Print

Cookeville, TN Code of Ordinances

CHAPTER 5
EROSION AND SEDIMENT CONTROL REGULATIONS

SECTION

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14-501. General provisions.

(1) Purpose and scope. The purpose of these regulations is to protect, maintain and enhance the environment of the City of Cookeville and the public health, safety and general welfare of the citizens of the city, by minimizing the discharge of sediment and construction related waste into the municipal separate storm sewer system and waters of the state; and to maintain and improve the quality of the receiving waters into which stormwater runoff flows, including streams, rivers, lakes, ponds and wetlands; and to comply with the State of Tennessee National Pollutant Discharge Elimination System (NPDES) general permit for discharges from small municipal separate storm sewer systems.

(2) Compliance with other municipal codes and regulations. These regulations shall be used in compliance with and in conjunction with all other pertinent municipal codes, regulations and policies including the following:

(a) Cookeville Municipal Code Title 14, Chapter 6, Control of Natural Drainage Systems and Chapter 7, Stormwater Management.

(b) Cookeville Zoning Code.

(c) Cookeville Subdivision Regulations.

(d) Cookeville Building Codes.

(e) Cookeville Municipal Code Title 14, Chapter 5, § 14-510.

(3) Definitions.

(a) "Best Management Practices (BMP's)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to the municipal separate storm sewer system and waters of the state. This term also includes treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

(b) "City" means the City of Cookeville, Tennessee.

(c) "Clearing" (when used in the context of discharges associated with construction activity) means the removal of vegetation and disturbance of soil prior to grading or excavation in

anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities such as clearing of forested land for conversion to pasture. This term does not include the clearing of vegetation along roadways, highways, dams or power lines for sight distance or other maintenance or safety concerns, or cold planning, milling, or removal of concrete or bituminous asphalt roadway pavement surfaces.

(d) "Commencement of Construction or Commencement of Land Disturbing Activities" means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

(e) "Construction" means any installation, building, placement or assembly of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

(f) "Construction Related Waste" means refuse or unused materials that result from construction activities. "Construction related waste" can include, but not be limited to, unused building and landscaping materials, chemicals, litter, sanitary waste, and concrete truck washout.

(g) "Construction Support Activities" means activities which involve the use or operation of concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas or borrow areas provided all the following criteria are satisfied:

(1) the support activity is primarily related to a construction site that is subject to QLP permit coverage or to a grading permit;

(2) the operator of the support activity is the same as the operator of the construction site;

(3) the support activity is not a commercial operation serving multiple unrelated construction projects by different operators;

(4) the support activity does not operate beyond the completion of the construction activity of the last construction project it supports; and

(5) the support activities, with appropriate erosion prevention and controls therefor, are identified and described in the stormwater pollution prevention plan.

(h) "Development" means any manmade change to improved or unimproved property including, but not limited to, the construction of buildings or other structures, clearing, dredging, drilling operations, filling, grading, paving, excavation, or storage of equipment or materials.

(i) "Erosion" means the removal of soil particles by the action of water, wind, ice or other agents, whether naturally occurring or acting in conjunction with or promoted by manmade activities or effects.

(j) "Exceptional Tennessee Waters" means surface waters of the State of Tennessee that satisfy the characteristics of exception Tennessee waters as listed in Rule 1200-4-3-.06 of the official compilation - rules and regulations of the State of Tennessee.

(k) "Filling" means any deposition or stockpiling of dirt, rock, stumps, or other natural or manmade solid waste material.

(l) "Grading" means any excavation, filling (including fill placed in watercourses), or stockpiling of earth materials or any combination thereof, including the land in its excavated or filled condition.

(m) "Grading Permit" means a permit issued by the city authorizing the commencement of land disturbing activities on a site smaller than one acre in size.

(n) "Land Disturbing Activity" means any activity on a property that results in a change in the existing soil cover, whether vegetative or non-vegetative, or the existing soil topography. "Land disturbing activities" include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling and excavation.

(o) "Municipal Separate Storm Sewer System (MS4)" means a conveyance or system of conveyances, including roads with drainage systems, streets, roads, catch basins, curbs, gutters, ditches, manmade channels, or storm drains, which are:

(1) Owned or operated by a state, county, city, town, district, association, or other public body created by or pursuant to state law having jurisdiction over the disposal of sewage, industrial

wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity or a designated and approved management agency under section 208 of the federal Clean Water Act that discharges to waters of the state;

(2) Designed or used for collecting or conveying stormwater;

(3) Which is not a combined sewer; and

(4) Which is not part of a publicly owned treatment works (POTW) as defined by 40 C.F.R. § 122.2, as amended from time to time.

(p) "Owner" or "Operator" means any person or entity associated with a construction project that meets either of the following two criteria:

(1) The person or entity has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications, typically the owner or developer of the project or a portion of the project who is considered the primary permittee; or

(2) The person or entity has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions, typically a contractor or a commercial builder who is hired by the primary permittee who is considered a secondary permittee.

(q) "Plan" means a stormwater pollution prevention plan, or a small lot erosion and sediment control plan.

(r) "Priority Construction Activity" means construction activities that discharge directly into or immediately upstream from waters the state recognizes as impaired for siltation or those waters designated as exceptional Tennessee waters. A property is considered to have a direct discharge if stormwater runoff from the property does not cross any other property before entering the water of the state.

(s) "Public Works Director" means the Public Works Director of the city or his designee, who is responsible for the implementation of this chapter.

(t) "QLP Permit Coverage" means permit coverage under the State of Tennessee Construction General Permit issued by the city authorizing the commencement of land disturbing activities on a site larger than one acre in size. This permit coverage formerly would have been issued by the Tennessee Department of Environment and Conservation.

(u) "Section 404 permit" means a permit issued by the United States Army Corps of Engineers under Section 404 of the federal Clean Water Act.

(v) "Sediment" means solid material, either mineral or organic, that is in suspension, being transported, or has been moved from its site of origin by erosion.

(w) "Small Lot Erosion and Sediment Control Plan" means the plan necessary for obtaining a grading permit issued by the City authorizing commencement of land disturbing activities on a site smaller than one acre. This plan is designed to eliminate or reduce erosion and off-site sedimentation from a site during construction activities.

(x) "State" means the State of Tennessee or, where the context indicates, any state of the United States.

(y) "Stormwater Pollution Prevention Plan (SWPPP)" means a written plan that includes appropriate site maps, identification of construction activities that could cause pollutants in the stormwater and a description of measures or practices to control these pollutants.

(z) "Subdivision" means the division, subdivision, or re-subdivision of any lot or parcel of land as defined in the subdivision regulations of the city.

(aa) "Tennessee Erosion and Sediment Control Handbook" or "Handbook" means the handbook bearing such title, as amended from time to time, published by the Tennessee Department of Environment and Conservation.

(bb) "Tennessee Construction General Permit" means the General NPDES Permit for Discharges of Stormwater Associated with Construction Activities, Permit No. TNR 100000"

issued by the Tennessee Department of Environment and Conservation, as amended from time to time.

(cc) "TDEC" means the Department of Environment and Conservation of the State of Tennessee.

(dd) "Transporting" means any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized by an approved plan.

(ee) "Waters" or "Waters of the State" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

(4) Compatibility. If any provision of these regulations or any other provision of law impose overlapping or contradictory requirements, or contain any restrictions covering any of the same subject matter, that provision which is more restrictive or imposes higher standards or requirements shall govern. These regulations do not relieve the applicant from provisions of any other applicable codes, ordinances or regulations not explicitly repealed by these regulations.

(5) Severability. If any section, subsection, sentence, clause, phrase, or portion of these regulations is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of these regulations.

(6) Permitting. The review and permitting of plans and specifications for clearing and/or earthwork is not intended as approval of the overall layout, structural design, grading procedures, situation control, engineer's reports or construction procedures. These responsibilities shall remain with and be those of the owner or his consultants.

(7) Disclaimer or liability. The issuance of either QLP permit coverage or a Grading Permit by the City of Cookeville signifies only that the applicant has met all the application requirements specified by these regulations, including the submittal of plans for permit purposes shall not mean that those plans have been checked in detail for technical competency. The developer and his design consultant shall remain totally responsible for the adequacy of the plans to protect neighboring properties, and the developer and his contractor shall be responsible for constructing the project in accordance with the plans.

These regulations are considered reasonable for regulatory purposes and shall not create a liability on the part of, or a cause of action against, the City of Cookeville or any officer or employee thereof for any damages that result from reliance on these regulations, or any administrative decision lawfully made thereunder. (Ord. #001-08-09, Sept. 2001 as amended by Ord. #004-06-11, July 2004, and Ord. #O13-01-01, January 2013)

14-502. General Requirements.

(1) Applicability.

(a) All land disturbing, construction or construction support activities that cause off-site sedimentation or sediment discharges to the municipal separate storm sewer system or waters of the state shall be in violation of this ordinance.

(b) No owner or operator of any property within the city shall commence land disturbing activities unless he has obtained all applicable federal, state and city permits.

(c) The issuance of either QLP Permit coverage or a Grading Permit shall be conditioned upon the approval of all plan requirements, for the applicable permit, by the Public Works Director. The city shall serve as the plan approval agency only, and in no instance are its regulations construed as designing the stormwater pollution prevention plan or other stormwater systems.

(d) No building permit shall be issued until the owner or operator has obtained either QLP Permit coverage or a Grading Permit and is in compliance with the permit, where the same is required by this chapter.

(e) All land disturbing activities shall employ adequate erosion and sediment control best management practices.

(2) Exemptions from plans submittal. The following activities shall not require submittal and approval of a stormwater pollution prevention plan, a small lot erosion and sediment control plan, or a Grading Permit:

(a) For single family residence construction resulting in less than one acre of disturbed area a grading permit will not be required in addition to the Building Permit. Such construction shall remain responsible for controlling erosion and for protecting adjacent properties and drainage facilities from sedimentation in accordance with these regulations.

(b) Minor land disturbing activities such as home gardens and individual home landscaping, repairs or maintenance work that are less than one acre and are not part of a larger common plan of development;

(c) Additions or modifications to existing, individual, single-family structures that are less than one acre and are not part of a larger common plan of development;

(d) Emergency work to protect life, limb or property, and emergency repairs, provided that the land area disturbed shall be shaped and stabilized in accordance with the requirements of this chapter;

(e) Existing nursery and agricultural operations conducted as a permitted main or accessory use;

(f) State and federal projects subject to the submission requirements of TDEC; and

(g) Public utility installations, less than one acre in disturbed area, as follows: lateral sanitary sewer lines, water lines, storm sewer lines, telephone lines, cable television lines, electrical lines and gas lines. Although exempt, public agencies are required to notify the public works department prior to starting any construction and to submit plans, if requested, to allow coordination with other activities.

(3) All other provisions of this chapter shall apply to the exemptions noted in subsection (2) above.

(4) Responsibility not waived. Although the activities listed in § 14-502 (2) may be undertaken without a permit, the persons conducting these excluded activities shall remain responsible for controlling erosion and for protecting adjacent properties and drainage facilities from sedimentation in accordance with the provisions of these regulations.

(5) Hazardous conditions must be rectified. Whenever the Building Official or the Public Works Director, or his designee, is made aware of and determines that any existing land condition or exposed surface created or caused by means of clearing, earthwork or other land disturbing activity has:

(a) Become a hazard to life and limb;

(b) Endangered property;

(c) Affected the safety, use or stability of a public way or drainage channel, or

(d) Caused erosion,

the owner, upon receipt of notice in writing from the Building Official or Public Works Director, or his designee, shall rectify or eliminate the stated hazardous condition within the time period specified therein to bring the property into conformance with the requirements with these regulations.

It shall be a violation of these regulations for the owner to fail to eliminate the hazardous condition within that time.

(6) Soil Engineering Report. A soil engineering report will be required if deemed necessary by the owner's architect, landscape architect, or civil engineer. A soil engineering report may also be required by either the Public Works Director or the Building Official.

This report will include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective

measures when necessary, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading.

(7) Engineering Geology Report. An engineering geology report shall be required if deemed necessary by the owner's architect, landscape architect or civil engineer. An engineering geology report may also be required by either the Public Works Director or the Building Official.

This report will include adequate description of the geology of the site, conclusions and recommendations regarding the effect of geological conditions of the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading.

(8) Federal and State Permits. Approval by the City of Cookeville does not relieve the applicant of responsibility for obtaining any permits required by the U.S. Army Corps of Engineers, Tennessee Department of Environment and Conservation - Division of Water Resources, Region IV of the U.S. Environmental Protection Agency, or by any other federal or state agencies. Following is a non-inclusive list of permits that may be required:

(a) U.S. Army Corps of Engineers. Section 301 of the Clean Water Act prohibits the discharge of dredged or fill materials into waters of the United States unless the work has been previously authorized by a permit pursuant to Section 404 of the same Act. Placement of dredged or fill material below ordinary high water of any water in conjunction with drainage improvements (e.g., channel realignments, concrete slope paving) will require a Department of the Army permit prior to construction.

The placement of dredged or fill material or any grading activities within a wetland must also be in compliance with Section 404 of the Clean Water Act.

If a permit is required, approximately sixty (60) days would normally be required for permit processing. Depending on the nature and location of the work, it is possible that the work has been previously approved under authority of the nationwide permit and individual processing would not be required.

(b) Tennessee Department of Environment and Conservation - Division of Water Resources. In accordance with the Tennessee Water Quality Act, Tennessee Code Annotated, §69-3-108, any activity which alters a course or physical character of a stream, requires an Aquatic Resource Alteration Permit (ARAP). This permit is required for activities such as stream channelization, stream enlargement, dredging, or diversion in box culverts.

(9) Adoption of Standards. (a) The design, installation, operation, maintenance, inspection, record keeping and reporting of construction site runoff best management practices intended for erosion prevention and the control of sediment and other construction related wastes or pollutants shall be performed in accordance with the requirements of the Tennessee Construction General Permit that is effective at the time the stormwater pollution prevention plan is approved. Where the provisions of this section conflict or overlap with the Tennessee Construction General Permit or the Tennessee Erosion & Sediment Control Handbook, the regulation which is more restrictive or imposes higher standards or requirements shall prevail.

(b) The City adopts as its erosion and sediment control design standards and best management practices manual the Tennessee Erosion & Sediment Control Handbook which is incorporated herein by reference. This handbook includes a list of acceptable BMPs, including the specific design performance criteria, operation and maintenance requirements for each BMP.

(c) The requirements set forth in the Tennessee Construction General Permit and in the handbook may be updated and expanded at the discretion of the Public Works Director, based on improvements in engineering, science, monitoring and local maintenance experience.

(d) Erosion and sediment control BMPs that are designed, constructed and maintained in accordance with the BMP criteria set forth in the Tennessee Construction General Permit and the handbook shall be presumed to meet the minimum water quality performance standards required by the city.

(e) Additional requirements for discharges into impaired or exceptional Tennessee waters that are set forth in the Tennessee Construction General Permit shall be implemented for all priority construction activities. The Public Works Director, at his discretion, may require BMPs that conform to a higher than minimum standard for priority construction activities, or for exceptional Tennessee waters or where deemed necessary.

(10) Stormwater Pollution Prevention Plan (SWPPP). (a) The SWPPP is required for obtaining QLP Permit coverage for sites with a disturbed area greater than one acre. A SWPPP shall present in detail the best management practices that will be employed to minimize erosion and control sedimentation.

(b) The plan shall be sealed in accordance with the Tennessee Construction General Permit.

(c) Best management practices presented in the plan shall conform to the requirements found in the Tennessee Erosion & Sediment Control Handbook, and shall meet or exceed the requirements of the Tennessee Construction General Permit.

(d) The plan shall include measures to protect legally protected state or federally listed threatened or endangered aquatic fauna or flora or critical habitat (if applicable).

(e) The plan submitted shall be subject to any additional requirements set forth in the city's subdivision regulations, zoning ordinance, erosion and sediment control policy and any other applicable city regulations.

(f) Riparian buffer zones shall meet the requirements both in accordance with the Tennessee Construction General Permit and with the Buffer Zone Ordinance for the City of Cookeville.

(g) Construction of the site in accordance with the approved plan must commence within one year from the approval date of the stormwater pollution prevention plan, or the stormwater pollution prevention plan will become null and void and the plan must be resubmitted for approval.

(h) Stormwater pollution prevention plans shall include the components required by the Tennessee Construction General Permit and any other information deemed necessary by the Public Works Director. See the Erosion and Sediment Control Policy for additional plan requirements.

(11) Small lot erosion and sediment control plan contents. (a) Land disturbing activities that affect less than one acre and are not exempt from obtaining a Grading Permit, shall submit and obtain approval of a small lot erosion and sediment control plan and obtain a Grading Permit prior to obtaining a building permit.

(b) The plan shall include such information as may be required by the Public Works Director consistent with this article. See the Erosion and Sediment Control Policy for additional plan requirements.

(c) The Public Works Director has the discretion to require a fully engineered stormwater pollution prevention plan.

(Ord. #O13-01-01, January 2013)

14-503. Compliance.

(1) Conformity to approved plan. (a) The approved stormwater pollution prevention plan or the small lot erosion and sediment control plan shall be followed during the entire duration of the construction at the site.

(b) The Public Works Director may require reports or records from the permittee or person responsible for carrying out the plan to ensure compliance.

(c) No land disturbing activity shall be commenced without prior plan approval by the Public Works Director and the issuance of either QLP Permit coverage or a Grading Permit.

(d) Priority construction activities shall not commence until after the owner or operator has attended a pre-construction meeting with the Public Works Director.

(2) Amendments to approved plans. The permittee shall modify and update the plan in accordance with the requirements of the Tennessee Construction General Permit.

(3) Maintenance. (a) Maintenance, site assessments and inspections of the best management practices shall be implemented in the manner specified in the Tennessee Construction General Permit and the Tennessee Erosion & Sediment Control Handbook by qualified personnel that are provided by the owner or operator of the land disturbing activity.

(b) The owner or operator shall at all times properly operate and maintain all facilities and

systems of treatment and control and related appurtenances which are installed or used by the owner or operator to achieve compliance with this chapter. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by an owner or operator only when necessary to achieve compliance with this chapter.

(c) Any inadequate control measures or control measures in disrepair shall be repaired, replaced or modified, as may be necessary, in accordance with the inspection and maintenance timeframes set forth in the Tennessee Construction General Permit and the maintenance guidance provided in the Tennessee Erosion & Sediment Control Handbook.

(d) If sediment escapes the permitted property, the permittee shall remove off-site accumulations in accordance with the requirements of the Tennessee Construction General Permit.

(e) Records shall be retained in accordance with the Tennessee Construction General Permit.

(4) Inspections by the City.

(a) The City shall have the right to enter onto private property for the purposes of conducting unrestricted periodic inspections of all land disturbing activities to verify compliance with the approved plan.

(b) The City shall have the right to enter onto private property for the purposes of investigating a suspected violation of this chapter.

(c) Failure on the part of an owner or operator to allow such inspections by the City shall be cause for the issuance of a stop work order, withholding of a certificate of occupancy, and civil penalties.

(Ord. #O13-01-01, January 2013)

14-504. Fees.

Neither QLP Permit coverage or a Grading Permit shall be issued until the fee prescribed below has been paid, nor shall an amendment to a permit be released until the additional fee, due to an increase in the project size, is paid.

FEE PER ACRE OF PROJECT

Project less than One Acre	$ 50.00
Project more than One Acre but less than 5 Acres	250.00
Project more than 5 Acres but less than 50 Acres	1,000.00
Project more than 50 Acres but less than 150 Acres	4,000.00
Project more than 150 Acres	7,500.00

Where work for which either QLP Permit coverage or a Grading Permit is required by these regulations is started prior to obtaining said permit, the fees herein specified shall be doubled, but the payment of such double fee shall not relieve any persons from fully complying with the requirements of these regulations in the execution of the work not from any penalties prescribed herein.

(Ord. #O13-01-01, January 2013)

14-505. Warranty of improvements required.

(1) For work requiring either QLP Permit coverage or a Grading Permit, the property owner shall submit to the Public Works Department a warranty of improvements to assure that the work is completed in accordance with the permitted plans and specifications. Said warranty of improvements shall be in the form of a letter of credit or certified check.

(2) At a minimum the warranty of improvements shall remain in force for one (1) year after the anticipated date of the completion of the installation of vegetation. The expiration date shall be specified in the warranty of improvements along with an exact description of the work being guaranteed.

(3) The warranty of improvements for clearing operations only shall be in the amount of $1,000.00 per acre for each acre or fraction thereof disturbed or affected by such operations.

(4) The warranty of improvements for earthwork or clearing and earthwork operations shall be in the amount of $3,000.00 per acre or each acre or fraction thereof disturbed or affected by such operations.

(5) Additional surety, equal to double the amounts required in 14-505(3) and 14-505(4) herein, shall be required where clearing or earthwork is performed in areas designated as floodways, floodplains, sinkhole retention areas or if determined by the Public Works Director, the site is susceptible to landslides. (Ord.#001-08-09, Sept. 2001, as amended by Ord.#004-06-11, July 2004 and Ord. #O13-01-01, January 2013)

14-506. Administration.

(1) Department of Public Works. This department is responsible for reviewing all plans submitted with applications for QLP Permit coverage, Grading Permits and for site inspections to insure compliance with these regulations. The plan review shall be conducted by the Director of Public Works or his designee, and site inspections will be conducted by the Public Works Director or his designee. Once the application has been approved the Public Works Department is responsible for collecting fees and warranty of improvements and issuing the permit.

(2) Right of entry. The Public Works Director or any of his duly authorized representatives may enter upon the premises of any land located within the Cookeville, Tennessee city limits for the purpose of inspecting the site before, during and after construction to determine compliance with these regulations.

(Ord. #O13-01-01, January 2013)

14-507. Enforcement.

(1) Enforcement authority. The Director of the Public Works Department (hereafter referred to as Director) or his designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.

(2) Notifications of violation.

(a) Written Notice. Whenever the Director finds that any permittee or any other person has failed to comply with these regulations or a permit or order issued hereunder, the Director or his designee may serve upon such person written notice of the violation. Within the notice of violation will be a list of failures that have led to the violation and measures required to correct the deficiencies. Such measures might include repair of existing Best Management Practices (BMPs), installation of new/additional BMPs, containment of discharged materials, cleanup of said materials, and a timetable for meeting the goals.

(b) Consent Orders. The Director or his designee is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.

(c) Show Cause Hearing. The Director may order a person who violates this ordinance or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. The hearing shall be before the Public Works Director. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered mail or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

(d) Compliance Order. When the Director or his designee finds that any person has violated or continues to violate this chapter or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other

.requirements as might be reasonably necessary and appropriate to address noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and best management practices.

(e) Cease and Desist Orders. When the Director finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the Director or his designee may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(i) Comply forthwith; or

(ii) Take such appropriate remedial or preventative action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge. (Ord. #O13-01-01, January 2013)

14-508. Penalties.

(1) Violations. Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Public Works Department, shall be guilty of a civil offence.

(2) Penalties. Under the authority provided in Tennessee Code Annotated §68-221-1106, the municipality declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Public Works Department of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(3) Measuring civil penalties. In assessing a civil penalty, the director of the Public Works Department may consider:

(a) The harm done to the public health or the environment;

(b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(c) The economic benefit gained by the violator;

(d) The amount of effort put forth by the violator to remedy this violation;

(e) An unusual or extraordinary enforcement costs incurred by the municipality;

(f) The amount of penalty established by ordinance or resolution for specific categories or violations; and

(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the municipality may recover:

(a) All damages proximately caused by the violator to the municipality, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapteror any other actual damages caused by the violation.

(b) The costs of the municipality's maintenance of storm water best management practices when the owner of such facilities fails to maintain them as required by this chapter.

(5) Other remedies. The municipality may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense of any such actions.

(6) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted. (Ord. #O13-01-01, January 2013)

14-509. Appeals.

.Pursuant to Tennessee Code Annotated §68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this ordinance may appeal said penally or damage assessment to the Board of Environmental Appeals.

(1) Appeals to be in writing. The appeal shall be in writing and filed with the City Clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

(2) Public hearing. Upon receipt of any appeal, the Board of Environmental Appeals shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days' notice by registered by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal.

(3) Appealing decisions of the Board of Environmental Appeals. Any alleged violator may appeal a decision of the Board of Environmental Appeals pursuant to the provisions of Tennessee Code Annotated, Title 27, Chapter 8.

(4) If a petition for review of such damage assessment or civil penalty is not filed within thirty (30) days after the damage assessment or civil penally is served in any manner authorized by law, the violator shall be deemed to have consented to the damage assessment or civil penalty, and it shall become final. (Ord. #O13-01-01, January 2013)

14-510. Erosion and Sediment Control Policy.

(1) For Land Disturbing Activities Less Than One Acre.

(a) Grading Permit application required. To obtain a Grading Permit the owner shall first file with the Public Works Department an application in writing on a form furnished for that purpose. Each applicant shall provide:

i. The names, addresses and telephone numbers of the owner or owners of the subject property.

ii. The names, addresses and telephone numbers of the contractor and any subcontractor(s) who shall perform the land disturbing activity, and who shall implement the plans for erosion and sediment control.

iii. The address of the subject property, and a map or plat of the property upon which the limits of the land disturbing activity is shown.

iv. If required under these rules three (3) copies each of the grading/drainage plan and the erosion and sediment control plan shall be submitted with the application; see subsection (3), Plan Requirements.

v. A statement setting forth the nature, extent and purpose of the land disturbing activity, including the size of the area for which the permit shall be applicable, and a schedule for the starting and completion dates of the land disturbing activity.

vi. A certification by the owner that prior to beginning any work he agrees to the following:

(A) Hold the City of Cookeville, its officers, agents and employees, harmless from any and all claims made against the City of Cookeville which arise out of any action or omission of the owner, contractor or subcontractor, or any of their officers, employees or agents, and any and all claims which result from any condition arising out of, created or maintained by the owner, contractor or subcontractor or any of their officers, employees or agents.

(B) That no work, including clearing and/or earthwork shall be performed without first installing all temporary erosion control measures, unless approved by the Public Works Department.

(C) That the applicant has read the application and that all information contained therein is true and correct.

(D) That the applicant agrees to comply with all city ordinances and state laws regulating this construction.

(E) That the applicant is the owner or is authorized to act as the owner's agent for the described work.

(2) For Land Disturbing Activities Greater Than One Acre.

(a) QLP Permit coverage application required. To obtain coverage under the Construction General Permit through the QLP a Notice of Intent (NOI) application shall be required for any project that formerly would require a NPDES Construction General Permit as would have been available from the Tennessee Department of Environment and Conservation.

i. Each applicant shall provide:

(A) Site or project name.

(B) Street address or location.

(C) Site description.

(D) County.

(E) QLP/MS4 jurisdiction.

(F) Start date.

(G) Estimated end date.

(H) Latitude (dd°.dddd) and longitude (dd°.dddd).

(I) Acres disturbed.

(J) Total acres.

(K) Information as to the presence of streams or wetlands adjacent to the construction site.

(L) Wetlands delineation report if wetlands are present.

(M) Aquatic Resource Alterations Permit (ARAP) number if relevant.

(N) Receiving waters name if known.

(O) Storm Water Pollution Prevention Plan (SWPPP).

(P) Location Map.

(Q) Site owner/Developer contact information.

(R) Owner/Developer Certification.

(S) Contractor Certification.

ii. QLP Permit applications must be accompanied by three (3) sets of grading/drainage plan and the erosion and sediment control plan. If a project involves clearing only, this requirement may be waived by the Public Works Department. See subsection (3), Plan Requirements, for information on drawings required.

(b) Standards.

i. The design, installation, operation, maintenance, inspection, record keeping and reporting of construction site runoff best management practices intended for erosion prevention and the control of sediment and other construction related wastes or pollutants shall be performed in accordance with the requirements of the Tennessee Construction General Permit that is effective at the time the storm water pollution prevention plan is approved.

ii. The city adopts as its erosion and sediment control design standards and best management practices manual the Tennessee Erosion & Sediment Control Handbook which is incorporated herein by reference. This handbook includes a list of acceptable BMPs, including the specific design performance criteria, operation and maintenance requirements for each BMP.

iii. The requirements set forth in the Tennessee Construction General Permit and in the handbook may be updated and expanded at the discretion of the Public Works Director, based on improvements in engineering, science, monitoring and local maintenance experience.

iv. Erosion and sediment control BMPs that are designed, constructed and maintained in accordance with the BMP criteria set forth in the Tennessee Construction General Permit and the handbook shall be presumed to meet the minimum water quality performance standards required by the city.

v. Additional requirements for discharges into impaired or exceptional Tennessee waters that are set forth in the Tennessee Construction General Permit shall be implemented for all priority construction activities. The Public Works Director, in his discretion, may require BMPs that conform to a higher than minimum standard for priority construction activities, or for exceptional Tennessee waters or where deemed necessary.

vi. The following certification signed by either the engineer or the surveyor regarding the presence or absence of water resources on the site:

CERTIFICATE OF PRESENCE OF WATER RESOURCES ON SITE

I hereby certify that to the best of my knowledge any and all on site water resources are located and identified on this plan. Water resources are defined as streams, ponds, wetlands, springs, reservoirs.

_____ _____

Date Signed Engineer/Surveyor's Signature

(3) Plan Requirements.

(a) QLP Permit coverage and Grading Permit applications must be accompanied by three (3) copies of grading/drainage plan and the erosion and sediment control plan. If a project involves clearing only, this requirement may be waived by the Public Works Department.

(b) Plans will be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of these regulations and all relevant laws, ordinances and rules. The first sheet of each set of plans shall give the location and the name and address of the owner and the person by whom they were prepared. The plan shall be prepared by a professional engineer registered in the State of Tennessee.

(c) Plans shall include the following information:

i. General vicinity of the proposed site.

ii. Property limits and accurate contours of the existing ground in two (2) foot intervals, and details of terrain and area drainage. Contour intervals other than two (2) feet may be approved by the Director of Public Works upon request should the reason for the exception have validity.

iii. Proposed contours using the same contour interval as in subsection (3)(c)ii. above, as well as proposed drainage channels and related construction.

iv. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work together with a map showing the drainage area and the estimated runoff of the area served by any drains.

v. Location of any buildings or structures on the property where work is to be performed and the location of any buildings or structures on land of adjacent property owners which are within fifteen (15) feet of the property or which may be affected by the proposed grading operations.

vi. All elevations must be stated in mean sea level datum and this fact indicated in a note on the plan sheet.

vii. Areas of special flood hazard and/or sinkhole retention areas shall be shown on all site plans where applicable. Areas of special flood hazard shall be identified by the Flood Insurance Rate Maps for Putnam County, Tennessee and Incorporated Areas dated May 16, 2007, or any subsequent amendments to said maps. Sinkhole retention areas shall be identified by the Sinkhole Retention Maps of the City of Cookeville or as determined by the Director of Public Works.

viii. Specifications shall contain information covering construction and material requirements. It shall be acceptable to reference existing specifications that have been approved by the Director of Public Works, and that are on file in the Public Works Department.

ix. Erosion and sediment controls.

(d) The drainage plan must be prepared by a registered civil engineer proficient in the field of hydrology and hydraulics and licensed in the State of Tennessee. The plan may be submitted as part of the grading plan, but must be clearly identified as a "drainage plan". Drainage plans will be drawn to an appropriate scale that will enable ready identification and recognition of submitted information and will include:

i. Flow lines of surface water onto and off the site.

ii. Building pads and existing and proposed finished floor and street elevations if building construction is proposed.

iii. Existing and proposed drainage channels, including drainage swales, wetlands, ditches and berms.

iv. Locations of all manmade facilities, such as buildings, parking lots, sidewalks, etc.

v. Location and design of any proposed facilities for storage or conveyance of runoff into indicated drainage channels, including sumps, basins, channels, culverts, retention or detention ponds, bio-retention facilities, storm drains and drop inlets.

vi. Estimates of existing and increased runoff resulting from the proposed improvements and a statement explaining the amount of the proposed effects on the existing drainage system and adjacent property.

vii. Plans and specifications for all drainage provisions, retaining walls, planting, anti-erosion devices, or other protective devices whether temporary or permanent to be constructed in connection with or as part of the proposed project.

viii. A map depicting the drainage area of land tributary to the site and a statement explaining the amount of estimated runoff used to determine the design characteristics of any drainage device.

ix. Upstream drainage shall be considered in the design calculations.

x. Downstream improvements may be required of the developer if such improvements are required to handle storm water generated by the proposed development.

xi. The requirements of Title 14, Chapter 7, Stormwater Management shall be met for all applicable developments.

(4) Erosion and Sediment Control Plan Requirements.

(a) An erosion and sediment control plan and a narrative Storm Water Pollution Prevention Plan (SWPPP) is required whenever QLP Permit coverage is required. In addition, a separate erosion and sediment control plan may be required for a Grading Permit if the Public Works Department determines that the development is so complex that soil erosion and sediment controls cannot be included in the grading plan in a clear and understandable manner or if it is determined that the site is in a special hazard area.

(b) The erosion and sediment control plan shall be prepared by a professional engineer registered in the state of Tennessee. This plan will be clearly identified as an "erosion and sediment control plan". A Storm Water Pollution Prevention Plan must be developed by persons meeting the requirements for SWPPP preparation as required by the Tennessee Construction General Permit that is effective at the time the storm water pollution prevention plan is approved.

(c) Erosion and sediment control plans will conform to the requirements of the Tennessee Construction General Permit.

(5) Standards for Erosion and Sediment Control Plans. The Tennessee Erosion and Sediment Control Handbook (latest edition) has been adopted by the City of Cookeville as an approved best management practices manual. Other specifications may be used upon review and approval of the Public Works Director.

(6) Requirements for Erosion and Sediment Control.

(a) The design, installation, operation, maintenance, inspection, record keeping and reporting of construction site runoff best management practices intended for erosion prevention and

sediment control and other construction related wastes or pollutants shall be performed in accordance with the requirements of the Tennessee Construction General Permit that is effective at the time the Grading Permit or the QLP Permit coverage is obtained.

(b) The requirements set forth in the Tennessee Construction General Permit and the Tennessee Erosion and Sediment Control Handbook may be updated and expanded at the discretion of the Director of Public Works, based on improvements in engineering, science, monitoring and local maintenance experience.

(c) Neighboring persons and property shall be protected from damage or loss resulting from excessive storm water runoff, soil erosion or deposition upon private property or public right-of-way of water transported silt and debris. Adjacent property owners shall be protected from land devaluation due to exposed bare banks.

(7) Permitting Procedures. The following procedures for applying for either a Grading Permit or QLP Permit coverage shall apply:

(a) Pre-application conference. A pre-application conference with the Public Works Department is required to assure timely permit application preparation and review. This conference will be used to determine if a proposed project qualifies for exemption and to determine how technical guidelines and criteria should be applied. At this time a decision will be made as to which permit is required for the project.

(b) Submittal. Submission of the permit application, plans (one (1) set) and any other required submittals, i.e. drainage calculations, water quality is to be made to the Public Works Department. Plans and submittals for a Building Permit must be submitted to the Codes Department for the review by the plans examiner.

(c) Review. The Public Works Department will review the permit application to ensure that all information is provided in accordance with the regulations. Should the application be found to be incomplete, it will be returned to the applicant with a written request for additional information. The application will not be processed until such time as any requested information or reports are submitted.

(d) Permit issuance. If the work described in the permit application, including drawings and/or SWPPP, conforms to the requirements of these regulations and any other pertinent laws and ordinances, and when the fees and warranty of improvements have been paid, a Grading Permit or QLP Permit coverage will be issued. Alternately if the permit application does not meet the requirements the application will be denied and a written explanation will be provided to the applicant. The issuance of either permit will not be construed to mean approval for violation of any of the provisions of these regulations or any other law or regulation; and such permit will not be valid, except insofar as the work or use that it authorizes is lawful. The issuance of a Grading Permit shall not prevent the Director of Public Works from requiring the correction of errors or changes due to unforeseen problems in permitted plans and specifications. The Director of Public Works may require operations and project design be modified if significant problems occur which were not considered at the time the permit was issued. The issuance of a Grading Permit or QLP Permit coverage in no way implies that a building permit will be issued.

(e) Revisions to approved plans. Prior to or during construction, should changes be anticipated that would constitute a revision of the plans already approved by the Public Works Director, the approved plans are to be revised and resubmitted in triplicate with a letter stating why such changes are believed necessary. Approval or disapproval by the Public Works Director will be given in written form.

(f) Expiration. Every permit issued by the Public Works Director under provisions of these regulations shall expire by limitation and become null and void if the work authorized by such permit is not commenced within ninety (90) days from the date of issuance of the permit, provided that consecutive renewal of such permit may be granted, at no additional cost, upon written request to the Public Works Director with good cause shown. The work authorized by such permit shall not be suspended or abandoned at any time after the work is commences and shall be carried to completion or the permit shall be void. If work is suspended or abandoned, the required warranty of improvements may be issued to correct or eliminate erosion, drainage problems, or hazardous conditions.

(g) Suspension or revocation. The Public Works Director shall suspend or revoke a permit issued under provisions of these regulations by giving notice in writing to the owner whenever the

permit is issued in error, on the basis of incorrect information supplied or in violation of any ordinance, regulation or any of the provisions of these regulations.

(8) Construction Procedures.

(a) Permit required prior to commencing any work. A person, firm, or corporation required to obtain a Grading Permit or QLP Permit coverage in compliance with these regulations must do so prior to commencing any work pertaining to the permit. Corrective measures, including but not limited to stop work orders, penalties, and injunctions, may be taken as required to enforce the terms of this requirement.

(b) Posting of permit. Work requiring a Grading Permit or QLP Permit coverage shall not be commenced until the permit holder or his agent has posted the permit and SWPPP if one is required, in a conspicuous place on the front of the premises. The permit/SWPPP shall be protected from the weather and be placed to allow easy access for recording entries. The permit shall remain posted until the certificate of occupancy has been issued and/or a notice of termination has been turned into the Public Works Director on QLP Permit coverage.

(c) Notification of construction. After posting the permit, the permittee must first install all erosion and sediment control measures as shown on the plans. All clearing and/or earthwork are subject to inspection by the city, and should it be determined that additional erosion control measures are needed they shall be promptly acquired and installed by the permittee.

(d) Observation of construction. The owner shall be responsible for the ongoing observation, review and field issuance of reports in the actual earthwork. This responsibility shall include, but need not be limited to, testing, inspection and issuing field reports as to the establishment of line, grade and drainage of the project area. Civil engineering record documents shall be preserved in accordance with state law. Permittees with QLP Permit coverage are responsible for documented inspections on approved inspection forms and shall be performed in accordance with the requirements of the Tennessee Construction General Permit that is effective at the time the storm water pollution prevention plan is approved.

(e) Notification of non-compliance. If the owner, his contractor or his consultants finds that the work is not being done in conformance with these regulations or the permitted plans, the discrepancies, if not corrected in a timely manner, must be reported immediately in writing to the Director of Public Works. Plans for corrective measures must be submitted to the Director of Public Works along with an appropriate schedule for completion of such corrections.

(f) Replacement of contractors or consultants. If the owner's contractor, civil engineer, engineering geologist or the testing agency of record, are changed during the course of the work, the owner shall replace the contractor or consultants of record with a qualified individual, and will notify the Director of Public Works in writing. Those with QLP Permit coverage are required to have the contractor listed on their QLP NOI and any change in the contractor must be noted and the new contractor must sign the QLP Permit.

(g) Notification of completion. Holders of a Grading Permit must notify the Director of Public Works when the project has been completed, including installation of any permanent storm water management facilities in accordance with the final permitted plans. Those with QLP Permit coverage must complete a Notice of Termination (NOT) form provided in accordance with the requirements of the Tennessee Construction General Permit that is effective at the time the storm water pollution prevention plan is approved. Once a NOT has been received by the Public Works Department, the department will review the NOT and inspect the site to determine if coverage under the QLP permit can be terminated or if there are deficiencies that must be corrected prior to permit termination. Any deficiencies are discovered the permittee will be notified in writing within thirty (30) days of receiving the NOT. When the site meets the termination criteria, the NOT should be re-submitted.

(h) Release of warranty of improvements. One (1) year following the installation of permanent vegetation, the owner may request the Public Works Department check the vegetation on site and if it is found to have seventy-five percent (75%) coverage and be in good condition the warranty of improvements will be released. If it is discovered that the vegetation is not established, the warranty of improvements must be kept by the city until such time as the vegetation is well established. Should the warranty of improvements be in the form of a letter of credit, upon receiving notice that the letter of credit needs to be renewed the owner will provide the Public Works Department with a letter of credit for an additional year.

(9) Checklist.

(a) Have a pre-application meeting with the Public Works Department.

(b) You need three (3) sets each of: grading plan, erosion and sediment control plan, and drainage plan.

(c) One (1) set of drainage/detention calculations.

(d) Determine the size of the disturbed area.

i. If less than one (1) acre you need to apply for a Grading Permit – your permit cost will be fifty dollars ($50.00) and for work involving more than $3,000.00 in value a warranty of improvements of $3,000.00 for grading or $1,000.00 for clearing will be required – either a cashier's check or a letter of credit – you may skip the following steps unless notified by Public Works Department.

ii. If greater than one (1) acre you need QLP Permit coverage – Continue on to subsection (9)(e) below.

(e) You must complete and turn in subsections (9)(a) – (d) above and complete a Notice of Intent (NOI) available online at: www.cookeville-tn.org/pw/stormwater-management

(f) You must provide a Storm Water Pollution Prevention Plan (SWPPP) which meets the requirements of the Tennessee General Construction Permit.

(g) Your QLP Permit coverage cost is determined by disturbed acreage:

i. > 1 acre & < 5 acres $250

ii. > 5 acres & < 50 acres $1,000

iii. > 50 acres & < 150 acres $4,000

iv. > 150 acres $7,500

(h) You will be required to submit a warranty of improvements in the amount of $3,000.00/acre or fraction thereof for grading or $1,000.00/acre or fraction thereof for clearing – either a cashier's check or a letter of credit.

(as added by Ord. #O16-06-16, August 2016)

Print

Cookeville, TN Code of Ordinances

CHAPTER 8
RIPARIAN BUFFER ZONES

SECTION

14-801. General provisions.

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14-801. General provisions.

Riparian buffer zones serve as natural boundaries between local waterways and development and help to protect water resources by filtering pollutants, providing infiltration of stormwater runoff, providing wildlife habitat, stabilizing the banks and restoring and maintaining the chemical, physical and biological integrity of the water resources.

It is the desire of the City of Cookeville to protect and maintain the native vegetation in riparian areas by the implementation of specifications for the establishment, protection and maintenance of vegetated buffers along all water resources within the city. These provisions apply to all lots which are contiguous with or directly adjoin water bodies determined to meet the definition of streams, ponds, wetlands, springs, reservoirs or lakes. These provisions are applicable to permanent riparian buffer zones and are not referring to temporary construction buffer zones as required by the Tennessee Construction General Permit, those buffer zones are required by state law and are separate and covered by separate ordinances.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-802. Definitions.

For the purpose of this section, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The words “shall” and “will” are mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

"BMPs" or "Best Management practices" are physical, structural and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, that have been approved by the City of Cookeville, and that have been incorporated by reference into the city stormwater ordinances. [Note: see § 14-704(1) for recommended BMP manual.]

"Channel" means a natural watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

"Dumping" means the introduction of material into the riparian buffer zone which could wash into the stream or otherwise cause contamination of the stream.

"Filling" means the deposit of earth by artificial means.

"Grading" means the operation of raising or lowering the ground surface to a predetermined elevation datum.

"Impervious" means not allowing the passage of water through the surface of the ground or ground covering, or a substantial reduction in the capacity for water to pass through the surface of the ground or ground covering.

"Right-of-way" is land over which a road, railroad, etc. passes.

"Riparian" relating to, or living on the bank of a river, stream, lake, wetland, etc.

"Riparian buffer" is an undisturbed area, measured from top of bank of water resource, which consists of a riparian zone comprised of native vegetation, original or re-established, bordering streams, ponds, wetlands, springs, reservoirs or lakes or other water resources designated by the state as requiring a riparian buffer.

"Stabilize" means to provide adequate measures, vegetative and/or structural, that will prevent erosion from occurring.

"Stream" is a linear surface water that is not a wet-weather conveyance as determined by a qualified hydrological professional.

"Stripping" means the removal of existing vegetation or soils.

"Wet weather conveyance" is a man-made or natural watercourse, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality, whose channels are above the groundwater table and which do not support fish and aquatic life and are not suitable for drinking water supplies, and in which hydrological and biological analysis indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two (2) months. Determination of what channels are wet weather conveyances may be made by a qualified hydrological professional.

"Wetlands" are those areas that are inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and under normal circumstances do support a prevalence of vegetation typical to life in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, bogs and similar areas. Wetlands are designated by federal or state organizations with this responsibility.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-803. Standards for buffer zones.

The following standards shall apply for all riparian buffer zones:

A. The vegetated buffer shall begin at the ordinary high water level and break in slope of the water resource.

B. The riparian buffer width shall depend upon the size of the drainage area for the project. Streams and other waters with drainage areas of less than one square mile will require buffer widths of 30 feet minimum. Streams or other waters with drainage areas of greater than one square mile will require buffer widths of 60 foot minimum. The required width for buffer zones may be averaged at the discretion of the Public Works Department but under no circumstances will the buffer zone be allowed to be less than one half the minimum width given above, for the size of watershed.

C. The vegetative target for the riparian buffer is undisturbed native vegetation with woody vegetation (i.e. trees and shrubs) being the dominant plant form along the banks.

D. There shall be no septic systems, permanent structures or impervious cover within the riparian buffer zone.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-804. Buffer zone management and maintenance requirements.

The following requirements shall apply for the management and maintenance of riparian buffer zones:

A. The riparian buffer zone shall be managed to enhance and maximize the unique value of these resources. Management includes specific limitations on alteration of the natural conditions of these resources. The following practices or activities are not allowed within the buffer zone:

1. Soil disturbance by grading, stripping or other practices.

2. Filling or dumping.

3. Use, storage or application of herbicides, except for spot spraying of noxious weeds or non-native species.

4. Storage or operation of motorized vehicles, except for maintenance and emergency use approved by the Public Works Department.

EXCLUSION: Any project that has received a state or federal permit (including but not limited to Aquatic Resource Alteration Permits (ARAP), 401 or 404 permits) will be excluded from those requirements of this policy that are superceded by requirements of the state or federal permits.

B. The following structures, practices, and activities are permitted in the buffer zone, with specific design or maintenance features, subject to the review of the Public Works Department.

1. Individual trees within the buffer zone may be removed which are in danger of falling, causing damage to dwellings or other structures, or causing blockages in the stream.

2. Roads, bridges, paths and utilities:

a. The right-of-way should be the minimum width needed to allow for maintenance access and installation.

b. The angle of the crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements.

c. A minimum number of road crossings should be used within each subdivision, and no more than one stream crossing is allowed for every 1000 feet of buffer.

3. Stormwater management:

a. In new development, on-site and non-structural alternatives will be preferred over larger facilities within the stream buffer. When constructing stormwater management facilities (i.e. BMPs), the area cleared will be limited to the area required for construction and adequate maintenance access, as outlined in the Tennessee Erosion and Sediment Control Handbook.

b. Material dredged or otherwise removed from a BMP shall be stored outside the buffer.

4. Stream restoration projects, facilities and activities approved by Public Works are permitted within the riparian buffer zone.

5. Water quality monitoring and stream gauging are permitted within the stream buffer zone, as approved by the Public Works Department.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-805. Exemptions.

These provisions shall apply to all proposed development except for that development which prior to the effective date of this policy:

A. Is covered by a valid, unexpired plat in accordance with development regulations.

B. Is covered by a valid, unexpired building permit. (as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-806. Variances and modifications.

The Public Works Director may reduce or modify the requirement for a stream buffer zone for projects which will not result in disturbance of the land or where on-site conditions clearly demonstrate that the site is not now occupied by riparian habitat vegetation and would not effectively respond to riparian re-vegetation. An applicant requesting such a waiver shall submit sufficient information to substantiate the request to waive the requirement. (as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-807. Enforcement.

A. Enforcement authority. The director of the Public Works Department (hereafter referred to as director) or his or her designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.

B. Notification of violation.

1. Written notice. Whenever the director finds that any permittee or any other person has violated or is violating this chapter, the director may serve upon such person written notice of the violation. Within fourteen (14) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the director. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

2. Consent orders. The director is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (4) and (5) below.

3. Show cause hearing. The director may order any person who violates this chapter, to show cause why a proposed enforcement action should not be taken. The hearing shall be before the Public Works director. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meetings shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

4. Compliance order. When the director finds that any person has violated or continues to violate this chapter, he or she may issue an order to the violator directing that, following a specific time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the non-compliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.

5. Cease and desist orders. When the director finds that any person has violated or continues to violate this chapter, the director may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

a. Comply forthwith; or

b. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations.

C. Conflicting standards. Whenever there is a conflict between any standard contained in this chapter and in the BMP manual adopted by the municipality, the strictest standard shall prevail.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-808. Penalties.

A. Violations. Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to

this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Public Works Department, shall be guilty of a civil offense.

B. Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the municipality declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Public Works Department of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

C. Measuring civil penalties. In assessing a civil penalty, the director of the Public Works Department may consider:

1. The harm done to the public health or the environment;

2. Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

3. The economic benefit gained by the violator;

4. The amount of effort put forth by the violator to remedy this violation;

5. Any unusual or extraordinary enforcement costs incurred by the municipality;

6. The amount of penalty established by ordinance or resolution for specific categories of violations; and

7. Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

D. Recovery of damages and costs. In addition to the civil penalty in subsection (B) above, the municipality may recover:

1. All damages proximately caused by the violator to the municipality, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.

2. The costs of the municipality's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

E. Other remedies. The municipality may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

F. Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

14-809. Appeals.

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the Board of Environmental Appeals.

A. Appeals to be in writing. The appeal shall be in writing and filed with the City Clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

B. Public hearing. Upon receipt of an appeal, the Board of Environmental Appeals shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal.

C. Appealing decisions of the Board of Environmental Appeals. Any alleged violator may appeal a decision of the Board of Environmental Appeals pursuant to the provisions of Tennessee Code Annotated, Title 27, Chapter 8.

1. If a petition for review of such damage assessment or civil penalty is not filed within thirty (30) days after the damage assessment or civil penalty is served in any manner authorized by law, the violator shall be deemed to have consented to the damage assessment or civil penalty, and it shall become final.

(as added by Ord. #08-01-02, Feb. 2008, and amended by Ord. #015-01-01, February 2015)

Print

Cookeville, TN Code of Ordinances

CHAPTER 7
STORMWATER MANAGEMENT

SECTION

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14-701. General provisions.

It is the purpose of these regulations to:

(a) Provide a means to protect, maintain, and enhance the environment of the City of Cookeville and the public health, safety and the general welfare of the citizens of the city, by controlling discharges of pollutants into the city's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the city.

(b) Enable the City of Cookeville to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR section 122.26 for stormwater discharges.

(c) Allow the City of Cookeville to exercise the powers granted in Tennessee Code Annotated § 68-221-1105, which provides that, among other powers municipalities have with respect to stormwater facilities, is the power by ordinance or resolution to:

(1) Exercise general regulation over the planning, location, construction, and operation and maintenance of stormwater facilities in the municipality, whether or not owned and operated by the municipality;

(2) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;

(3) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;

(4) Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;

(5) Issue permits for stormwater discharges, due to construction or for construction, alteration, extension, or repair of stormwater facilities;

(6) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit; or be charged with a civil offense.

(7) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and

(8) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

The Public Works Department shall administer the provisions of these regulations.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-702. Definitions.

For the purpose of this chapter, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

(1) "As built plans" means drawings depicting conditions as they were actually constructed.

(2) "Best management practices " or "BMPs " are physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, that have been approved by the City of Cookeville, and that have been incorporated by reference into this chapter as if fully set out therein.

[NOTE: See § 14-704(1) for recommended BMP manual.]

(3) "Building Permit Applicant or Applicant" means anyone applying for a building or grading permit.

(4) "Channel" means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

(5) "Civil penalties" under the authority provided in Tennessee Code Annotated § 68-221-1106, the city declares that any person violating the provisions of this chapter may be assessed a civil penalty by the city of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(6) "Common plan of development or sale" is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

(7) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

(8) "de minimus discharges " are water discharges that pose insignificant threat to water quality and the environment.

(9) "Design storm event" means a hypothetical storm event of a given frequency, interval and duration, used in the analysis and design of a stormwater facility. The estimated design rainfall amounts for any return period interval (i.e. 2-yr, 5-yr, 10-yr, etc.), in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds map cont.html

(10) "Discharge " means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system.

(11) "Easement" means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, municipality or other legal entity has in the land of another.

(12) "Erosion " means the removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

(13) "First flush " means the initial or early stages of stormwater runoff from a storm event which commonly delivers a disproportionately large amount of previously accumulated pollutants due to the rapid rate of runoff. The first flush is defined in the City of Cookeville Stormwater Management Design Guidelines.

(14) "Hotspot" ("priority area") means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

(15) "Illicit connections " means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.

(16) "Illicit discharge " means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under § 14-706 (2).

(17) "Improved sinkhole " is a natural surface depression that has been altered in order to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under TDEC's Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste water in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone).

(18) "Inspector" An inspector is a person that has successfully completed (has a valid certification from) the "Fundamentals of Erosion Prevention and Sediment Control Level I" course or equivalent course. An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

(a) Oversee the requirements of other construction-related permits, such as Aquatic Resources Alteration Permit (ARAP) or Corps of Engineers permit for construction activities in or around waters of the state;

(b) Update field SWPPPs;

(c) Conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed; and

(d) Inform the permit holder of activities that may be necessary to gain or remain in compliance with the Construction General Permit (CGP) and other environmental permits.

(19) "Land disturbing activity" means any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land-disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, and excavation. Excludes agricultural activities.

(20) "Maintenance" means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.

(21) "Maintenance agreement" means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

(22) "Municipal separate storm sewer system (MS4)" ("Municipal separate stormwater system") means the conveyances owned or operated by the municipality for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains, and where context indicates, it means the municipality that owns the separate storm sewer system.

(23) "National Pollutant Discharge Elimination System permit" (NPDES permit) means a permit issued pursuant to 33 U.S.C. 1342.

(24) "Off-site facility" means a structural BMP located outside the subject property boundary described in the permit application for land development activity.

(25) "Peak flow" means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

(26) "Person" means any and all persons, natural or artificial, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.

(27) "Redevelopment" is defined as land development on a previously developed site which disturbs fifty percent (50%) or more of the existing developed site. Redevelopment does not include ordinary maintenance activities, such as repaving existing paved areas, remodeling existing buildings, reroofing, and cosmetic changes to existing buildings.

(28) "Runoff" means that portion of the precipitation on a drainage area that is discharged from the area into the municipal separate stormwater system.

(29) "Sediment" means solid 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 either above or below sea level.

(30) "Sedimentation" means soil particles suspended in stormwater that can settle in stream beds and may disrupt the natural flow of the stream.

(31) "Soils Report" means a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a soils engineer or geologist licensed in the State of Tennessee, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.

(32) "Stabilization" means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.

(33) "Stormwater" means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.

(34) "Stormwater management" means the programs to maintain quality and quantity of stormwater runoff to pre-development levels.

(35) "Stormwater management facilities" means the drainage structures, conduits, ponds, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.

(36) "Stormwater management plan" means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.

(37) "Stormwater runoff" means flow on the surface of the ground, resulting from precipitation.

(38) "Stormwater utility" means the stormwater utility created by ordinance of the city to administer the stormwater management ordinance, and other stormwater rules and regulations adopted by the municipality.

(39) "Stream" is a linear surface water that is not a Wet-Weather Conveyance as determined by a Qualified Hydrological Professions.

(40) "Structural BMPs" means devices that are constructed to provide control of stormwater runoff.

(41) "Surface water" includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.

(42) "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

(43) "Watershed" means all the land area that contributes runoff to a particular point along a

waterway.

(44) "Waters" or "waters of the state" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

(45) "Wetland(s)" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

(46) "Wet Weather Conveyance" are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015, and Ord. #O16-09-21, November 2016)

14-703. Existing locations and developments.

(1) Requirements for all existing locations and developments. The following requirements shall apply to all locations and developments at which land disturbing activities have occurred previous to the enactment of this chapter:

(a) Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP manual and on a schedule acceptable to the Public Works Department.

(b) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.

(c) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, etc., to prevent erosion.

(d) Trash, junk, rubbish, etc. shall be cleared from drainage ways.

(2) Requirements for existing problem locations. The Public Works Department shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problem affecting such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance.

(3) Inspection of existing facilities. The Public Works Department may, to the extent authorized by state and federal law, establish inspection programs to verify that all stormwater management facilities, including those built before as well as after the adoption of this chapter, are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the municipality's NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other BMPs.

(4) Corrections of problems subject to appeal. Corrective measures imposed by the Public Works Department under this section are subject to appeal under § 14-710 of this chapter.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-704. Stormwater system design and management standards.

(1) Stormwater design or BMP manual.

(a) Adoption. The municipality adopts as its stormwater design and best management practices (BMP) manual the following publications, which are incorporated by reference in this chapter as is fully set out herein:

(1) TDEC Sediment and Erosion Control Handbook; most current edition.

(2) Title 14, Chapter 7, § 14-712.

(3) Tennessee Permanent Stormwater Management and Design Guidance Manual; most current edition.

(4) Other MS4 approved BMP manuals that comply with the goals of the MS4 Permit and/or the Construction General Permit (CGP) may be chosen by the city and a current list is available from the Public Works Department.

(b) These manuals include lists of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. These include city approved BMPs for permanent stormwater management including green infrastructure BMPs. These manuals may be updated and expanded from time to time, at the discretion of the governing body of the municipality, upon the recommendation of the Public Works Department, based on improvements in engineering, science, monitory and local maintenance experience. Stormwater facilities that are designed, constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

(2) General performance criteria for stormwater management. The following performance criteria shall be addressed for stormwater management at all sites:

(a) All site designs shall control the peak flow rates of stormwater discharge associated with design storms specified in this chapter or as specified by the City of Cookeville Stormwater Management Design Guidelines and reduce the generation of post construction stormwater runoff to pre-construction levels. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity. All stormwater management facilities that are required under § 14-608 of the Cookeville Municipal Code, and the Cookeville Zoning Code and Subdivision Regulations and which are approved after the adoption of this chapter shall be built to control water quality by using the best management practice outlined in this section. Other methods of controlling water quality may be approved by the Director of Public Works if valid documentation is provided which indicates an equivalent or higher level of water quality will result from the alternate method. Due to the city's NPDES MS4 permit stormwater management requirements are periodically changed, therefore specific requirements for detention and water quality will be found in the City of Cookeville Stormwater Management Guidelines.

(b) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the BMP manual.

(c) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, swimming areas, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.

(d) Stormwater discharges from "hot spots" may require the application of specific structural BMPs and pollution prevention practices. In addition, stormwater from hot spot land use may not be infiltrated.

(e) Prior to or during the site design process, building permit applicants shall consult with the Public Works Department to determine if they are subject to additional stormwater design requirements.

(f) The calculations for determining peak flows as found in the MS4 BMP manual shall be used for sizing all stormwater facilities.

(3) Minimum control requirements.

(a) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified by the City of Cookeville Stormwater Management Design Guidelines, unless the Public Works Department has granted the applicant a full or partial waiver for a particular BMP under § 14-707 .

(b) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the Public Works Department may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.

(4) Permanent stormwater management plan requirements. The stormwater management plan shall include sufficient information to allow the Public Works Department to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal the stormwater management plan shall include the following:

(a) Topographic base map: A topographic base map (2 foot contour intervals) to a suitable scale of the site which extends a minimum of 100 feet beyond the limits of the proposed development and indicates:

(1) Existing surface water drainage including streams, ponds, culverts, ditches, sink holes, wetlands; and the type, size, elevation, etc., of nearest upstream and downstream drainage structures;

(2) Current land use including all existing structures, locations of utilities, roads, and easements;

(3) All other existing significant natural and artificial features;

(4) Proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading;

(b) Proposed structural BMPs;

(c) A written description of the site plan and justification of proposed changes in natural conditions may also be required.

(d) Calculations: Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in the BMP manual. These calculations must show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this chapter and the guidelines of the BMP manual. Such calculations shall include:

(1) A description of the design storm frequency, duration, and intensity where applicable;

(2) Time of concentration;

(3) Soil curve numbers or runoff coefficients including assumed soil moisture conditions;

(4) Peak runoff rates and total runoff volumes for each watershed area;

(5) Infiltration rates, where applicable;

(6) Culvert, stormwater sewer, ditch and/or other stormwater conveyance capacities;

(7) Flow velocities;

(8) Data on the increase in rate and volume of runoff for the design storms referenced in the BMP manual; and

(9) Documentation of sources for all computation methods and field test results.

(e) Soils information: If a stormwater management control measure depends on the hydrologic properties of soils (e.g., infiltration basins), then a soils report shall be submitted. The soils report shall be based on on-site boring logs or soil pit profiles and soil survey reports. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.

(f) Maintenance and repair plan: The design and planning of all stormwater management facilities shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.

(g) Landscaping plan: The applicant must present a detailed plan for management of vegetation at the site after construction is finished, including who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved. Where it is required by the BMP, this plan must be prepared by a registered landscape architect licensed in Tennessee.

(h) Maintenance easements: The applicant must ensure access to the site for the purpose of inspection and repair by securing all the maintenance easements needed. These easements must be binding on the current property owner and all subsequent owners of the property and must be properly recorded in the land record.

(i) Maintenance agreement:

(1) Stormwater facilities on properties permitted under the requirements of this chapter are required to provide a maintenance agreement that runs with the land. The owner of property must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owner and all subsequent property owners and their lessees and assigns, including but not limited to, homeowner associations or other groups or entities.

(2) The maintenance agreement shall:

(a) Assign responsibility for the maintenance and repair of the stormwater facility to the owner of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.

(b) Provide for periodic inspection by the property owner in accordance with the requirements of subsection (3) below for the purpose of documenting maintenance and repair needs and to ensure compliance with the requirements of this chapter. The property owners will arrange for professional inspections in accordance with the requirements of subsection (3) below on a less frequent schedule, to be conducted by a licensed professional engineer or landscape architect, registered to practice in the State of Tennessee, who will submit a signed written report of the inspection to the Public Works Department. It shall also grant permission to the city to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.

(c) Provide that the minimum maintenance and repair needs include, but are not limited to: the removal of silt, litter and other debris, the cutting of grass, grass cuttings and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities. It shall also provide that the property owner shall be responsible for additional maintenance and repair needs consistent with the needs and standards outlined in the BMP manual.

(d) Provide that maintenance needs must be addressed in a timely manner.

(e) Provide that if the property is not maintained or repaired within the prescribed schedule, the Public Works Department shall perform the maintenance and repair at its expense, and bill the same to the property owner. The maintenance agreement shall also provide that the Public Works Department's cost of performing the maintenance shall be a lien against the property.

(3) Inspections required for stormwater management facilities that have a recorded maintenance agreement - generally. The owners and/or the operators of stormwater management facilities shall:

(a) Perform routine inspections to ensure that the BMPs are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. Owners or operators shall maintain documentation of these inspections. The Public Works Department may require submittal of this documentation,

(b) Perform comprehensive inspection of all stormwater management facilities and

practices. Such inspection shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect, licensed in the State of Tennessee. Complete inspection reports for these five year inspections shall include:

(i) Facility type,

(ii) Inspection date,

(iii) Latitude and longitude and nearest street address,

(iv) BMP owner information (e.g. name, address, phone number, fax, and email)

(v) A description of BMP condition including: vegetation and soils; inlet and outlet channels and structures; embankments, slopes and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation,

(vi) Photographic documentation of BMPs, and

(vii) Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and re-inspection dates.

(c) Owners or operators shall maintain documentation of these inspections. The Public Works Department may require submittal of this documentation.

(5) Sediment and erosion control plans: The applicant must prepare a sediment and erosion control plan for all construction activities that complies with § 14-704 (6) below.

(6) Sediment and erosion control plan requirements. The requirements of Cookeville Municipal Code, Title 14, Chapter 5, entitled "Erosion and Sediment Control Regulations", shall be met. (as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-705. Post construction.

(1) As built plans. All applicants are required to submit actual as built plans for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A certificate of occupancy shall not be granted by the Codes Department until any needed corrections to all BMPs have been made and accepted by the Public Works Department.

(2) Landscaping and stabilization requirements.

(a) Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be revegetated according to a schedule approved by the Public Works Department. The following criteria shall apply to revegetation efforts:

(1) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

(2) Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.

(3) Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.

(b) In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

(3) Records of installation and maintenance activities. Parties responsible for the operation and maintenance of a stormwater management facility shall make records of all maintenance and

repairs to the facility, and shall retain the records for at least 5 years. These records shall be made available to the Public Works Department during inspection of the facility and at other reasonable times upon request.

(4) Failure to meet or maintain design or maintenance standards. If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this chapter, the Public Works Department, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the Public Works Department shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have 14 days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the Public Works Department may take necessary corrective action. The cost of any action by the Public Works Department under this section shall be charged to the responsible party.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015, and Ord. #O16-09-21, November 2016)

14-706. Illicit discharges.

(1) Scope. This section shall apply to all water generated on developed or undeveloped land which enters the municipality's separate storm sewer system.

(2) Prohibition of illicit discharges. No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater or any discharge that flows from a stormwater facility that is not inspected in accordance with § 14-704 shall be an illicit discharge. Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxics. The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as described as follows:

(a) Uncontaminated discharges from the following sources:

(1) Water line flushing or other potable water sources,

(2) Landscape irrigation or lawn watering with potable water,

(3) Diverted stream flows,

(4) Rising ground water,

(5) Groundwater infiltration to storm drains,

(6) Pumped groundwater,

(7) Foundation or footing drains,

(8) Crawl space pumps,

(9) Air conditioning condensation,

(10) Springs,

(11) Non-commercial washing of vehicles,

(12) Natural riparian habitat or wet-land flows,

(13) Swimming pools (if disinfected with chlorine and de-chlorinated prior to release - typically less than one PPM chlorine),

(14) Fire fighting activities, and

(15) Any other uncontaminated water source.

(b) Discharges specified in writing by the Public Works Department as being necessary to protect public health and safety.

(c) Dye testing is an allowable discharge if the Public Works Department has so specified in writing.

(d) De minimus discharges - water discharges that pose insignificant threat to water quality and the environment.

(e) Discharges authorized by the Construction General Permit (CGP), which comply with section 3.5.9 of the same:

(i) dewatering of work areas of collected stormwater and ground water (filtering and chemical treatment may be necessary prior to discharge);

(ii) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;

(iii) water used to control dust in accordance with the CGP section 3.5.5;

(iv) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;

(v) routine external building washdown that does not use detergents or other chemicals;

(vi) uncontaminated ground water or spring water; and

(vii) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.).

(3) Prohibition of illicit connections.

(a) The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited.

(b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(4) Reduction of stormwater pollutants by the use of best management practices. Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. Discharges from existing BMPs that have not been maintained and/or inspected in accordance with this chapter shall be regarded as illicit.

(5) Notification of spills. Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into stormwater, the municipal separate storm sewer system, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the Public Works Department in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the Public Works Department within three (3) business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least 5 years.

(6) No illegal dumping allowed. No person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the city.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-707. Waivers.

(1) General. Every landowner shall provide for stormwater management as required by this chapter, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to the Public Works Department for approval.

(2) Conditions for waiver. The minimum requirements for stormwater management may be waived in whole or in part upon written request of the landowner, provided that at least one of the following conditions applies:

(a) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this chapter,

(b) Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the Public Works Department.

(3) Downstream damage, etc. prohibited. In order to receive consideration, the applicant must demonstrate to the satisfaction of the Public Works Department that the proposed alternative will not lead to any of the following conditions downstream:

(a) Deterioration of existing culverts, bridges, dams, and other structures;

(b) Degradation of biological functions or habitat;

(c) Accelerated streambank or streambed erosion or siltation;

(d) Increased threat of flood damage to public health, life or property.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-708. Enforcement.

(1) Enforcement authority. The director of the Public Works Department (hereafter referred to as director) or his or her designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.

(2) Notification of violation.

(a) Verbal warning. Verbal warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.

(b) Written notice. Whenever the director or his or her designee finds that any permittee or any other person discharging stormwater has violated or is violating this chapter or a permit or order issued hereunder, the director may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the director. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.

(c) Consent orders. The director or his or her designee is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.

(d) Show cause hearing. The director or his or her designee may order any person who violates this chapter or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. The hearing shall be before the Public Works director. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.

(e) Compliance order. When the director or his or her designee finds that any person has violated or continues to violate this chapter or a permit or order issued thereunder, he or she may issue an order to the violator directing that, following a specific time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.

(f) Cease and desist orders. When the director or his or her designee finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the director may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(1) Comply forthwith; or

(2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(3) Conflicting standards. Whenever there is a conflict between any standard contained in this chapter and in the BMP manual adopted by the municipality under this chapter, the strictest standard shall prevail.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-709. Penalties.

(1) Violations. Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the Public Works Department, shall be guilty of a civil offense.

(2) Penalties. Under the authority provided in Tennessee Code Annotated § 68-221-1106, the municipality declares that any person violating the provisions of this chapter may be assessed a civil penalty by the Public Works Department of not less than fifty dollars ($50.00) and not more than five thousand dollars ($5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

(3) Measuring civil penalties. In assessing a civil penalty, the director of the Public Works Department may consider:

(a) The harm done to the public health or the environment;

(b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(c) The economic benefit gained by the violator;

(d) The amount of effort put forth by the violator to remedy this violation;

(e) Any unusual or extraordinary enforcement costs incurred by the municipality;

(f) The amount of penalty established by ordinance or resolution for specific categories of violations; and

(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the municipality may recover:

(a) All damages proximately caused by the violator to the municipality, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation.

(b) The costs of the municipality's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.

(5) Other remedies. The municipality may bring legal action to enjoin the continuing violation of this chapter, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(6) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-710. Appeals.

Pursuant to Tennessee Code Annotated § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the Board of Environmental Appeals.

(1) Appeals to be in writing. The appeal shall be in writing and filed with the City Clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

(2) Public hearing. Upon receipt of an appeal, the Board of Environmental Appeals shall hold a public hearing within thirty (30) days. Ten (10) days prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten (10) days notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal.

(3) Appealing decisions of the Board of Environmental Appeals. Any alleged violator may appeal a decision of the Board of Environmental Appeals pursuant to the provisions of Tennessee Code Annotated, Title 27, Chapter 8.

(4) If a petition for review of such damage assessment or civil penalty is not filed within thirty (30) days after the damage assessment or civil penalty is served in any manner authorized by law, the violator shall be deemed to have consented to the damage assessment or civil penalty, and it shall become final.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-711. Board of environmental appeals.

(1) There is created a Board of Environmental Appeals to hear appeals filed by any person incurring a civil penalty or damage assessment imposed pursuant to § 14-709 of these regulations.

(2) The board may issue subpoenas requiring attendance of witnesses and production of such evidence as requested, administer oaths, and take testimony as the board deems necessary to fulfill its purpose.

(3) The board shall be composed of five members appointed by the Cookeville City Council.

(4) The council shall select appointees so that the board will consist of individuals with an expertise as follows:

(a) One licensed professional engineer with civil engineering expertise.

(b) One licensed professional engineer.

(c) One representative of the development or industrial community.

(d) One neighborhood representative.

(e) One member at large.

(5) The professional engineers shall have at least three (3) years experience in each member's area of expertise.

(6) Board members shall serve for a term of five (5) years. A board member shall continue to serve, however, until a successor has been appointed, or until the board member has been reappointed. The terms of the original board members shall be staggered so that the term of one

member shall expire each year.

(7) An appointment to succeed a board member who is unable to serve said member's full term shall be for the remainder of said member's term.

(8) Board members may be reappointed, but they do not succeed themselves automatically.

(9) Board members shall serve without compensation.

(10) The board shall annually select one of its members to serve as chair and another member to serve as vice-chair of the board by a majority vote of all members.

(11) The board shall keep complete and accurate records of the proceedings of all their meetings. The Department of Public Works shall designate a person to serve as secretary to the board.

(12) No board member shall participate in the appeal of any matter in which the member has direct personal or financial interest.

(13) Three members of the board shall constitute a quorum, and the concurrence of a majority of the board present and voting in any matter shall be required for a determination of any matter within its jurisdiction.

(as added by Ord. #004-06-11, July 2004, and amended by Ord. #015-01-01, February 2015)

14-712. Stormwater Management Guidelines.

(1) General Provisions.

(a) These guidelines will outline the way storm water detention and green infrastructure will be calculated. Storm water detention is a necessary part of most storm water treatment BMPs and is required for most developments.

(b) The Storm Water Ordinance of the City of Cookeville is posted at the City of Cookeville Public Works Department's website and must be read by anyone attempting to perform storm water calculations with the City of Cookeville. It contains provisions for fees, right-of-entry, definitions, easements and penalties. A major purpose of the Storm Water Ordinance is to improve water quality, storm water quantity as well as comply with the city's NPDES Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4).

(c) Due to the MS4 permit requirements, projects over one (1) acre in disturbed area require additional controls; therefore the guidelines are separated into two (2) categories: one for projects less than one (1) disturbed acre and another for projects with more than one (1) disturbed area.

(d) Storm water detention is required for any new development or re-development containing 5,000 square feet or more of impervious area. (Cookeville Municipal Code § 14-608, Cookeville Zoning Code, Cookeville Subdivision Regulations). Where additions to the existing impervious area of the site bring the total area of impervious surface to 5,000 square feet or more, only the additional impervious area is required to provide detention.

(e) Storm water detention is defined as limiting the peak discharge rate for the post developed conditions to be no greater than the peak discharge rate for the predevelopment conditions. This must be accomplished using the two (2)-year, five (5)-year, and ten (10)-year storms. The estimated design rainfall amounts for either twenty-four (24)-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee:

http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html

(f) Redevelopment of property shall be evaluated using one of the following methods unless otherwise determined by the Public Works Department:

i. Rational method – evaluate the pre-development conditions using the appropriate meadow/pastureland runoff coefficient or as existing conditions; the more conservative condition shall be used.

ii. USDA Technical Release Number 55 (TR-55) – evaluate the pre-development conditions as either grassland conditions or existing conditions; the more conservative conditions shall be

used.

(2) Projects Disturbing Less Than One Acre.

(a) The first flush volume is defined as the first one (1) inch of direct runoff from the impervious areas of the contributing drainage basin. The first flush volume must be captured and released over a minimum of twenty-four (24) hours and a maximum of seventy-two (72) hours. No first flush runoff of impervious surfaces shall bypass the treatment facility. Storm water recharge by infiltrating the first flush volume into the soil on site is the preferable method of first flush treatment. Infiltration may be accomplished by the use of bioretention basins, rain gardens, bio swales, green parking for overflow lots, or other methods pre-approved by the Director of Public Works or his designee. Infiltration of the first flush may not be possible if the site is located on unsuitable soils. Where infiltration of storm water is not possible or ill advised, treatment of the first flush is defined as a practice or structure that removes eighty percent (80%) total suspended solids (TSS) and other anticipated pollutants such as oil and grease.

(b) A dry detention basin must have a minimum of two percent (2%) slope in the bottom of the basin in order to drain properly. Side slopes should generally be three to one (3:1) (H:V) or flatter, unless traversable access has been designed.

(c) All hydrological and hydraulic computations for storm water detention facilities must be prepared and stamped by a registered engineer (licensed in the state of Tennessee) and proficient in this field. Plans must show sufficient information to enable the builder to construct the facility as required.

(d) Underground detention is the use of large underground structures to provide necessary volumes for attenuating storm water peak flows. Underground structures generally provide little or no storm water quality benefits. The following minimum requirements must be met before an underground storage facility will be considered for approval:

i. The underground detention structure must provide adequate access for inspection from the surface. Public safety must be considered.

ii. The underground detention structure must be constructed of durable materials with a typical one hundred (100)-year lifetime. Detention storage volume shall not include the porous space within a stone or gravel bed without soils reports stamped by a geotechnical engineer stating that infiltration into the soils should exceed one-half inch (1/2") per hour infiltration rate.

iii. The underground detention structure shall be designed to have positive drainage into the receiving channel or storm water sewer assuming there is a ten (10)-year flood in the receiving facility.

iv. The underground detention structure shall not receive surface runoff directly from parking lots. Surface water shall be directed to a BMP that improves water quality such as an oil/water separator, grass filter strips (of sufficient size to filter the water quantity), or a proprietary water quality devise approved by the Public Works Department.

v. Design measures must be taken to trap and store sediments in locations where cleanout and maintenance can be easily performed. This generally requires that some type of water quality inlet or other storm water treatment BMP must be installed upstream from the underground detention facility. Proprietary water quality devices must be approved by the Public Works Department.

vi. A detailed maintenance and inspection plan must be submitted and approved (including inspection schedules and guidelines). Evidence of responsibility and financial budgeting must be presented.

(3) Projects Disturbing More Than One Acre. Projects disturbing more than one (1) acre for new and redevelopment will be required to meet the site design standards set out by the Tennessee Department of Environment and Conservation (TDEC) for compliance with the city's National Pollutant Discharge Elimination System (NPDES) permit as well as minimum volume controls.

(a) Site design standards for all new construction and redevelopment disturbing one (1) acre or more must use, in combination or alone, storm water management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use the first inch of every rainfall event preceded by seventy-two (72) hours of no measurable precipitation. This first inch of rainfall must be one hundred percent (100%) managed with no discharge to surface waters.

(b) Storm water management measures that are often referred to as green infrastructure that can infiltrate the first inch of rainfall are the goal that TDEC is aiming for that they term runoff reduction. Green infrastructure includes many practices including: rain gardens, bioretention, infiltration swales, etc.

(c) Some sites are not suitable for infiltration methods and infiltration requirements may be set aside on such sites, with prior agreement by the Public Works Department. Limitations to using runoff reduction methods include, but are not limited to:

i. Where the potential for introducing pollutants into the ground water exists, unless pretreatment is provided;

ii. Where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff;

iii. The presence of sinkholes or other karst features.

(d) Pre-development infiltration capacity of the soils at the site must be taken into account in selection of runoff reduction management measures.

(e) Incentive standards for redevelopment sites: a ten percent (10%) reduction in volume of rainfall to be managed for any of the following types of development. Such credits are additive such that a maximum reduction of fifty percent (50%) of the standard one (1) inch is possible for a project that meets all five (5) criteria:

i. Redevelopment.

ii. Brownfield redevelopment.

iii. High density (> 7 units per acre).

iv. Vertical density (> 18 units per acre).

v. Mixed use.

(f) For all projects that cannot meet one hundred percent (100%) of the one (1) inch runoff reduction requirement unless subject to the incentive standards, the remainder of the one (1) inch rainfall must be treated prior to discharge with a practice or technology documented to remove eighty percent (80%) total suspended solids (TSS). The treatment practice or technology must be designed, installed and maintained to continue to meet this performance standard.

(g) In addition to the runoff reduction requirement for the one (1) inch rainfall minimum volume controls are required to detain those storms greater than one (1) inch in depth.

(h) A dry detention basin must have a minimum of two percent (2%) slope in the bottom of the basin in order to drain properly. Side slopes should generally be three to one (3:1) (H:V) or flatter, unless traversable access has been designed.

(i) All hydrological and hydraulic computations for storm water detention facilities must be prepared and stamped by a registered engineer (licensed in the state of Tennessee) and proficient in this field. Plans must show sufficient information to enable the builder to construct the facility as required.

(j) Underground detention is the use of large underground structures to provide necessary volumes for attenuating storm water peak flows. Underground structures generally provide little or no storm water quality benefits. The following minimum requirements must be met before an underground storage facility will be considered for approval:

i. The underground detention structure must provide adequate access for inspection from the surface. Public safety must be considered.

ii. The underground detention structure must be constructed of durable materials with a typical one hundred (100)-year lifetime. Detention storage volume shall not include the porous space within a stone or gravel bed without soils reports stamped by a geotechnical engineer stating that infiltration into the soils should exceed one-half inch (1/2") per hour infiltration rate.

iii. The underground detention structure shall be designed to have positive drainage into the receiving channel or storm water sewer assuming there is a ten (10)-year flood in the receiving facility.

iv. The underground detention structure shall not receive surface runoff directly from parking lots. Surface water shall be directed to a BMP that improves water quality such as an oil/water separator, grass filter strips (of sufficient size to filter the water quantity), or a proprietary water quality devise approved by the Public Works Department.

v. Design measures must be taken to trap and store sediments in locations were cleanout and maintenance can be easily performed. This generally requires that some type of water quality inlet or other storm water treatment BMP must be installed upstream from the underground detention facility. Proprietary water quality devices must be approved by the Public Works Department.

vi. A detailed maintenance and inspection plan must be submitted and approved (including inspection schedules and guidelines).

(as added by Ord. #O16-06-16, August 2016, and amended by Ord. #O16-09-21, November 2016)