## **CHAPTER 155**

## **EROSION AND SEDIMENTATION CONTROL**

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**155.01 TITLE.** A chapter amending City-wide standards for the quantity and quality of water that runs off land under construction within the City.

**155.02 PURPOSE.** The purpose of this chapter is to help protect the City's surface waters and quality of life by reducing the negative impacts of sediment, rainfall, melting snow and other water runoff.

**155.03 FINDINGS.** The U.S. EPA's National Pollution Discharge Elimination System ("NPDES") permit program requires certain individuals engaged in construction activities (applicant or applicants) to submit an application to the IDNR for a State NPDES General Permit No. 2. Notwithstanding any provision of this ordinance, every applicant bears final and complete responsibility for compliance with a State NPDES General Permit No. 2 and a City Erosion and Sediment Control (ESC) Permit and any other requirement of state or federal law or administrative rule.

**155.04 DEFINITIONS.** For the purpose of this chapter all words shall carry their customary meanings, except where specifically defined herein. The use of the present tense shall include the past and future tenses, and the future the present; the word "shall" is mandatory, while the word "may" is permissive; the singular number shall include the plural and the plural the singular.

1. "Best management practice" (or "BMP") means structural and non-structural measures, practices, techniques or devices employed to avoid or minimize sediment or other pollutants carried in runoff. 2. "Building" means any structure having a roof supported by columns or walls for the housing or enclosure of persons or corporation, animals, or property. When any portion thereof is completely separated from every other portion thereof by a division wall without openings, then such portion shall be deemed to be a separate building.

3. "Building Permit" means a permit issued by the Zoning Administrator stating that the proposed erection, construction, enlargement or moving of a building or structure referred to therein complies with the provisions of the Zoning Ordinance.

4. "City Engineer" means the officer designated and authorized by the City Council to carry out various functions as specified in this chapter.

5. "Clearing" means the stripping, grubbing, scalping or removal of trees and stumps, and removing and disposing of all vegetation and debris within the site, and includes the conditions resulting therefrom.

6. "Construction" means the erection, alteration, repair, renovation, demolition or removal of any building or structures; and the clearing, stripping excavating, filling grading and regulation of sites in connection therewith.

7. "Developer" means any individual, subdivider, firm, association, syndicate, partnership, corporation, trust, or any other legal entity commencing proceedings under this chapter to effect the development of land.

8. "Development" means construction of buildings, other structures, impervious surfaces, and/or soil disturbance to the extent that peak runoff rates and volumes are increased, in a location where no such features currently exist.

9. "Erosion" means the process of detachment, transport and deposition of soil, sediment or rock fragments by action of water, wind, ice or gravity.

10. "Erosion control plan" means a written description and detailed site plan of best management practices designed to meet the requirements of this ordinance submitted by the applicant for review and approval by the City Engineer.

11. "Filling" means to deposit, place push, pull, or transport soil, earth, sand, gravel, rock or any similar material by any act, and includes the conditions resulting therefrom.

12. "Floodplain" means a flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding.

13. "Hazardous" means any danger to public health, welfare and safety including exposure to risk of damage to property or liability for personal injury; or risk of harm to land, air, or water resulting in environmental degradation. Hazards can include but are not limited to flooding and ponding, compaction and settling, landslides, earthquakes, toxic chemicals, radiation, fire and disease.

14. "Land disturbing activity" (or "disturbance") means any manmade alteration of the land surface that may result in a change in the topography or existing vegetative or non-vegetative soil cover, or may expose soil and lead to an increase in soil erosion and movement of sediment. Land disturbing activity includes clearing and grubbing for future land development, excavating, filling, grading, building construction or demolition, and pit trench dewatering.

15. "Major Erosion Control (ESC) Permit" applies to sites with a disturbance area greater and two (2) acres and any development that is considered a subdivision.

16. "Minor Erosion Control (ESC) Permit" applies to sites with a disturbance area less than two (2) acres. All that needs to be submitted is the information to complete the Minor ESC Permit Form.

17. "Ordinary high water mark (OHWM)" means the highest level reached by a body of water that has been maintained for a sufficient period of time to leave evidence on the landscape.

18. "Permittee" means any person to whom an erosion control permit is issued pursuant to this chapter or who is subject to inspection under this chapter.

19. "Plans" means the profiles, typical cross sections, working drawings and supplemental drawings; site, grading, drainage, and erosion and sedimentation plans as approved by the City Engineer or exact reproduction thereof, which show the location, character, dimension and details of the work.

20. "Runoff" means water from rain, snow or ice melt, or dewatering that moves over the land surface via sheet or channelized flow.

21. "Sediment" means solid earth material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity or ice, and has come to rest on the earth's surface at a different site.

22. "Site" means the entire area included in the legal description of which the land disturbing or land development activity will occur.

23. "Soil" means all earth material of whatever origin that overlies bedrock, and may include the decomposed zone of bedrock which can be readily excavated by mechanical equipment.

24. "Specifications" means the general term comprising all the directions, provisions and requirements, together with such as may be added or adopted as supplemental specifications or special provisions approved by the City Engineer.

25. "Stabilized" means that all land disturbing activities are completed and that a uniform, perennial vegetative cover has been established over the entire surface with a density of at least 70%, or other surfacing material is in place and the risk of further soil erosion is minimal, as determined the City.

26. "Structure" means a combination of materials other than a building to form a construction and includes, among other things, stadiums, platforms, radio towers, fences and signs.

27. "Stormwater" has the same meaning as the term "runoff".

28. "Surface waters" means all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within the City of Asbury.

29. "Wetlands" means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions.

**155.05 ADMINISTRATION.** The Erosion and Sediment Control Ordinance shall be administered by the City Engineer.

**155.06 ULTIMATE RESPONSIBILITY.** The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore this chapter does not intend nor imply that compliance by any person will ensure that there will be no erosion or sedimentation from a land disturbing activity, or contamination, pollution, or other unauthorized discharge of pollutants. This chapter does not relieve any person of the responsibility to obtain a State NPDES General Permit No. 2 and adhering to the requirements therein, nor does it relieve any person from the responsibility of following any other applicable local, State, or Federal regulation.

**155.07 FEES.** Fees are set by the City as follows:

1. For any one site with two acres or more of disturbed area, the fee is \$285.00 plus \$100.00 per acre for every acre or portion of an acre over two acres.

2. Any development that is considered a subdivision, or requires a plat, would be charged the fees stated above.

3. For any one site with between 4000 square feet and 2 acres of disturbed area, the fee is \$285.00.

4. Fees may be modified by the City by resolution.

**155.08 MANUAL.** The City of Asbury Erosion and Sediment Control BMP Design Standards Manual shall be available for inspection and/or copying during regular business hours at City Hall.

**155.09 APPLICABILITY.** Construction site erosion plans and permit are required for any of the following:

- 1. Land disturbance of 4,000 square feet or more.
- 2. Land disturbance on a slope more than 6%.

3. Land disturbance involving excavation and/or filling more than 200 cubic yards of material.

4. Land disturbance of more than 100 lineal feet of road ditch, grass waterway, or other area where surface drainage flows in open channels.

- 5. New public or private roads or access drives longer than 150 feet.
- 6. Development that requires a land division.

7. Land disturbance less than 2,000 square feet that has a high risk of soil erosion or water pollution, as determined by local ordinance administration.

8. Land disturbance of any size within any of the following areas:

A. Within the watershed of a cold water stream.

B. Within 300 feet of the ordinary high-water mark of any navigable water or 1000 feet of a lake or pond.

- C. Within the 100 year floodplain.
- D. Within 75 feet of an inland wetland.

**155.10 PERFORMANCE STANDARDS.** Acceptable Soil Loss Limits: Maximum rate of off-site sediment yield permitted from projects requiring an erosion control plan and permit is 5 tons per acre per year leaving the site as determined by the Revised Universal Soil Loss Equation 2 (RUSLE-2) Worksheet or by other methods as approved by the City Engineer.

**155.11 MANAGEMENT PRACTICES.** A comprehensive guide to managing erosion on construction sites has been developed by the Iowa

Department of Natural Resources. The "Iowa Construction Site Erosion Control Manual" can be found on the Internet at:

http://www.iowadnr.gov/water/stormwater/forms/construction\_man.pdf Stabilization control measures listed in this guide include grass channels, dust control, mulching, seeding and fertilizing, silt fence, sod, surface roughening, vegetative filter strip, compost blankets, compost filter tubes, rolled erosion control products (RECPs), wattles, flocculants, and turf reinforcement mats (TRMs). Structural control measures listed in this guide include benches, compost filter berms, check dams, temporary slope drains, energy dissipaters, flotation silt curtains, rock chutes and flumes, gabions, inlet protection, jetties, level spreaders, rock outlet protection, retaining walls, stabilized construction entrances, rip-rap, sediment barriers, sediment basins, streambank protection, stream channel enhancement, subsurface drainage, and diversion structures. The guide contains figures and tables summarizing the appropriate use of each of the measures listed, as well as providing specifications and installation guidelines for each. The use of this guide is strongly encouraged when choosing management practices for a construction site.

**155.12 CONSTRUCTION SITE EROSION CONTROL SUBMITTAL.** \*\*PLEASE NOTE\*\* A DNR issued General Permit No. 2 will continue to be necessary prior to the beginning of any construction activity that disturbs more than one or more acres or which is part of a larger project that disturbs one or more acres in total.

**155.13 MINOR EROSION CONTROL (ESC) PERMIT.** A Minor Erosion Control (ESC) Permit applies to sites with a disturbance area greater than 4000 square feet and less than two (2) acres. All that needs to be submitted is the information to complete the Minor ESC Permit Form.

**155.14 MAJOR EROSION CONTROL (ESC) PERMIT.** A Major Erosion Control (ESC) Permit applies to sites with a disturbance area greater and two (2) acres and any development that is considered a subdivision. See below for details on Major ESC submittal requirements.

**155.15 SUBMITTAL OF AN EROSION CONTROL PLAN.** The submittal of an erosion control plan will require completion of an ESC Permit Form, a descriptive narrative of the site, a site plan, and other supporting documents. Note that many of the items coincide with the Iowa DNR's Storm Water Pollution Prevention Plan (SWPPP) requirements.

1. Site Description including the following items:

A. The nature of the construction activity (e.g. roadway construction, utility construction, single family residential

construction, etc.) and major soil disturbing activities (i.e. clearing, grading, utility work, paving, home building, etc.).

B. An estimate of the total area of the project site and the total disturbed area.

C. Watershed size for each drainage area to determine how much of the area to be developed is affected by other drainage flowing through the construction site; to design culvert sizes and drainage channels' to determine the sediment produced by the site under construction.

D. A summary of available information describing the existing soil and soil properties (e.g. type, depth, infiltration, erodibility, etc.).

E. Information describing the quality of the stormwater runoff currently discharged from the site (required only if data exists, it is not necessary to collect and analyze runoff).

F. The name of the receiving waters and ultimate receiving waters of runoff from the site. If the site drains into a municipal storm sewer system, identify the system, and indicate the receiving waters to which the system discharges.

G. List the anticipated sequence of major construction activities and clearly describe the order for implementation of the control measures.

H. Describe the temporary and permanent stabilization control measures used.

I. Describe the maintenance procedures required to keep the controls functioning in an effective manner. For each type of erosion or sediment control practice utilized, a description of the proper methods for maintenance must be provided. In addition, maintenance should include removal of sediment from streets, ditches, or other off-site areas.

J. Describe practices for preventing hazardous materials that are stored on the site from contaminating stormwater.

K. When there is a possibility for non-stormwater related discharges from the site, they must be identified and include a description of the measures that will be implemented to prevent these flows from becoming contaminated by hazardous materials or sediment. Allowable non-stormwater related flows include flows from sump pumps, fire hydrant and potable waterline flushing, vehicle washing, external building washdown, pavement

washwater, air conditioning condensate, springs, and footing drains, provided that they are not contaminated by detergents or spills/leaks of toxic/hazardous materials.

L. Describe a method to limit the off-site tracking of sediment by vehicles.

2. A site map (or maps) including the following items:

A. Limits of soil-disturbing activities – define construction boundaries to limit the disturbance to the smallest area possible. Identify areas to be preserved or left as open space, existing drainage patterns, drainage areas for each discharge location (including off-site drainage), proposed grading, *surface waters* and wetlands, and locations where stormwater is discharged to surface water.

B. Plan drawing of site to show the location of property lines, lot dimensions, limits of impervious area, land cover type, natural and artificial water features, 100-yr flood plain boundaries, wetland boundaries, and locations of proposed erosion controls.

C. A plan note stating that areas not subject to construction activity for 21 days or more must have stabilizing measures initiated within 14 days after construction activity has ceased.

D. A plan note stating that any waste materials from the site must be properly disposed of.

E. In conformance with IDNR General Permit No. 2 Part IV D.2.A(2)(a), for disturbed drainage areas smaller than 10 acres, a sediment basin or sediment control along the sideslope and downslope boundaries of the construction area is required. For sites with 10 acres or more of disturbed drainage areas that drain to a common location, a sediment basin providing 3600 cubic feet of storage per acre drained is required where attainable. The storage requirement does not apply to flows from undisturbed areas or stabilized areas that have been diverted around the sediment basin. When sediment basins of the size required are not attainable, other methods of sediment control that provide an equivalent level of protection are required.

3. Other supporting materials:

A. Revised Universal Soil Loss Equation 2 (RUSLE-2) Worksheet or computations from other approved methods to show that 5.0 ton/Ac/yr soil loss standard is being met. B. List additional state or local regulations that apply to the project.

C. List any applicable procedures or requirements specified on plans approved by state or local officials.

**155.16 INDEMNIFY CITY.** The application form signed by the applicant for a City ESC permit shall include the following statement:

The undersigned Applicant hereby agrees to defend, indemnify and hold the City, its officers, and employees harmless from any and all claims, damages or suits of any kind arising directly or indirectly out of any act of commission or omission by the Applicant, or any employee, agent, assign, contractor or subcontractor of the Applicant, in connection with the Applicant's State NPDES General Permit No. 2 and/or City ESC Permit.

**155.17 PERMIT ISSUANCE OR DENIAL.** Upon receipt of an application for a City ESC permit, if the City finds that the application complies with this chapter, the City shall issue a City ESC permit in accordance with this chapter. If the City finds that the application fails to comply with this chapter, the City shall provide the applicant a schedule identifying wherein the application does not comply with this chapter.

**155.18 CONDITION PRECEDENT TO ISSUANCE OF BUILDING PERMIT.** Issuance of a City ESC permit shall be a condition precedent to the issuance of a City building permit for the land disturbing activity described in the application. For any application submitted to the City on or after August 1, 2011, no City ESC permit shall be issued until the site plan has been approved by the City.

**155.19 INFORMATION REQUIRED.** For so long as any land disturbing activity is subject to a state NPDES General Permit No. 2, the City ESC permit shall be required. At all times while the land disturbing activity is being conducted, the permittee shall provide the City with the following current information:

1. The name, address and telephone number of the person on site designated by the property owner where the land disturbing activity is being conducted who is knowledgeable and experienced in erosion and sediment control and who will oversee compliance with a state NPDES General Permit No. 2 and the City ESC permit; and

2. The name(s), address(es) and telephone number(s) of the contractor(s) and/or subcontractor(s) who will implement each erosion and sediment control measure identified in the SWPPP.

**155.20 TRANSFER OF ESC PERMIT RESPONSIBILITIES.** Upon the sale of property for which a City ESC permit has been issued, the permittee may transfer the City ESC permit to the new property owner if the permittee provides the City with written confirmation that the permittee has transferred a state NPDES General Permit No. 2 in accordance with the guidelines established by a state NPDES General Permit No. 2 and the permittee pays the permit transfer fee established by the City. The permittee shall notify the City of any application to the IDNR for the release of any property from a state NPDES General Permit No. 2. Absent such written confirmation of transfer, the permittee shall remain responsible for City ESC permit compliance on the property sold.

**155.21 DISCONTINUANCE OF PERMIT.** A permittee who discontinues a State NPDES General Permit No. 2 shall immediately submit to the City copies of the materials and documents submitted to the IDNR in support of the discontinuation.

**155.22 NPDES NONCOMPLIANCE.** Noncompliance with any provision of a state NPDES General Permit No. 2 by any person required by law or administrative rule to comply with the terms of a state NPDES General Permit No. 2 constitutes a violation of this chapter. Each failure to comply with a State NPDES General Permit No. 2 shall constitute a separate violation of this chapter.

**155.23 MONITOR SITE CONDITIONS; INSPECTION.** Upon issuance of a state NPDES General Permit No. 2 or a City ESC permit, a permittee shall monitor site conditions and perform inspections in a manner consistent with state NPDES General Permit No. 2 requirements and report to the City any change of circumstances or site conditions which the permittee knows or should know pose a risk of stormwater discharge in a manner inconsistent with the permittee's SWPPP, state NPDES General Permit No. 2 and/or City ESC permit. Inspections are required every seven calendar days, and within 24 hours of the end of a 0.5 inch or greater storm. An inspection form will be supplied to the contractor for use. The inspections must include the following:

A. Inspect disturbed areas and areas used for storage of materials for evidence of pollutants leaving the site and/or entering the storm drainage system.

B. Inspect erosion and sediment control measures identified in the written site description and plan to ensure they are functioning correctly.

C. Inspect discharge locations to ascertain if the current control measures are effective in preventing significant impacts to the receiving waters.

D. Inspect locations where vehicles enter/exit the construction site for signs of sediment tracking. All entrances and exits shall be stabilized with a tracking pad. In addition, any roads where construction tracking leaves gravel, dust or sediment, must be swept at the end of every workday.

E. Implement required maintenance or changes to the written site description and plan identified during the inspection within seven calendar days following the inspection.

F. Inspections should be held to Iowa DNR SWPPP requirements.

G. The City, at their sole discretion, may perform spot checks and inspections at any time without warning.

**155.24 RIGHT OF ENTRY.** The City Engineer and/or City Inspector may enter upon any property where land disturbing activity is being conducted to determine compliance with this chapter.

**155.25 NOTIFY CITY OF COMPLETION OF REQUIREMENTS.** Prior to initiating any land disturbing activity that requires a city ESC permit, the permittee shall notify the City when all measures required by the applicant's SWPPP have been accomplished on site.

**155.26 PERIODIC INSPECTIONS.** Upon issuance of a City ESC permit, the City Engineer and/or City Inspector may conduct an inspection at least once every two (2) weeks to monitor and report on compliance with a state NPDES General Permit No. 2 and the City ESC permit.

**155.27 CONDITIONS OF NONCOMPLIANCE; CORRECTIVE ACTION.** At any time the City receives any information that the site conditions pose a risk of stormwater discharge in a manner inconsistent with the permittee's SWPPP, state NPDES General Permit No. 2 and/or City ESC permit, the City shall provide the permittee with a schedule identifying the conditions of noncompliance. The permittee shall immediately commence corrective action and shall complete such corrective action within twenty four (24) hours after receipt of the schedule. For good cause shown, the City may extend the deadline for completing such corrective action.

**155.28 MUNICIPAL INFRACTION.** A violation by any person of any provision of this chapter, including the commencing, constructing, causing, or

permitting the commencement of any land disturbing activity without a City ESC permit as required by this chapter, constitutes a municipal infraction.

**155.29 ABATEMENT REQUIRED.** The City may order compliance with this chapter by written notice of violation to a person violating this chapter setting forth the time within which remediation or restoration must be completed and that if the person fails to complete such remediation or restoration within such time, the City shall cause such remediation or restoration work to be done and the person shall be liable for such costs.

**155.30 STOP WORK ORDER.** The City may issue an order to stop all construction activities on any property where land disturbing activity is being conducted until conditions of noncompliance with this chapter are corrected. Construction activity, other than that which is required to correct a condition of noncompliance, prior to the correction of the conditions of noncompliance, shall constitute a violation of this chapter.

155.31 ENFORCEMENT AND PENALTIES. The City will work with applicants for consistent enforcement of the City minimum standards. The City requires builders, developers and other site planners to submit erosion and sediment control plans. If a site is not in compliance with its plan as determined by inspection, a stop work order may be issued and the City may levy fines. A violation by any person of any provision of this chapter, including the commencing, constructing, causing or permitting the commencement of any land-disturbing activity without submittals as described within this chapter and the City, will be subject to abatement, a stop work order, and/or cited for a Municipal Infraction as per Chapter 3 of the Code of Ordinances of the City of Asbury, Iowa. The City may order compliance by written notice of violation setting forth the time within which remediation or restoration must be completed and that if the person fails to complete such remediation or restoration within such time, the City shall cause such remediation or restoration work to be done and the person shall be liable for such costs. The City may issue an order to stop all construction activities on any property where land-disturbing activity is being conducted until conditions of non-compliance are corrected. Construction activity, other than that which is required to correct a condition of non-compliance, prior to the correction and the conditions of non-compliance, shall constitute a further violation.

**155.32 APPEAL.** The determination by the City of a violation of this chapter may be appealed by an aggrieved party to the City Council, provided written notice of appeal is received by the City within fifteen (15) days from the date of the notice of violation. Upon hearing, the City Council may rescind, modify or affirm the notice of violation.

**155.33 ENFORCEMENT.** The City Engineer and/or City Inspector may enter upon any property where land disturbing activity is being conducted and take any and all action necessary to abate any violation of this chapter and/or remediate or restore the property to its condition prior to the land disturbing activity. It shall be a violation of this chapter for any person to refuse to allow the City Engineer and/or City Inspector to enter upon property for such purposes.

**155.34 COST OF ABATEMENT OF VIOLATION.** Within thirty (30) days after abatement of a violation of this chapter, the owner of the property shall be notified in writing by the City of the cost of abatement, including administrative costs. The property owner may file a written protest with the City objecting to the amount of the cost of abatement within fifteen (15) days thereafter. If the cost of abatement is not paid to the City within sixty (60) days after the date of the notice, the cost of abatement shall be certified by the City in the manner of a special assessment against the property and shall constitute a lien on the property.

**155.35 INJUNCTIVE RELIEF.** The City may seek equitable relief restraining any person from any activity in violation of this chapter including compelling the performance of abatement or remediation of such violation.

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