, and may further order the permittee to take any necessary remedial measures to abate such hazard.

- A. In the event of such imminent hazard, the city manager shall be authorized to notify the permittee, or the person authorized by the permittee to receive notice, in person or by telephone, and shall, as soon as reasonably possible, follow such notice with a written notice or order ordering the cessation of the earthwork and any remedial measures necessary for the abatement of the hazard.
- B. In the event the permittee fails to commence compliance with the requirements in the written notice within twenty-four hours of service of the written notice upon him, or the person authorized to receive notice and complete the same within a reasonable amount of time, the city manager is authorized to commence and complete the remedial measures at the expense of the permittee. (Ord. 10-94 § 1 (part), 1994)

#### **12.20.170 Violation--Notice--Remedy and enforcement authority.**

- A. In the event the city manager determines that the permittee is conducting construction activities in violation of the terms of this chapter, his permit or any rules and regulations promulgated pursuant to this chapter, and such does not constitute a hazard to the life, health, and safety of persons or property, the city manager shall notify the permittee in writing of the violation or violations.

1. Such notice shall specify the section or rule and regulation, or portion of the permit being violated, and shall further specify what action the permittee must take to remedy the violation.
  2. The notice shall further specify the time in which the permittee shall be allowed to commence and complete the remedial procedures. If no time is specified, the measures shall be commenced and completed within seven calendar days from the date the notice is served.
- B. In the event the permittee does not commence and complete the same in compliance with the written notice, the city manager is authorized to enter upon the property for which the permit has been granted, and commence and complete the remedial measures at the expense of the permittee. The permittee shall pay the city for all of its expenses incurred in doing remedial measures in compliance with this section, upon demand from the city. (Ord. 10-94 § 1 (part), 1994)

**12.20.190 Violation--Penalty.**

Any person who conducts any construction activity, not exempted by this chapter without first obtaining a permit therefor, or who violates the terms of this chapter, shall be deemed guilty of a misdemeanor. Each day such violation occurs shall be a separate offense. The penalty for such violation shall be that set forth in Chapter 1.28 of this code. (Ord. 10-94 § 1 (part), 1994)