

City of Dyersburg



LAND DISTURBANCE PERMIT DTN00000

Storm Water Discharges Associated With Construction Activity

City of Dyersburg Storm Water Management Dept.
P.O. Box 1358
Dyersburg, TN 38025-1358
731-288-7696

Under the Authority of Tennessee Code Annotated Title 68-221-1105, and approval of Tennessee Department of Environment and Conservation:

Permit DTN00000, the City of Dyersburg Land Disturbance Permit is issued and made available to persons who discharge to waters inside the city limits of Dyersburg, Tennessee Storm Water Discharges Associated with Construction Activity. This permit authorizes discharges in accordance with the following SWPPP requirements, effluent limitations, monitoring, and reporting requirements set therein.

Issuance Dale _____

Scott Jackson
City of Dyersburg
Storm Water Management

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Section 1. General provisions.

1.1 Purpose. It is the purpose of this ordinance to:

- 1.1.1 Protect, maintain, and enhance the environment of the City of Dyersburg and the public health, safety and the general welfare of the citizens of the city, by controlling discharges of pollutants to the city's storm water system and to maintain and improve the quality of the receiving waters into which the storm water outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the city.
- 1.1.2 Enable the City of Dyersburg to comply with the National Pollution Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR '122.26 for storm water discharges.
- 1.1.3 Allow the City of Dyersburg to exercise the powers granted in Tennessee Code Annotated '68-221-1105, which provides that, among other powers municipalities have with respect to storm water facilities, is the power by ordinance or resolution to:
 - 1.1.3.1 Exercise general regulation over the planning, location, construction, and operation and maintenance of storm water facilities in the municipality, whether or not owned and operated by the municipality;
 - 1.1.3.2 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;
 - 1.1.3.3 Establish standards to regulate the quantity of storm water discharged and to regulate storm water contaminants as may be necessary to protect water quality;
 - 1.1.3.4 Review and approve plans and plats for storm water management in proposed subdivisions or commercial developments;
 - 1.1.3.5 Issue permits for storm water discharges, or for the construction, alteration, extension, or repair of storm water facilities;
 - 1.1.3.6 Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;
 - 1.1.3.7 Regulate and prohibit discharges into storm water facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and
 - 1.1.3.8 Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of storm water contamination, whether public or private.

1.1.3.9 The City of Dyersburg shall be provided the right of access to all properties inside the city limits for the purpose of inspections.

1.2 Administering entity. The City of Dyersburg Storm Water Management Department shall administer the provisions of this ordinance.

Section 2. 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.

2.1 *As built plans:* means drawings depicting conditions as they were actually constructed.

2.2 *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 Dyersburg Storm Water Management Department, and that have been incorporated by reference into this ordinance as if fully set out therein.

2.3 *Channel:* means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

2.4 *Community water:* means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the City of Dyersburg.

2.5 *Contaminant:* means any physical, chemical, biological, or radiological substance or matter in water.

2.6 *Design storm event:* means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a storm water facility.

2.7 *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.

2.8 *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.

2.9 *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 construction or recreational activities or effects.

2.10 *Erosion and sediment control plan:* means a written plan (including drawings or other graphic representations)

- that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.
- 2.11 *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 storm water or any other area within proximity to or subject to contribute contaminants to local waters.
- 2.12 *Illicit connections*: means illegal and/or unauthorized connections to the municipal separate storm water system whether or not such connections result in discharges into that system.
- 2.13 *Illicit discharge*: means any discharge to the municipal separate storm sewer system that is not composed entirely of storm water and not specifically exempted under Section 3.3. This includes, but is not limited to the introduction of pesticides (i.e. Roundup) not approved by the City of Dyersburg Storm Water Management Department.
- 2.14 *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 for an area of 5,000 sq/ft. or larger. Land-disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, and excavation.
- 2.15 *Maintenance*: means any activity that is necessary to keep a storm water facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a storm water 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 storm water facility.
- 2.16 *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 storm water management practices.
- 2.17 *Municipal separate storm sewer system (MS4)*: means the conveyances owned or operated by the municipality for the collection and transportation of storm water, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.
- 2.18 *National Pollutant Discharge Elimination System permit or NPDES permit*: means a permit issued pursuant to 33 U.S.C. 1342.
- 2.19 *Off-site facility*: means a structural BMP located outside the subject property boundary described in the permit application for land development activity.
- 2.20 *On-site facility*: means a structural BMP located within the subject property boundary described in the permit

application for land development activity.

- 2.21 *Peak flow*: means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.
- 2.22 *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.
- 2.23 *Priority area*: means hot spot as defined in section 2.11
- 2.24 *Runoff*: means that portion of the precipitation on a drainage area that is discharged from the area into the municipal separate storm water system.
- 2.25 *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.
- 2.26 *Sedimentation*: means soil particles suspended in storm water that can settle in stream beds and disrupt the natural flow of the stream.
- 2.27 *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 qualified soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.
- 2.28 *Stabilization*: means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.
- 2.29 *Storm water*: means storm water runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.
- 2.30 *Storm water management*: means the programs to maintain quality and quantity of storm water runoff to pre-development levels.
- 2.31 *Storm water management facilities*: means the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which storm water is collected, transported, pumped, treated or disposed of.
- 2.32 *Storm water 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 storm water runoff to pre-development levels.
- 2.33 *Storm water pollution prevention plan (SWPPP)*: consist of an Erosion and Sediment Control Plan and a Storm

Water Management Plan.

- 2.34 *Storm water runoff*: means flow on the surface of the ground, resulting from precipitation.
- 2.35 *Storm water utility*: means the storm water utility created by ordinance of the city to fund the administration of the storm water management ordinance, and other storm water rules and regulations adopted by the municipality.
- 2.36 *Structural BMPs*: means devices that are constructed to provide control of storm water runoff.
- 2.37 *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.
- 2.38 *Watercourse*: means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.
- 2.39 *Watershed*: means all the land area that contributes runoff to a particular point along a waterway.

Section 3. Land disturbance permits.

3.1 When required.

3.1.1 Every person will be required to obtain a land disturbance permit from the City of Dyersburg Storm Water Management Department in the following cases:

3.1.1.1 Land disturbing activity disturbs one (1) or more acres of land;

3.1.1.2 Land disturbing activity of less than one (1) acre of land if such activity is part of a larger common plan of development that affects one (1) or more acre of land;

3.1.1.3 Land disturbing activity of less than one (1) acre of land, if in the discretion of the City of Dyersburg Storm Water Management Department such activity poses a unique threat to water, or public health or safety, or land disturbance is 5,000 sq/ft. or more.

3.1.1.4 The creation and use of borrow pits, fill areas, or stockpiles.

3.2 Building permit. No building permit shall be issued until the applicant has obtained a land disturbance permit where the same is required by this ordinance.

3.3 Exemptions. The following activities are exempt from the requirement to obtain a permit:

3.3.1 Any emergency activity that is immediately necessary for the protection of life, property, or natural resources; however, activities must comply with all control requirements.

3.3.2 Existing nursery and agricultural operations conducted as a permitted main or accessory use.

3.3.3 Any logging or agricultural activity that is consistent with an approved farm conservation plan or a timber management plan prepared or approved by the appropriate Federal or State agency.

3.3.4 Additions or modifications to existing single family structures disturbing less than 5000 sq/ft.

3.4 Application for a land disturbance permit.

3.4.1 Each application shall include the following:

3.4.1.1 Name of applicant;

3.4.1.2 Business or residence address of applicant;

3.4.1.3 Name, address and telephone number of the owner of the property of record in the office of the assessor of property;

3.4.1.4 Address and legal description of subject property including the tax reference number and parcel number of the subject property;

3.4.1.5 Name, address and telephone number of the contractor/site operator and any subcontractor(s) who shall perform the land disturbing activity and who shall implement the erosion and sediment control plan;

3.4.1.6 A statement indicating 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.

3.4.1.7 The applicant shall obtain from any other state or federal agency any other appropriate environmental permits that pertain to the property. However, the inclusion of those permits in the application shall not foreclose the City of Dyersburg Storm Water Management Department from imposing additional development requirements and conditions, commensurate with this ordinance, on the development of property covered by those permits.

3.4.2 Each application shall be accompanied by:

3.4.2.1 A sediment and erosion control plan as described in Section 5.5

3.4.2.2 A storm water management plan as described in Section 5.4, providing for storm water management during the land disturbing activity and after the activity has been completed.

3.4.2.3 Each application for a land disturbance permit or resubmittal of a denied application shall be accompanied by payment of the appropriate land disturbance permit fee.

3.4.2.4 A written request for a waiver, where applicable.

3.5 Review and approval of application.

3.5.1 The City of Dyersburg Storm Water Management Department will review each application for a land disturbance permit to determine its conformance with the provisions of this ordinance. Within ten (10) days after receiving an application, the City of Dyersburg Storm Water Management Department shall provide one of the following responses in writing:

3.5.1.1 Approval of the permit application;

3.5.1.2 Approval of the permit application, subject to such reasonable conditions as may be necessary to secure substantially the objectives of this ordinance, and issue the permit subject to these conditions; or

3.5.1.3 Denial of the permit application, indicating the reason(s) for the denial.

3.5.1.4 If waiver is granted a Land Disturbance Permit will be issued.

3.5.2 If the City of Dyersburg Storm Water Management Department has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the City of Dyersburg Storm Water Management Department.

3.5.3 No development plans will be released until the land disturbance permit has been approved.

3.6 Permit duration.

Every land disturbance permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance. In all other situations, the permit will remain in effect until a Notice of Termination has been filed and accepted.

3.7 Notice of Intent.

The applicant must notify, in writing, the City of Dyersburg Storm Water Management Department twenty (20) working days in advance of the commencement of construction. Regular inspections of the storm water management system construction shall be conducted by the City of Dyersburg Storm Water Management Department. All inspections shall be documented and written reports prepared that contain the following information:

3.7.1 The date and location of the inspection;

3.7.2 Whether construction is in compliance with the submitted storm water management plan;

3.7.3 Variations from the submitted construction specifications;

3.7.4 Any violations that exist.

3.8 Performance bonds.

3.8.1 The City of Dyersburg Storm Water Management Department may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the storm water practices are installed by the permit holder as required by the submitted storm water management plan. The amount of the installation performance security or performance bond shall be the total estimated construction cost of the structural BMPs listed under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. [Or plus a certain percentage of the total estimated costs.] The performance security shall contain forfeiture provisions for failure to complete work specified in the storm water management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment or rejection by the City of Dyersburg Storm Water Management Department. Alternatively the City of Dyersburg Storm Water Management Department reserves the right to calculate the cost of construction cost estimates.

3.8.2 The performance security or performance bond shall be released in full only upon submission of as-built plans and written certification by a registered professional engineer licensed to practice in Tennessee that the structural BMP has been installed in accordance with the approved plan and other applicable provisions of this ordinance. The City of Dyersburg Storm Water Management Department will make a final inspection of the structural BMP to ensure that it is in compliance with the submitted plan and the provisions of this ordinance. Provisions for a partial pro-rata release of the performance security or performance bond based on the completion of various development stages can be made at the discretion of the City of Dyersburg Storm Water Management Department.

Section 4. Waivers.

4.1 General. Every applicant shall provide a storm water pollution prevention plan as required by this ordinance, unless a written request is filed to waive this requirement. Requests to waive the SWPPP requirements shall be submitted to the City of Dyersburg Storm Water Management Department for approval.

4.2 Conditions for waiver. The requirements for a Storm water Pollution Prevention Plan may be waived in whole or in part upon written request of the applicant, provided that all sediment remains on site and at least one of the following conditions applies:

4.2.1 It can be demonstrated that the proposed development is not likely to impair attainment of the

objectives of this ordinance.

4.2.2 Alternative minimum requirements for on-site management of storm water discharges have been established in a storm water management plan that has been submitted to the City of Dyersburg Storm Water Management Department.

4.2.3 Provisions are made to manage storm water by an off-site facility. The off-site facility must be in place and designed to provide the level of storm water control that is equal to or greater than that which would be afforded by on-site practices. Further, the facility must be operated and maintained by an entity that is legally obligated to continue the operation and maintenance of the facility.

4.3 Downstream damage, etc. prohibited. In order to receive a waiver, the applicant must demonstrate to the satisfaction of the City of Dyersburg Storm Water Management Department that the waiver will not lead to any of the following conditions downstream:

4.3.1 Deterioration of existing culverts, bridges, dams, and other structures;

4.3.2 Degradation of biological functions or habitat;

4.3.3 Accelerated stream bank or streambed erosion or siltation;

4.3.5 Increased threat of flood damage to public health, life or property.

4.4 Land disturbance permit not to be issued where waiver requested. No land disturbance permit shall be issued where a waiver has been requested until the waiver is granted. If no waiver is granted, the request must be resubmitted with a storm water management plan and the appropriate Land Disturbance fee.

Section 5. Storm water system design and management standards.

5.1 Storm water design or BMP manual.

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

5.1.1.1 TDEC Sediment and Erosion Control Manual

5.1.1.2 TDEC Post Construction BMP Manual

5.1.2 This manual includes a list of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each storm water practice. The manual may be updated and expanded from time to time, at the discretion of the governing body of the municipality, upon the recommendation of the City of Dyersburg Storm Water Management Department, based on

improvements in engineering, science, monitory and local maintenance experience. Storm water facilities that are designed, constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

5.2 General performance criteria for storm water management. Unless granted a waiver or judged by the City of Dyersburg Storm Water Management Department to be exempt, the following performance criteria shall be addressed for storm water management at all sites:

- 5.2.1 All site designs shall control the peak flow rates of storm water discharge associated with design storms specified in this ordinance or in the BMP manual and reduce the generation of post construction storm water runoff to pre-construction levels. These practices should seek to utilize pervious areas for storm water treatment and to infiltrate storm water runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
- 5.2.2 To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the BMP manual.
- 5.2.3 Storm water discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain storm water management practices.
- 5.2.4 Storm water discharges from hot spots may require the application of specific structural BMPs and pollution prevention practices.
- 5.2.5 Prior to or during the site design process, applicants for land disturbance permits shall consult with the City of Dyersburg Storm Water Management Department to determine if they are subject to additional storm water design requirements.
- 5.2.6 The TR-55, SCS, USGS or other approved calculations for determining peak flows, shall be used for sizing all storm water facilities.
- 5.2.7 As of July 1, 2005 all site operators must complete a state sponsored erosion and sediment control workshop, such as TDEC Level I Erosion and Sediment Control.
- 5.2.8 Land disturbance permits must be posted on site.
- 5.2.9 The Sediment and Erosion Control Plan and Storm Water Management Plan must be kept on site where possible, or easily accessible.

5.2.10 Controls will be inspected according to BMP manual standards, but not less than fourteen day intervals, and reports kept on site.

5.2.11 A rain gauge must be installed on site and records kept of rain fall events.

5.3 Minimum control requirements.

5.3.1 Storm water designs shall meet the multi-stage storm frequency storage requirements as identified in the BMP manual unless the City of Dyersburg Storm Water Management Department has granted the applicant a full or partial waiver for a particular BMP under Section 4.

5.3.2 If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Dyersburg Storm Water Management Department may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.

5.4 Storm water management plan requirements. The storm water management plan shall include sufficient information to allow the City of Dyersburg Storm Water Management 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 storm water generated at the project site. To accomplish this goal the storm water management plan shall include the following for all sites over (1) one acre, and at the discretion of the Storm Water Manager may include the following for sites less than (1) one acre:

5.4.1 Topographic Base Map: A 1" = 100' topographic base map of the site which extends to areas that effect or are effected by the proposed land disturbance.

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

5.4.1.2 Current land use including all existing structures, locations of utilities, roads, and easements;

5.4.1.3 All other existing significant natural and artificial features;

5.4.1.4 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;

5.4.1.5 Proposed structural BMPs;

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

- 5.4.2 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 storm water management measures are capable of controlling runoff from the site in compliance with this ordinance and the guidelines of the BMP manual. Such calculations shall include:
- 5.4.2.1 A description of the design storm frequency, duration, and intensity where applicable;
 - 5.4.2.2 Time of concentration;
 - 5.4.2.3 Soil curve numbers or runoff coefficients including assumed soil moisture conditions;
 - 5.4.2.4 Peak runoff rates and total runoff volumes for each watershed area;
 - 5.4.2.5 Infiltration rates, where applicable;
 - 5.4.2.6 Culvert, storm water sewer, ditch and/or other storm water conveyance capacities;
 - 5.4.2.7 Flow velocities;
 - 5.4.2.8 Data on the increase in rate and volume of runoff for the design storms referenced in the BMP manual; and documentation of sources for all computation methods and field test results.
- 5.4.3 Soils Information: If a storm water 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.
- 5.4.4 Maintenance and Repair Plan: The design and planning of all storm water management facilities shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a storm water management facility that need to be maintained and the equipment and skills or training necessary. The facility owner shall demonstrate the ability to garner and apply the financial resources necessary for long-term maintenance requirements. This method of funding must be demonstrated to be permanent and transferable to another entity with equivalent longevity. 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. A permanent elevation benchmark shall be identified in the plans to assist in the

periodic inspection of the facility.

5.4.5 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 competent landscape architect .

5.4.6 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.

5.4.7 Maintenance Agreement:

5.4.7.1 The owner of property to be served by an on-site storm water management facility 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.

5.4.7.2 The maintenance agreement shall:

5.4.7.2.1 Assign responsibility for the maintenance and repair of the storm water 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.

5.4.7.2.2 The property owner shall provide for a periodic inspection for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this ordinance. The property owner will arrange for this inspection to be conducted by a registered professional engineer licensed to practice in the State of Tennessee who will submit a sealed report of the inspection to the City of Dyersburg Storm Water Management Department. It shall also grant permission to the city to enter the property at reasonable times and to inspect the storm water facility to ensure that it is being properly maintained.

5.4.7.2.3 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 storm water 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.

5.4.7.2.4 Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the City of Dyersburg Storm Water Management Department.

5.4.7.2.5 Provide that if the property is not maintained or repaired within the prescribed schedule, the City of Dyersburg Storm Water Management 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 City of Dyersburg Storm Water Management Department's cost of performing the maintenance shall be a lien against the property.

5.4.7.2.6 Sediment and Erosion Control Plans: The applicant must prepare a sediment and erosion control plan for all construction activities that complies with Section 5(5) below.

5.5 Sediment and erosion control plan requirements. The sediment and erosion control plan shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. The plan shall be constructed using good engineering practices. The plan shall also conform to the requirements found in the BMP manual, and shall include at least the following for all sites over (1) one acre, and at the discretion of the Storm Water Manager may include the following for sites less than (1) one acre:

5.5.1 Project Description - Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.

5.5.2 A topographic map with contour intervals of two (2) feet or less showing present conditions and

proposed contours resulting from land disturbing activity.

- 5.5.3 All existing drainage ways, including intermittent and wet-weather. Include any designated floodways or flood plains.
- 5.5.4 A general description of existing land cover. Individual trees and shrubs do not need to be identified.
- 5.5.5 Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed and proposed planted trees. Tree protection measures must be identified, and the diameter of the area involved must also be identified on the plan and shown to scale. Information shall be supplied concerning the proposed destruction of exceptional and historic trees in setbacks and buffer strips, where they exist. Complete landscape plans may be submitted separately. The plan must include the sequence of implementation for tree protection measures.
- 5.5.6 Approximate limits of proposed clearing, grading and filling.
- 5.5.7 Approximate flows of existing storm water leaving any portion of the site.
- 5.5.8 A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.
- 5.5.9 Location, size and layout of proposed storm water and sedimentation control improvements.
- 5.5.10 Proposed drainage network.
- 5.5.11 Proposed drain tile or waterway sizes.
- 5.5.12 Approximate flows leaving site after construction and incorporating water run-off mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting storm water off-site; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas off-site, etc.
- 5.5.13 The projected sequence of work represented by the grading, drainage and sedimentation and erosion control plans as related to other major items of construction, beginning with the initiation of excavation and including the construction of any sediment basins or retention facilities or any other structural BMPs.
- 5.5.14 Specific remediation measures to prevent erosion and sedimentation run-off. Plans shall include

detailed drawings of all control measures used; stabilization measures including vegetation and non-vegetation measures, both temporary and permanent, will be detailed. Detailed construction notes, inspection and maintenance schedules shall be included for all control measures in the plan.

- 5.5.15 Specific details for: the construction of rock pads, wash down pads, and settling basins for controlling erosion; road access points; eliminating or keeping soil, sediment, and debris on streets and public ways at a level acceptable to the City of Dyersburg Storm Water Management Department. Soil, sediment, and debris brought onto streets and public ways must be removed by the end of the work day by machine, broom or shovel to the satisfaction of the City of Dyersburg Storm Water Management Department. Failure to remove the sediment, soil or debris shall be deemed a violation of this ordinance.
- 5.5.16 Proposed structures; location (to the extent possible) and identification of any proposed additional buildings, structures or development on the site.
- 5.5.17 A description of on-site measures to be taken to recharge surface water into the ground water system through infiltration.

Section 6. Post Construction.

- 6.1 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 storm water management facilities and must be sealed by a registered professional engineer licensed to practice in Tennessee. A final inspection by the City of Dyersburg Storm Water Management Department is required before any performance security or performance bond will be released. The City of Dyersburg Storm Water Management Department shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMPs have been made and accepted by the City of Dyersburg Storm Water Management Department
- 6.2 Landscaping and stabilization requirements.
 - 6.2.1 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 City of Dyersburg Storm Water Management Department. The following criteria shall apply to revegetation efforts:
 - 6.2.1.1 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.

6.2.1.2 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.

6.2.1.3 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.

6.2.2 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.

6.3 Inspection of storm water management facilities. Periodic inspections of facilities shall be performed as provided for in Section 5.4.7.2.2.

6.4 Records of installation and maintenance activities. Parties responsible for the operation and maintenance of a storm water management facility shall make records of the installation of the storm water facility, and 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 City of Dyersburg Storm Water Management Department during inspection of the facility and at other reasonable times upon request.

6.5 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 storm water facilities under this ordinance, the City of Dyersburg Storm Water Management 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 storm water management facility becomes a danger to public safety or public health, the City of Dyersburg Storm Water Management Department shall notify in writing the party responsible for maintenance of the storm water management facility. Upon receipt of that notice, the responsible person shall have 7 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 City of Dyersburg Storm Water Management Department may take necessary corrective action. The cost of any action by the City of Dyersburg Storm Water Management Department under this section shall be charged to the responsible party.

Section 7. Existing locations and developments.

7.1 Requirements for all existing locations and developments. The following requirements shall apply to all locations and development at which land disturbing activities have occurred previous to the enactment of this ordinance:

7.1.1 Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP manual and on a schedule acceptable to the City of Dyersburg Storm Water Management Department.

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

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

7.1.4 Trash, junk, rubbish, etc. shall be cleared from drainage ways.

7.1.5 Storm water runoff shall be controlled to the extent reasonable to prevent pollution of local waters.

Such control measures may include, but are not limited to, the following:

7.1.5.1 Ponds

7.1.5.1.1 Detention pond

7.1.5.1.2 Extended detention pond

7.1.5.1.3 Wet pond

7.1.5.1.4 Alternative storage measures

7.1.5.2 Constructed wetlands

7.1.5.3 Infiltration systems

7.1.5.3.1 Infiltration/percolation trench

7.1.5.3.2 Infiltration basin

7.1.5.3.3 Drainage (recharge) well

7.1.5.3.4 Porous pavement

7.1.5.4 Filtering systems

7.1.5.4.1 Catch basin inserts/media filter

7.1.5.4.2 Sand filter

7.1.5.4.3 Filter/absorption bed

7.1.5.4.4 Filter and buffer strips

7.1.5.5 Open channel

7.1.5.5.1 swale

7.2 Requirements for existing problem locations. The City of Dyersburg Storm Water Management 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.

7.3 Inspection of existing facilities. The City of Dyersburg Storm Water Management Department may, to the extent authorized by state and federal law, establish inspection programs to verify that all storm water management facilities, including those built before as well as after the adoption of this ordinance, 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 storm water 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.

7.4 Corrections of problems subject to appeal. Corrective measures imposed by the storm water utility under this section are subject to appeal under Section 11 of this ordinance.

Section 8. Illicit discharges.

8.1 Scope. This section shall apply to all water generated on developed or undeveloped land entering the municipality's separate storm sewer system.

8.2 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 storm water. The commencement, conduct or continuance of any non-storm water discharge to the municipal separate storm sewer system is prohibited except as described as follows:

- 8.2.1 Uncontaminated discharges from the following sources are allowed:
 - 8.2.1.1 Water line flushing or other potable water sources,
 - 8.2.1.2 Landscape irrigation or lawn watering with potable water,
 - 8.2.1.3 Diverted stream flows,
 - 8.2.1.4 Rising ground water,
 - 8.2.1.5 Groundwater infiltration to storm drains,
 - 8.2.1.6 Pumped groundwater,
 - 8.2.1.7 Foundation or footing drains,
 - 8.2.1.8 Crawl space pumps,
 - 8.2.1.9 Air conditioning condensation,
 - 8.2.1.10 Springs,
 - 8.2.1.11 Non-commercial washing of vehicles,
 - 8.2.1.12 Natural riparian habitat or wet-land flows,
 - 8.2.1.13 Swimming pools (if dechlorinated - typically less than one PPM chlorine),
 - 8.2.1.14 Fire fighting activities, and
 - 8.2.1.15 Any other uncontaminated water source.
- 8.2.2 Discharges specified in writing by the City of Dyersburg Storm Water Management Department as being necessary to protect public health and safety.
- 8.2.3 Dye testing is an allowable discharge if the dye used is environmentally safe.
- 8.2.4 Commercial and benefit car washing is an allowed discharge, but we encourage the use of biodegradable detergents and measures to filter other pollutants. (i.e. catch basin filters or allowing wash water to infiltrate into grassy areas)
- 8.3 Prohibition of illicit connections.
 - 8.3.1 The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited.
 - 8.3.2 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.
- 8.4 Reduction of storm water 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 storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

- 8.5 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 storm water, 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 City of Dyersburg Storm Water Management 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 City of Dyersburg Storm Water Management 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.

Section 9. Enforcement

- 9.1 Enforcement authority. The manager of the City of Dyersburg Storm Water Management Department or his designees shall have the authority to issue notices of violation and citations, and to impose the civil penalties provided in this section.
- 9.2 Notification of violation.
- 9.2.1 Written Notice. Whenever the manager of the City of Dyersburg Storm Water Management Department finds that any permittee or any other person discharging storm water has violated or is violating this ordinance or a permit or order issued hereunder, the manager may serve upon such person written notice of the violation. Within seven (7) 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 manager. 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.

9.2.2 Consent Orders. The manager 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 (9.2.4) and (9.2.5) below.

9.2.3 Show Cause Hearing. The manager may order any person who violates this ordinance or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. 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 seven (7) days prior to the hearing.

9.2.4 Compliance Order. When the manager finds that any person has violated or continues to violate this ordinance 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 the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.

9.2.5 Cease and Desist Orders. When the manager finds that any person has violated or continues to violate this ordinance 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:

9.2.5.1 Comply forthwith; or

9.2.5.2 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.

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

Section 10. Penalties.

- 10.1 Violations. Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the City of Dyersburg Storm Water Management Department, shall be guilty of a civil offense.
- 10.2 Penalties. Under the authority provided in Tennessee Code Annotated Section 68-221-1106, the municipality declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the City of Dyersburg Storm Water Management 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. The penalty shall increase by 25% of the previous penalty amount for every subsequent but separate offence made by the same person, company or facility.
- 10.3 Measuring civil penalties. In assessing a civil penalty, the manager of the City of Dyersburg Storm Water Management Department may consider:
- 10.3.1 The harm done to the public health or the environment;
 - 10.3.2 Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;
 - 10.3.3 The economic benefit gained by the violator;
 - 10.3.4 The amount of effort put forth by the violator to remedy this violation;
 - 10.3.5 Any unusual or extraordinary enforcement costs incurred by the municipality;
 - 10.3.6 The amount of penalty established by ordinance or resolution for specific categories of violations; and
 - 10.3.7 Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.
- 10.4 Recovery of damages and costs. In addition to the civil penalty in subsection (2) above, the municipality may recover;
- 10.4.1 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 ordinance, or any other actual damages caused by the violation.
 - 10.4.2 The costs of the municipality's maintenance of storm water facilities when the user of such facilities fails to maintain them as required by this ordinance.
- 10.5 Other remedies. The municipality may bring legal action to enjoin the continuing violation of this ordinance, and

the existence of any other remedy, at law or equity, shall be no defense to any such actions.

10.6 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.

Section 11 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 penalty or damage assessment to the municipality's governing body or by board established to hear appeals.

11.1 Appeals to be in writing. The appeal shall be in writing and filed with the municipal recorder or clerk within thirty (30) days after the civil penalty and/or damage assessment is served in any manner authorized by law.

11.2 Hearing. Upon receipt of an appeal, the municipality's SWAC (Storm Water Advisory Committee) shall hold a hearing within thirty (30) days. 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. The decision of the SWAC of the municipality shall be final.

11.3 Appealing decisions of the municipality's SWAC. Any alleged violator may appeal a decision of the municipality's SWAC pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

Section 12. Severability

12.1 Should any article, section, subsection, clause or provision of this Comprehensive Storm Water Management Ordinance be declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not effect the validity of the ordinance as a whole or any part thereof other than the part declared to be unconstitutional or invalid, each article, section clause and provision being declared severable.

12.2 If any provision of this ordinance and any other provision of law impose overlapping or contradictory regulations, or contain any restrictions covering any of the same subject matter, that provision which is more restrictive or imposes the higher standards or requirements shall govern.

Section 13. Schedule of Fees

13.1	Land Disturbance Permit for 5,000 ² ft up to one (1)acre with Waiver	\$25
13.2	Land Disturbance Permit for 5,000 ² ft up to one (1)acre	\$125
13.3	Land Disturbance Permit for one (1) to five (5) acres	\$200
13.4	Land Disturbance Permit for five (5) acres and up	\$300
13.5	Resubmittal of denied application	SAME AS ORIGINAL FEE

