

## **RESOLUTION**

### **A Resolution to revise the Sevier County TN, Stormwater Authority Resolution**

**WHEREAS**, Sevier County, TN must comply with the most current Phase II National Pollution Discharge Elimination System (NPDES) permit requirements of the Clean Water Act; and

**WHEREAS**, Sevier County, TN must protect, maintain and enhance the environment of Sevier County, TN along with the public health, safety and general welfare of its Citizens; and

**WHEREAS**, Sevier County, TN must control discharge of pollutants to the County storm water system and maintain and improve the quality of the receiving waters to which stormwater flows; and

**NOW, THEREFORE BE IT RESOLVED** by the County Commission of Sevier County, Tennessee that the 2008 Revised Storm Water Authority Resolution be repealed and replaced with this attached resolution.

\_\_\_\_\_  
Larry Water, County Mayor

ATTEST:

\_\_\_\_\_  
Karen Cotter, County Clerk

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**COUNTY OF**  
**SEVIER**  
  
**REVISED**  
  
**STORM WATER AUTHORITY**  
  
**RESOLUTION**

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## SEVIER COUNTY STORM WATER AUTHORITY RESOLUTION

### **Section 1 General Provisions**

The purpose of this Resolution in creating the Sevier County Storm Water Authority (“Authority”) is to:

- (1) Protect, maintain, and enhance the environment of the County of Sevier and the public health, safety and general welfare of the citizens of the County by controlling discharges of pollutants to the County 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, pond, wetlands, and groundwater;
- (2) Enable the County to comply with the National Pollution Discharge Elimination System (NPDES) and applicable Federal regulations as set out in 40 CFR 122.26 regarding storm water discharges;
- (3) Allow the County to exercise the powers granted in TCA 68-221-1105 and all other appropriate statutes with respect to storm water facilities;
- (4) Exercise general regulation over the planning, location, construction and operation and maintenance of storm water facilities in the County whether owned and operated by the County or not;
- (5) Adopt rules and regulations deemed necessary to accomplish the purposes of the Resolution including fees for service and permits;
- (6) Establish standards to regulate the quantity of storm water discharge and to regulate storm water contaminants as may be necessary to protect water quality;
- (7) Review and approve plans and plats for storm water management in proposed subdivisions and residential and commercial development;
- (8) Issue permits for storm water discharges and for the construction, alteration, extension and repair of storm water facilities;
- (9) Suspend or revoke permits when it is determined that the permittee has violated any provision in this Resolution or provision of the permit;
- (10) Regulate and prohibit discharges into storm water facilities of sanitary, industrial or commercial sewage or waters that have otherwise been contaminated; and
- (11) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of storm water contamination whether public or private

**Administering entity:** The Authority shall administer the provisions of this Resolution through its manager (“Inspector”) appointed by the County and the manager’s agents.

**Right of Entry:** The Authority shall make inspections and investigations, carry on research or take on such other actions as may be necessary to carry out this administration of regulations; enter at all reasonable times upon any property other than dwelling places for the purpose of conducting investigations and studies or enforcing any of the provisions of this resolution, pursuant to TCA 69-3-107 (5) and (6).

**Jurisdiction:** The Authority shall administer the provisions of this Resolution on all property outside the municipal boundaries of Pigeon Forge, Gatlinburg and Sevierville. The Authority shall serve the Town of Pittman Center as requested.

## **Section 2 Definitions:**

For the purpose of this resolution the definitions set out below shall apply. Additionally, 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” or “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.

- (1) *As built plans.* Drawings depicting conditions as they were actually constructed;
- (2) *Authority.* The department created by the County to administer the provisions of this Resolution.
- (3) *Base flood.* The flood having a one (1%) percent chance of being equaled or exceeded in any given year;
- (4) *Best Management Practices or BMPs.* Physical, structural, and managerial practices that (when used singularly or in combination) prevent or reduce pollution of water;
- (5) *Buffer Zone.* A strip of undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any nutrients or pollutants from pollutants from leaving the upland area and reaching surface waters.
- (6) *Channels.* A natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically;
- (7) *Clearing.* Typically refers to the removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also cover a wide variety of uses, many of which may not be regulated within the scope of stormwater management.
- (8) *Community water.* 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 County of Sevier;
- (9) *Common plan of development or sale.* This term 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, survey 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.
- (10) *Contaminant.* Any physical, chemical, or radiological substance or matter in water;

- (11) *County Separate Storm Sewer System (CS4)*. A CS4 is a conveyance owned or operated by the County 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, storm drains, or outfalls to community waters or waters of the state.
- (12) *Design storm event*. A hypothetical storm event of a given frequency interval and duration used in the analysis and design of a storm water facility;
- (13) *Discharge*. To dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means or that which is placed by any means (including any direct or indirect entry of any solid or liquid matter) into the municipal separate storm sewer system;
- (14) *Easement*. 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;
- (15) *Erosion*. The removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction or promoted by anthropogenic activities or effects;
- (16) *Erosion and sediment control plan*. (SWPPP) 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;
- (17) *Hotspot*. An area where land use or activities may generate highly contaminated runoff with concentrations of pollutants in excess of those typically found in storm water. Hotspots include, but are not limited to: garages, repair shops, junk yards, detailing shops, car wash waste water, restaurants (where grease traps are maintained), commercial properties with large paved parking areas, factories, retail facilities, manufacturing plants, storage lots, maintenance areas, sanitary waste water, effluent from septic tanks and alternative sewer systems, carpet cleaning waste water, laundry waste water/ gray water and household toxics;
- (18) *Illicit connections*. Any illegal and/ or unauthorized connections to the municipal separate storm water system whether or not such connections result in discharges into that system.
- (19) *Illicit discharge*. Any discharge to separate storm sewer system that is not composed entirely of storm water and not specifically exempted in this Resolution;
- (20) *Improved Sinkhole*. 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 the Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters into natural depressions, open fractures, and crevices (such as those commonly associated with weathering limestone).
- (21) *Land-distributing activity*. Any activity on property that results in the change in the existing soil cover (both vegetative and non-vegetative) and the existing soil topography. Land-disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling and excavation.
- (22) *Linear Project*. A land disturbance activity as conducted by an underground/ overhead utility or highway department, including but not limited to any cable line or wire for transmission of electrical energy; and conveyance pipeline for transportation of gaseous or liquid substance; any cable line or wire or communications' or any other energy resource transmission ROW or utility infrastructure, e.g., roads and highways. Activities include the construction and installation of these utilities within a corridor. Linear project activities also include the construction of access roads, staging areas, and borrow/spoil sites associated with the linear project. Land disturbance specific to the development of a residential and/ or commercial



subdivision or high-rise structures is not considered a linear project.

(23) *Maintenance*. 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 function of the storm water facility;

(24) *Maintenance agreement*. A document recorded in the Sevier County Register's Office such as a deed restriction or other provision that provides for long-term maintenance of storm water facilities;

(25) *Manager or Inspector*. The person appointed by the County to lead the authority.

(26) *National Pollutant Discharge Elimination System or (NPDES) permit*. A permit issued pursuant to 22 U.S.C. 1342;

(27) *Off-site facility*. A structural BMP located outside the subject property boundary described in the permit application for land development activity.

(28) *On-sight facility*. A structural BMP located within the subject property boundary described in the permit application for land development activity.

(29) *Quality Assurance Site Assessment*. A documented site inspection to verify the functionality and performance of the SWPPP and for determining if construction, operation and maintenance accurately comply with permit requirements, as presented in the narrative, engineering specifications; maps, plans, drawings; and details for erosion prevention, sediment control and stormwater management.

(30) *Peak flow*. The maximum instantaneous rate of flow of water at a particular point resulting from a storm event;

(31) *Person or Owner*. Any individual, firm or association and any public or private corporation or entity organized or existing under the laws of this or any other state, and includes the plural i.e. "owner" and "owners" are interchangeable;

(32) *Runoff*. The portion of the precipitation on a drainage area that is discharged from the area into separate storm sewer system;

(33) *Sediment*. 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;

(34) *Sedimentation*. Soil particles suspended in storm water that can settle in stream beds and disrupt the natural flow of the stream;

(35) *Soil reports*. 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 soil engineer who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees;

(36) *Stabilization*. Providing adequate measures, vegetative or structural, that will prevent erosion from occurring;

(37) *Steep Slope*. A natural or created slope of 30 % grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff non-erosively around or over a steep slope. In addition, site mangers should focus on erosion prevention on the slope(s) and stabilize the slope(s) as soon as practicable to prevent slope failure and/ or sediment discharges from the project.

- (38) *Storm water*. Storm water runoff, snow melt surface runoff, street wash water related to street cleaning or maintenance, infiltration and drainage;
- (39) *Storm water management*. The programs to maintain quality and quantity of storm water runoff to pre-development levels.
- (40) *Storm water management facilities*. 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.
- (41) *Storm water management plan*. 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;
- (42) *Stormwater Pollution Prevention Plan*. (SWPPP) A written plan that includes site map(s) identifying construction/ contractor activities that could cause pollutants in stormwater runoff, and a description of the measures or best management practices to be used to prevent and control pollution from the site.
- (43) *Storm water runoff*. The flow on the surface of the ground resulting from precipitation;
- (44) *Structural BMPs*. The devices that are constructed to provide control of storm water runoff.
- (45) *Surface water*. Water upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoir;
- (46) *TDEC*. Tennessee Department of Environment and Conservation is the state agency having water pollution control oversight;
- (47) *TDEC Manuals*. Current Sediment and Erosion Control and Post Construction manuals approved by TDEC for storm water system design and installation;
- (48) *Turbidity*. The term refers to the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.
- (49) *Urbanized Area*. For the purpose of this document, an urbanized area will be designated as all unincorporated property within Sevier County with the current and/ or proposed Zoning classification of R-2, R-2M, C1, C2, and I-1 as shown on the most current Sevier County Zoning Map.
- (50) *“Waters” or “waters of the state”*. 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.
- (51) *Watercourse*. A permanent or intermittent system or other body of water, either natural or man-made, that gathers or carries surface water;
- (52) *Watershed*. All the topographically defined land area that contributes runoff to a particular point along a waterway;
- (53) *Wetlands*. 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.
- (54) *Wet weather conveyances*. 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 which do not support fish or aquatic life and are not suitable for drinking water supplies.

### **Section 3 Land Disturbance Permits**

#### (1) Land disturbance activities;

Every person or entity shall obtain a Land Disturbance Permit from the Authority in the following cases;

- (a) When land disturbing activity disturbs one (1) or more acres of land;
- (b) When land 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 acres of land;
- (c) When land disturbing activity of less than one (1) acre of land if in the discretion of the Authority such activity poses a unique threat to water or public health or safety. Projects or developments of less than one acre of total land disturbance may also be required to obtain authorization under this permit if:
  - (i) The Authority has determined that the stormwater discharge from a site is causing, contributing to or is likely to contribute to a violation of federal or state water quality regulations;
  - (ii) Changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale to obtain a stormwater permit.
- (d) Upon the creation and operation of borrow pits where material is excavated and relocated offsite, and fill sites where materials or earth is deposited by mechanized methods resulting in an increase elevation or grade;
- (e) If the Authority becomes aware that construction activity is ongoing, but is not permitted, the Authority will notify TDEC of this situation by supplying the following information to the Knoxville Environmental Field Office:
  - (i) Construction project or industrial facility location;
  - (ii) Name of the operator or owner;
  - (iii) Estimated construction project or size or type industrial activity;
  - (iv) Records of communications with the owner or operator regarding permit requirements
- (f) When land disturbance activities are for development of property that by type of business, location, designated usage, etc., are determined by the Authority to be a “hot spot”, an additional “Hot Spot Site Plan” must be submitted. The definition for a hotspot is found in Section 2. The requirements for a “Hot Spot Site Plan” are outlined in Section 8 of this document and are to be submitted in addition to any other permit requirements (e.g. Post Construction designs).

#### (2) Exemption

The following activities are exempt from the permit requirement;

- (a) Any emergency activities that are immediately necessary for the protection of life,

property or natural resources;

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

(c) Any logging or agricultural activity that is consistent with an approved farm conservation plan or a timber management plan prepared or approved by the U.S. Soil Conservation (NRC);

(d) Additions or modifications to existing family residential structures;

The owner or developer whose land disturbing activity has been exempted from requirements for registration shall nevertheless be responsible for otherwise conducting such activity in accordance with the provisions of this Resolution and other applicable laws including responsibility for controlling erosions and sedimentation. Where individual lots or sections in a subdivision are being developed by different property owners, all earth disturbing activities related to the subdivision shall be covered by the approved storm water pollution prevention plan (SWPPP); such developments are subject to the terms of the requirements therein, including but not limited to: gravel construction entrance/exits, necessary erosion controls, concrete washout restrictions, etc.

### (3) Limitations

The Authority shall not grant land disturbance coverage for discharges into waters that are designated by the Water Quality Control Board as “Outstanding National Resource Waters” (ONRW). An individual permit is required for land disturbance activities and is available from the Tennessee Department of Environment and Conservation.

### (4) Land disturbance permits

Each application shall include the following:

(a) Name, address and telephone number of owner or developer of land;

(b) Address and legal description of subject property including the tax map and parcel number;

(c) Name, address and telephone number of the contractor and any subcontractor(s) who will perform the land disturbing activity and who will implement the erosion and sediment control plan;

(d) A statement describing the land disturbance activity, including the size of the area for which the permit is applicable, and a schedule for the starting and estimated completion dates of the land disturbing activity;

(e) If the property includes a sinkhole, or involves a stream crossing, or wetland, the

applicant shall obtain permits from the TDEC as may be required.

(f) The applicant shall obtain other environmental permits that may be required from any other governmental entity. If Aquatic Resource Alteration Permits (ARAP) are required for a site in areas proposed for active construction, the NOC will not be issued until ARAP application(s) are submitted and deemed by TDEC to be complete. The treatment and disposal of wastewater (including, but not limited to sanitary wastewater) generated during and after the construction must also be addressed. The issuance of the NOC may be delayed until adequate wastewater treatment and accompanying permits are issued. The inclusion of any such permits in the application shall not prevent the County from imposing additional development requirements and regulations of the County on the development of property covered by those permits;

(g) Each application shall be accompanied by:

- (1) A sediment and erosion control plan as described in Section 4.
- (2) A Post Construction Storm Water System Design and Maintenance Plan in Section 6

(h) Each application for a land disturbance permit shall be accompanied by payment of Land Disturbance Permit fee and any other necessary Stormwater Management fees

(5) Review and approval of application

The Authority shall review each application for a Land Disturbance Permit to determine its conformance with the provisions of this Resolution. Within a reasonable time after receiving the application the Authority shall provide one of the following responses in writing to the applicant:

- (a) Approval of permit application;
- (b) Approval of permit application, subject to such reasonable conditions as may be necessary substantially to secure the objectives of this Resolution and other applicable regulations, and issue the permit subject to these conditions; or
- (c) Denial of the permit application indicating the reason(s) for the denial;

If the Authority has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the Authority. The applicant shall be allowed to proceed with the land disturbing activity, however, so long as it conforms to conditions established by the Authority.

The Sevier County Storm Water Management Department shall not consider storm water pollution prevention plan (SWPPP) “approved” without the inclusion of an approval stamp accompanied by a signature and date on the plans. The stamp of approval on the plans is solely an acknowledgement of satisfactory compliance with the requirements of these regulations. The approval stamp does not constitute a representation or warranty to the applicant or any other person(s) concerning the safety, appropriateness or effectiveness of any provision or omission from the storm water pollution prevention plan (SWPPP).

No site plan, planned unit development plan, nor subdivision plat shall be considered as having received final approval from the appropriate planning office until such time as all conditions have been met of the Land Disturbance Permit under the provisions of this Resolution.

Every Land Disturbance Permit shall expire and become null and void if substantial work authorized by such permit has not commenced within (180) calendar days of issuance.

(6) Transfer of ownership

(a) Some construction projects, such as residential or commercial subdivisions and/ or developments or industrial parks are subdivided. Subdivided lots are sometimes sold to new owners prior to completion of construction. The site wide developer/ owner must describe erosion control and sediment prevention measures implemented at those lots. Once the property is sold, the new operator must obtain coverage under this permit.

(b) If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (including but not limited to a lending institution) must obtain permit coverage if the property is inactive, but is not stabilized sufficiently. If the property is sufficiently stabilized permit coverage may not be necessary, unless and until construction activity at the site resumes.

(7) Disclaimer of liability

The submission of a plan under the provisions herein, the compliance with the provisions of these regulations, and/ or the satisfaction of any requirements or any approvals of the Authority shall not relieve any person from responsibility for damages to any person or property otherwise imposed by law; nor shall the foregoing impose any liability upon Sevier County, its officials, its representatives, and/ or agents for damages to any person or property.

(8) Appeals

Appeals may be made to the Construction Board of Appeals.

(9) Notice of construction

The applicant must notify the Authority of the commencement of construction. A pre-construction conference may be required for certain land disturbing activity.

(10) Performance guarantee

(a) Prior to the issuance of a grading permit the owner or developer may be required to provide security in the form of a cash deposit, letter of credit or other acceptable form of security for the work to be completed or any portion thereof pursuant to the final plan. The amount of the performance security shall be the total estimated construction cost of the vegetative or structural BMPs approved for the permit plus any reasonably foreseeable additional related 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 Authority. The Authority shall have the right to calculate the construction costs. Where applicable the security may be included as part of the security required as a condition of final subdivision plat approval for subdivisions where such are not installed prior to final plat approval, or in the instance of site plans, as part of the site bond or other security required as a condition for issuance of a building permit;

(b) Such guarantees shall be accepted only when the final road grade has been established and built and inspected, all drainage and storm water facilities are installed, and when all cross drains and utilities within the roadway base have been installed, and certified as built per design by a licensed engineer.

(c) The security shall be released in full upon submission of as-built plans. A final inspection by the Authority will be done on the site. The Authority may also require 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 Resolution. Provisions for a pro-rata release of the security may be made at the discretion of the Authority.

#### (11) Inspections

(a) The permit holder shall perform inspections of erosion and sediment control practices on construction sites as indicated by the current NPDES Permit twice weekly and at least 72 hours apart. Based on the results of the inspection(s), any inadequate control measures or control in disrepair shall be replaced, modified or repaired as necessary. Inspections shall be documented;

(b) Quality assurance of erosion prevention and sediment controls shall be done by performing site assessment at a construction site. The site assessment shall be conducted at each outfall involving drainage totaling 10 acres or more (of disturbed and undisturbed acreage combined) or 5 or more acres if draining to impaired or exceptional quality waters, within 1 month of construction commencing. The site assessment shall be performed by individuals with the following qualifications:

- (i) a licensed professional engineer or landscape architect;
- (ii) a Certified Professional in Erosion and Sediment Control (CPESC); or
- (iii) a person that has successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course.

At a minimum, a site assessment should be performed to verify the installation, functionality and performance of the erosion prevention and sediment control measures described in the SWPPP. The site assessment findings shall be documented and the documentation kept with the SWPPP on site. The site assessment should be performed with the site inspector who conducts the twice weekly inspections, and should include a review and update (if

applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basin or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be performed by a licensed engineer or landscape architect and stamped and certified in accordance with state law.

The site assessment can take the place of one of the twice weekly inspections.

(c) The Authority shall perform inspections on priority construction sites and other construction sites as warranted by site location and complaints. If the Authority determines that the permit holder has failed to properly install, maintain, or use proper structural or vegetative erosion and sediment control practices as specified in the erosion and sediment control plan and the post construction design and maintenance plan, the permit holder may be subject to a stop work order or additional penalties as set forth in Section 10 of this Resolution;

(d) The Authority may require an inspection by an engineer licensed in the State of Tennessee for any erosion and sediment control measure or post construction storm water management facility to ensure they meet the design standards as described in the Construction Site and Post Construction Site plans;

(e) If the Authority determines that significant erosion or sedimentation is occurring on a graded site despite approved structural or vegetative erosion and sediment control practices, the Authority shall require the permit holder to take additional corrective action to protect the adversely affected area. The additional corrective action required shall be part of an amended erosion and sediment control plan;

(f) Where sites or portions of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice) or due to extreme drought, such inspection only has to be conducted one per month until thawing or precipitation results in runoff or construction activity resumes. Inspection requirements do not apply to definable areas that have been finally stabilized.

(g) Inspections and maintenance for post construction storm water facilities shall be performed as required in Section 6 for post construction design and maintenance;

#### **Section 4 Erosion and Sediment Control Plans**

##### (1) Components of erosion and sediment control plan

The erosion and sediment 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 will depend upon the size of the project, severity of the site condition and potential for off-site damage. The plan shall conform to the requirements found in the current TDEC Construction General Permit for construction site storm water and the BMP manual adopted in Section 6. When required the plan shall be sealed by an engineer or landscape architect licensed in the State of Tennessee. The plan must:

(a) Identify all potential sources of pollution which are likely to affect the quality of stormwater discharges from the construction site;

(b) Describe practices to be used to reduce pollutants in stormwater discharges from the construction/ permitted site;

(c) Assure compliance with the terms and conditions of this permit.

(2) The erosion and sediment control plan shall include the following:

(a) A description of the nature of the construction activity, including number of units and structures to be constructed and infrastructure required;

(b) A description of the intended sequence of major activities that disturb soils for major portions of the site (e.g. grubbing, excavation, grading, utilities, sediment basin or detention facilities and infrastructure installation);

(i) Appropriate control measures and the general timing for the measures to be implemented during construction activities; and

(ii) Which permittee is responsible for implementation of which controls.

(c) A general description of existing land covers. Individual trees and shrubs do not need to be identified.

(d) Stands of existing trees that 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 plans must include the sequence of implementation for tree protection measures.

(e) Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading or other activities;

(f) Any data describing the soil types and their effects on the quality of any discharge from the site;

(g) An estimate of the runoff coefficient of the site after construction activities is completed. The evaluation must include projected effects on property adjoining the site and

on existing drainage facilities and systems. The location, size and layout of proposed storm water and sedimentation control improvements are required. The plan must address the adequacy of the outfalls from the development to accept post-construction run-off and the measures used to prevent scouring of waterways and drainage areas off-site;

(h) A general location map (e.g. portion of a county tax map or similar plat) indicating the locations of existing roads or landmarks, any high quality and/or impaired streams, drainage patterns and approximate slopes anticipated after major activities, areas of soil disturbance and outline of areas that are not to be disturbed, the size and location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, the location of receiving water(s), locations of discharges into or immediately up stream of high quality or impaired waters, wetlands, sinkholes and all outfalls where runoff will leave the property should be identified. Stream(s) receiving the discharge, and storm sewer system(s) conveying the discharge from all site outfalls should be clearly identified and marked on the map. NOIs for linear projects must specify the location of each end of the construction area and all areas to be disturbed. Commercial and/ or industrial builders that develop separate SWPPPs that cover only their portion of the project shall also submit a site or plat map that clearly indicates the lot(s) which they are applying for permit coverage and the location of streams, conveyances, storm sewer connections and outfalls leaving the permitted portion of the property;

(i) Alternative Sewer Systems, because of their unique equipment, standards and designs, require special considerations. Each Alternative Sewer System is designed for each individual property location, soil conditions, type of development that the system serves, etc. Properties where Alternative Sewer Systems are to be installed shall submit the following:

(i) The site plan elements of the Alternative Sewer System, including but not limited to the location of the sewer plant, drip field areas, collections system pipes, force main sewer pipes, drip field dosing pipes, discharge point for effluent (if any), etc. shall be included in the SWPPP;

(ii) Design details for the installation of these design elements including the stabilization/ restoration of the ground disturbed by the installation of the design elements shall be included in the SWPPP;

(iii) A copy of the Design Plans and Operations Permit approved by TDEC shall be submitted to the Authority before Final Approval will be granted. These will satisfy the “Hot Spot Site Plan requirements (see definition 17, pg 7).

(j) Where properties, lots and/or parcels have an average of 30% slope or greater, detailed development and design standards shall be referred to within the “Critical Slope Overlay Zone” (steep slope) requirements adopted in the current Sevier County Zoning Resolution. Additional drainage system design criteria are established for street designs, ditches, grades, driveway accesses, utilities placements, as well as “as-built” certifications, etc., within the current Sevier County Subdivision Regulations. Also, when steep slopes and/ or moderate to highly erodible soils are present at the site, additional physical or chemical treatment of stormwater runoff may be required.

(k) Careful identification on the site map of outfall points for storm water discharges from

the site including designated floodways and flood hazards areas associated with the base flood;

(l) A description of any discharge associated with industrial activity other than construction storm water that originates on site and the location of that activity;

(m) A topographic map with contour intervals of five (5) feet or less showing present conditions and proposed contours resulting from land disturbing activities;

(n) The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an approved TMDL for pollutant of concern, including:

(i) identification of whether the discharge is identified, either specifically or generally, in an approved TMDL and any associated wasteload allocations, site specific requirements, and assumptions identified for the construction stormwater discharge;

(ii) summaries of consultation with the Authority and TDEC on consistency of SWPPP conditions with the approved TMDL, and;

(iii) measures taken to ensure that the discharge of TMDL identified pollutants from the site is consistent with the assumptions and requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the construction stormwater discharge.

(o) The plan shall include detailed drawings of all structural and non-structural controls and stabilization measures which shall be designed to minimize erosion and maximize sediment removal resulting in storm water discharge associated with the two (2) year, twenty-four (24) hour design storm event as a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website [http://hdsc.nws.noaa.gov/hdsc/pdfs/orb/tn\\_pdfs.html](http://hdsc.nws.noaa.gov/hdsc/pdfs/orb/tn_pdfs.html). These specific details for constructing stabilized construction entrance/exits, concrete washouts, sediment basins for controlling erosion, and road access points, etc., should be designed to eliminate or keep soils, sediment, and/or debris to a minimum.

(p) When land disturbance activities are proposed along 303 (d) listed streams impaired for siltation or a known high quality waterway, the erosion and sediment control plan shall be designed at a minimum to control the discharge of a (5) five year (24) twenty-four hour storm event along with other additional minimum standards outlined in the current Tennessee Construction General Permit.

(q) A description of on-site measures to be taken to recharge surface water into the ground water system through infiltration.

### 3. Other Items Needing Control

(a) No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/ or ARAP permit.

(b) For installation of any waste disposal systems on site, or sanitary sewer or septic system,

the SWPPP shall identify these systems and provide for the necessary erosion prevention and sediment controls. Permittees must also comply with applicable state and/ or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent these are located within the permitted area.

(c) The SWPPP shall include a description of construction and waste materials expected to be stored on site. The SWPPP shall also include a description of controls used to reduce pollutants from materials stored on site, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.

(d) A description of stormwater sources from areas other than construction and a description of controls and measures that will be implemented at those sites.

(e) A description of measures necessary to prevent a “taking” of legally protected state or federal listed threatened or endangered aquatic fauna and/ or critical habitat (if applicable). The permittee must describe and implement such measures to maintain eligibility for coverage under this permit.

## **Section 5 Construction Storm Water System Design and Management**

### 1. Storm water system design and management

The following publications (that are incorporated by reference in this Resolution as if fully set out herein) are hereby adopted as the storm water design and BMP manual for the County: current TDEC Sediment and Erosion Control Manual and current TDEC manual for Post Construction.

Storm water facilities and BMPs 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 criteria for erosion and sediment controls

(a) Erosion and sediment controls must be properly selected and installed in accordance with good engineering practices before earth moving operations begin. Effective erosion prevention and sediment controls should be designed, installed and maintained to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

- (i) Control stormwater volume and velocity within the site to minimize soil erosion;
- (ii) Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel stream bank erosion;

- (iii) Minimize the amount of soil exposed during construction activity;
- (iv) Minimize the disturbance of steep slopes;
- (v) Eliminate (or minimize if complete elimination is not possible) sediment discharges from the site. The design, installation and maintenance of erosion prevention and sediment controls must address factors such as the design storm and soils characteristics, including the range of soil particle sizes expected to be present on the site;
- (vi) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and
- (vii) Minimize soil compaction and, unless infeasible, preserve topsoil.

(b) Temporary measures may be removed at the beginning of the day but must be replaced at the end of the work day;

(c) Construction must be sequenced and phased on all projects regardless of size as a major practice to minimize exposure of bare soil and limit sediment discharges. Construction must be phased to keep the total disturbed area less than 50 acres at any one time. Within the Critical Slope Overlay Zone (steep slope) no more than 25% of the total property available may be disturbed.

(d) Pre-construction vegetative ground cover shall not be disturbed more than fifteen (15) days prior to grading or earth moving unless the area is seeded or mulched or other temporary cover is installed. Erosion prevention and sediment control measures must be in place and functional before earth moving activities begin, and must be constructed and maintained throughout the construction period;

(e) For common drainage locations that serve ten (10) or more acres disturbed at one time, a temporary or permanent sediment basin must be installed, or 5 or more acres if draining to impaired or exceptional quality waters;

(f) Soil stabilization measures shall be initiated within seven (7) days on a portion where construction activity has temporarily or permanently ceased. Where precluded by snow cover or frozen ground conditions stabilization measures shall be initiated as soon as possible. Stabilization measures do not have to be initiated where disturbing activities will resume within fifteen (15) days;

(g) Temporary or permanent soil stabilization shall be accomplished within fifteen (15) days after final grading or other earth work. For steep slopes, temporary stabilization must begin no later than 7 days after construction activity on the slope has temporarily or permanently ceased;

(h) Sediment should be removed from sediment traps, silt fences, sedimentation ponds and other sediment controls as necessary and must be removed when design capacity has been reduced by fifty percent (50%);

(i) Soil, sediment, and debris brought onto streets, roads and public ways must be removed by the end of the work day by machine, broom, shovel, etc. to the satisfaction of the Authority. Any time work is performed on or adjacent to any road in Sevier County, safety will be the primary consideration. Safety considerations will extend to the travelling public, local bystanders, and work crews. Work crews will strictly adhere to the Manual of Uniform Traffic Control Devices, Part VI, Work Zone Safety. Failure to remove the sediment, soil or debris shall be deemed as a violation of this resolution.

(j) Whenever construction access routes intersect paved public roads, provisions must be made to minimize the transport of sediment off site. A gravel designated construction entrance should extend a minimum of fifty (50) feet from the edge of the hard surface of the public road onto the site;

(k) Public roads should be thoroughly cleaned of any sediment transported off the site by the end of each or more often if deemed necessary;

(l) A permanent vegetative cover shall be established on areas subject to land disturbing activity not otherwise permanently stabilized. Established permanent vegetation should be mature enough to control soil erosion satisfactorily and to survive weather conditions;

(m) Operators of construction sites must control waste such as litter, construction debris, chemicals, concrete truck washout and sanitary waste from being a source of storm water pollution. After use, silt fences should be removed and disturbed areas stabilized;

### 3. Plans Modification(s)

(a) A SWPPP must be modified and updated if any of the following are met:

(i) Whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the SWPPP;

(ii) When inspections or investigations by site inspectors, local, state or federal officials indicate the SWPP is proving ineffective in eliminating or significantly minimizing pollutants from being discharged, or is otherwise not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity.

(iii) To identify any new permittee (e.g., owner, contractor, sub-contractor) as needed to reflect operational or design control that will implement a measure of the SWPPP;

(iv) To include measures necessary to prevent a negative impact to legally protected state or federally listed fauna or flora;

(v) A TMDL is developed for the receiving water(s) for a pollutant of concern (siltation and/ or habitat alteration).

(b) In the event the Authority finds that a permittee is complying with the SWPPP, but contributing to the impairment of a receiving stream, then the discharger will be notified by the Authority in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the necessary

changes designed to eliminate further impairment to the stream. If the permittee does not implement the SWPPP changes within a reasonable amount of time, the operator must file an individual permit with TDEC. To obtain the individual permit, the operator must file an individual permit application (EPA 1 & 2F). The project must be stabilized immediately until the SWPPP is updated and the individual permit is issued. Only discharges from earth disturbing activities necessary for stabilization are authorized to continue until the individual permit is issued.

## **Section 6 Post Construction (Permanent) Storm Water System Design and Management Plan**

Storm water system designs shall seek to maintain pre-development conditions through the use of structural and non-structural BMPs described in the TDEC Sediment and Erosion Control Manual and the Post Construction manual mentioned in Section 5. The design plan should incorporate ways to minimize the percent of impervious surfaces after development, protect sensitive areas such as wetlands and riparian areas. It should include structural BMPs that provide infiltration and storage and inspection and maintenance plans for facilities. The storm water management plan shall include sufficient information to allow for 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 Stormwater Pollution Prevention Plan (SWPPP) shall include the following:

### (1) Topographic base map

A not less than 1" = 100 feet Topographic base map of the site that extends a minimum of one hundred feet (100) feet beyond the limits of the proposed development with vertical contours at intervals not to exceed five (5) feet and indicates:

(a) Existing surface water drainage including streams, ponds, culverts, ditches, sinkholes, wetlands; and the type, size, elevation of nearest upstream and downstream drainage structures;

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

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

(d) 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;

(e) Proposed structural BMPs

(f) A written description of the site plan and justification of proposed changes in natural conditions may be required;

(2) Calculations

Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms shall include detailed drawings of all structural and non-structural controls and stabilization measures, including the proposed drainage network, culvert, storm water sewer, ditch and/or other storm water conveyances and detention or retention areas, and shall be designed to control the storm water discharge associated with the two (2) year, five (5) year, ten (10) year, and twenty-five (25) year twenty-four (24) hour design storm event for land disturbing activities.

(a) These calculations must show that the proposed storm water management measures are capable of controlling runoff from the site in compliance with this Resolution. Such calculations include:

- (i) A description of the design storm frequency, duration and intensity where applicable;
- (ii) Time of concentration;
- (iii) Soil curve numbers or runoff coefficients including assumed soil moisture conditions;
- (iv) Peak runoff rates and total runoff volumes for each watershed area;
- (v) Infiltration rates where applicable;
- (vi) Culvert, storm water sewer, ditch or other storm water conveyance capacities;
- (vii) Flow velocities;
- (viii) Data of the increase in rate and volume of runoff for the design storms; and
- (ix) Documentation of sources for all computation methods and field test results;
- (x) Documentation detailing the amount of water for infiltration, evapo-transpiration, harvest and/ or reuse as a required by runoff reduction requirements for urbanized areas.
- (xi) Any calculations documenting credits for meeting terms of Incentives Standards for runoff reduction.
- (xii) Calculations of amounts of rainfall that must be treated prior to discharge with a technology reasonably expected to remove 80% of the total suspended solids (TSS) where runoff reduction standards cannot be met.
- (xiii) Calculations for the amount of rainfall to be mitigated if runoff reduction cannot be accomplished;

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

(c) For projects discharging to waters considered impaired by sediment or habitat alteration due to in-channel erosion, the SWPPP shall include a description of measures that will be installed during the construction process to control pollutants and any increase in the volume of stormwater discharges that will occur after construction operations have been completed. For steep slopes sites, the SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the stormwater runoff to pre-development



levels.

(d) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive velocity flow from the structure to the receiving stream so that the natural physical and biological characteristics and functions of the stream are maintained and protected (e.g., there should be no significant changes in the hydrological regime of the receiving water). The SWPPP shall include an explanation of the technical basis used to select the velocity dissipation devices to control pollution where flows exceed pre-development levels. The Tennessee Erosion and Sediment Control Handbook provides measures that can be incorporated into the design or implemented on site to decrease erosive velocities. An Aquatic Resources Alteration Permit (ARAP) may be required if such velocity dissipation devices installed would alter the receiving stream and- or its bank.

### (3) Soils Information

If a permanent storm water management (Post Construction) control measure depends on the hydrologic properties of soils (e.g., infiltration basins), 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;

### (4) Additional Design Requirements for Urbanized Areas

As required by the new NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) which become effective Dec 1, 2014, new Post Construction (Permanent) Stormwater Management regulations must be adopted.

The urbanized area definition can be found in section 2, definition #49. For ease of use, an interactive map defining urbanized areas in the county will be available online at: [http://www.seviercountyttn.org/index.php?option=com\\_content&view=article&id=74&Itemid=101](http://www.seviercountyttn.org/index.php?option=com_content&view=article&id=74&Itemid=101)

Effective Dec 1, 2014, the following regulations become required as part of SWPPPs that are submitted for a Notice of Coverage by the Authority:

#### (a) Runoff Reduction

Site design for all new and redevelopment projects in urbanized areas require, in combination or alone, management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measureable precipitation. This first inch of rainfall must be 100% managed with no discharge to surface waters.

(a) Limitations to the application of runoff reduction requirements include, but are not

limited to:

- (i.) Where a potential for introducing pollutants into the groundwater exists, unless pretreatment is provided;
- (ii.) Where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff;
- (iii.) Presence of sinkholes or karst features;

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

(c) Incentive Standards for redeveloped sites: a 10% reduction in the volume of rainfall to be managed for any of the following types of developments. Such credits are additive so that a maximum reduction of 50% of the runoff reduction requirements for a project that meets all 5 criteria:

- (i.) redevelopment;
- (ii.) Brownfield redevelopment;
- (iii.) High density (>7 units per acre);
- (iv.) Vertical density
- (v.) Mixed use and Transit Oriented Development (within ½ mile).

#### (b) Pollutant Removal

For projects in urbanized areas that cannot meet 100% of the runoff reduction requirement unless subject to the incentive standards, the remainder of the stipulated amount of rainfall must be treated prior to discharge with a technology reasonably expected to remove 80% of the total suspended solids (TSS). The treatment technology must be designed, installed and maintained to continue to meet this performance standard in perpetuity.

A determination that standards cannot be met on site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria that would rule out an adequate combination of filtration, evapotranspiration and reuse such as: lack of available area to create the necessary infiltrative capacity; a site use that is inconsistent with capture and reuse stormwater; physical conditions that preclude use of these practices.

#### (c) Off-site Mitigation

For projects in urbanized areas that cannot meet 100% of the runoff reduction requirements, the Authority may allow runoff reduction measures to be implemented at another location within the same USGS 12- digit hydrologic unit code (HUC) as the original project. Off-site mitigation must be a minimum of 1.5 times the amount of water not managed on site. The off-site mitigation location (or alternative location outside the HUC 12) and runoff reduction measures must be approved by the Authority. The Authority shall identify priority areas within the watershed in which mitigation projects can be completed by the applicant. The Authority will select the mitigation project from an inventory of appropriate mitigation projects. The project must meet appropriate institutional standards and provide whatever effort is required to assist the

Authority to value, to evaluate, and track the transaction. Mitigation can be used for retrofit or redevelopment projects, but should be avoided in areas of new development.

(d) Payment into Public Stormwater Project Fund

For projects in urbanized areas that cannot meet 100% of the runoff reduction, pollutant removal requirements, or provide for off-site mitigation, the MS4 may allow the owner to make payment into a public stormwater project fund established by the MS4. Payment into a public stormwater project fund must be at a minimum of 1.5 times the estimated cost of on-site runoff reduction controls.

(5) Landscaping and stabilization requirements

Any area of land from which the natural vegetative cover has been either partially or wholly cleared by development activities shall be re-stabilized by vegetative or structural controls. The following criteria shall apply to re-vegetation efforts:

(a) Re-seeding must be done with a perennial cover crop accompanied by placement of straw mulch, erosion control, or its equivalent;

(b) 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 plantings are established and are capable of controlling erosion;

(c) Any area of re-vegetation must exhibit survival of a cover crop throughout the year immediately following re-vegetation. Re-vegetation must be repeated in successive years until the survival for one (1) year is achieved;

(d) Retaining walls, gabions, riprap and other proposed structural stabilization measures shall be installed using approved engineering and long-term maintenance.

(6) Landscaping plan

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 how the site will be stabilized after construction, who will be responsible for the maintenance of vegetation at the time and what practices will be employed to ensure that adequate vegetative cover is preserved.

(7) 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. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for permanent elevation

benchmark shall be identified in the plans to assist in the periodic inspection of the facility.

#### (8) Maintenance Easements

The applicant must ensure access to the site for the purpose of inspection and repair by securing all the accessible maintenance easements needed. These easements must be binding on the current property owners and all subsequent owners of the property and must be properly recorded in the Register of Deeds Office. Easements shall include all the area where stormwater treatment and structural components of any stormwater facilities are located. The easements shall include a minimum of 10ft of accessible ingress/ egress to the street right of way and require a 10ft setback from the easement to a building or structure.

#### (9) Maintenance Agreement

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 or otherwise be binding on the current property owner and all subsequent property owners.

The maintenance agreement shall:

- (a) Assign responsibility for the maintenance and repair of the storm water facility to the property owners upon which the facility is located and be recorded as such on the plat for the property by appropriate notation;
- (b) Provide for a periodic inspection by the property owner for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this Resolution. Permission shall be granted to the staff of the Authority to enter the property at reasonable times to inspect the storm water facility to ensure that it is being properly maintained;
- (c) Provide that the minimum maintenance and repair needs to 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;
- (d) Provide that maintenance needs must be addressed in a timely manner on a schedule to be determined by the Authority;

#### (10) Inspection of storm water facilities

- (a) Periodic inspections of facilities shall be performed by the Authority.
- (b) In order to ensure that all Post Construction (Permanent) storm water BMPs are operating

correctly and being properly maintained, the Authority shall, at a minimum, require owners or operators of storm water management practices to:

- (i.) 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 a site. Owners or operators shall maintain documentation of these inspections.
- (ii.) Perform comprehensive inspections of all storm water management facilities and practices. These inspections shall be conducted once every five (5) years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect. Complete inspection reports for these five year inspections shall include:
  1. Facility type;
  2. Inspection date;
  3. Latitude and longitude and nearest street address;
  4. BMP owner information (e.g. name, address, phone number, fax, and email);
  5. A description of BMP conditions including: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, safety benches, spillways, weirs, and other structures as well as any sediment and debris accumulation;
  6. Photographic documentation of BMPs;
  7. Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and re-inspection dates.

Owners or operators shall maintain documentation of these inspections. The Authority may require submittal of this documentation.

#### (11) Records of installation and maintenance facilities

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 two (2) years. These records shall be made available to the Authority during inspection of the facility and at other reasonable times upon request.

#### (12) Failure to meet maintenance design or maintenance standards

Upon the failure of the party responsible for maintenance to meet or maintain design or maintenance standards, the Authority shall notify in writing the party responsible for the storm water facility. Upon receipt of such notice, the responsible person shall cause the failure to be corrected within the time set out by the Authority in the written notice. In the event correction is not successfully made within that time, among its other sanctions the Authority may cause the corrections to be made. In such event the person responsible for the storm water facility shall reimburse Sevier County or the Authority for the expense, which expense shall be a lien against the subject real property until paid in full.

## **Section 7 Variances**

The Authority may waive or modify any of the general criteria for Post Construction that are deemed inappropriate or too restrictive for site conditions by granting a variance:

(1) At the time of plan submission, an applicant may request a variance to become part of the final plan. The applicant must set forth the reasons for requesting a variance in writing. Specific variances must be documented on the final plan.

(2) During construction the permit holder may request amendments to the final plan. The amended plan shall be reviewed pursuant to the procedures set forth in Section 5. Until such time as the amended plan is approved by the Authority, the land disturbing activity shall not proceed except in accordance with the original plan. A response in writing or plan review approving or disapproving such request shall be given within five (5) working days. Without written approval, no amendment shall be considered valid.

(3) In order to receive a variance, the applicant must demonstrate to the satisfaction of the Authority that the variance will not lead to any of the following conditions:

- (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 and property;

(4) An appeal when a variance is denied shall go before the Construction Board of Appeals.

## **Section 8 Illicit discharges**

(1) Scope

This section shall apply to all water generated on developed or under developed land entering the County separate storm sewer system (CS4).

(2) No person shall introduce or cause to be introduced into the CS4 any discharge that is not composed entirely of storm water. The commencement, conduct, or continuance of any non-storm water discharge to the CS4 (non-storm water discharges such as described in “hot spots”) is prohibited excepted as described as follows:

- (a) Uncontaminated discharges from the following sources:
  - (i) Waterline flushing or other potable water sources;
  - (ii) Landscape irrigation or lawn watering with potable water;

- (iii) Diverted stream flows;
- (iv) Rising ground water;
- (v) Groundwater infiltration to storm drains;
- (vi) Pumped groundwater;
- (vii) Foundation or footing drains;
- (viii) Crawl space pumps;
- (ix) Air conditioning condensation;
- (x) Springs;
- (xi) Non-commercial washing of vehicles;
- (xii) Natural riparian habitat or wet-land flows;
- (xiii) Swimming pools (if dechlorinated - typically less than one PPM chlorine);
- (xiv) Fire fighting activities;
- (xv) Any other uncontaminated water source;

(b) Discharge specified in writing by the Storm Water Authority as being necessary to protect public health and safety:

(c) Dye testing is an allowable discharge if the Authority has so specified in writing:

### (3) Right of Testing

The Director may require the owner or operator of any facility engaging in any activity where an illicit discharge is occurring to undertake such reasonable monitoring of any discharges to the County Separate Storm Sewer System (CS4) and to furnish periodic detailed reports of such discharges.

### (4) Third Party Testing

All third party testing and analysis should be in accordance to TDEC Environmental Assistance Center (EAC) protocols.

### (5) Prohibition

(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;

### (6) 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 sole cost and expense, the BMP's necessary to prevent the further discharge of pollutants to the CS4. 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 “in compliance” with the provisions of this Resolution.

#### (7) 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 CS4, 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. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the Authority 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 submit to Sevier County Storm Water Management within fourteen (14) calendar days of knowledge of a release a written description of the release, the circumstances leading to the release and the date of the discharge. In addition, the permittee must identify measures to prevent the re-occurrence of such discharge. Such records shall be retained for at least three (3) years.

#### (8) Hot spot discharges

The discharge of hazardous substances or oil into the CS4 from hotspots including, but not limited to: garages, repair shops, junk yards, detailing shops, car wash waste water, restaurants (where grease traps are maintained), commercial properties with large paved parking areas, factories, retail facilities, manufacturing plants, storage lots, maintenance areas, sanitary waste water, effluent from septic tanks and alternative sewer systems, carpet cleaning waste water, laundry waste water/ gray water and household toxics etc., shall be prevented.

This ordinance also requires these and other businesses and facilities, already in operation within the boundaries of Sevier County, to maintain proper storage and disposal practices of hazardous substances and oil.

#### (9) Hot Spot Site Plan

Any new development or redevelopment designated by the Authority as a Hot Spot may be required to submit a Hot Spot Site Plan prior to obtaining a Notice of Coverage for the Land Disturbance Permit. A Hot Spot Site Plan may also be required as part of an enforcement action.

##### (a) Site Plan Requirements



Before preparing a site plan, the facility operator/ manager should do the following:

- (i.) Conduct a materials inventory;
- (ii.) Evaluate any past spills or illicit discharges (if applicable);
- (iii.) Identify any non-storm water discharges and all outfalls or discharge points from the property
- (iv.) Evaluate storm water runoff;
- (v.) Summarize your findings.

(b) Each plan should then be prepared considering and indicating any and all of the following items in the plan specifically:

- (i) building design and layout including storm drain locations;
- (ii) storm water connections;
- (iii) name of receiving waters including whether it is high quality/ impaired waters;
- (iv) flow diversion structures (curb cuts, catch basins, etc.);
- (v) vegetative swales;
- (vi) fueling areas;
- (vii) vehicle/ equipment maintenance and wash areas;
- (viii) loading/ unloading areas;
- (ix) above ground tanks for liquid storage;
- (x) under ground detention inlets and outlets;
- (xi) waste management areas/ waste disposal areas, landfills;
- (xii) outside manufacturing areas;
- (xiii) outside storage of raw materials, by-products, finished products;
- (xiv) storage areas of hazardous materials/ chemicals;
- (xv) location of emergency cleanup/ response kits;
- (xvi) any other site specific pertinent details as required by the Authority.

## **Section 9 Streamside Buffers and Integrity of Existing Storm Water System**

### (1) Vegetative buffer

An undisturbed vegetative buffer of thirty (30) feet (as measured from the top-of-bank) shall be maintained adjacent to all free-flowing waters of the state located including bodies of water such as perennial and intermittent streams, rivers, ponds and lakes and wetlands. Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy, as well as storm water infiltration, filtration and evapotranspiration. Buffer zones are not primary sediment control measures and should not be relied upon as such. Based on new TDEC regulations, buffers now fall into (3) three categories:

#### (a) In Un-urbanized Areas

In un-urbanized areas of the jurisdiction, an undisturbed vegetative buffer of thirty (30) feet can

be established on an average basis at a project, as long as the minimum width of the buffer is no more than fifteen (15) feet at any measured location.

(b) In Urbanized Areas

Effective October 1, 2013, buffer widths in all urbanized areas will depend on the size of the drainage area. Streams or other waters with drainage areas less than 1 square mile upstream will require buffer widths of 30ft of buffer zone. Streams or other waters with drainage areas greater than 1 square mile will require buffer widths of 60ft minimum.

(c) Adjacent to or immediately upstream of Impaired or High Quality Streams

A 60 ft buffer width has been established for sites that contain or are adjacent to a receiving stream designated as impaired or exceptional waters. This 60ft buffer can be established on an average width basis at a project, as long as the minimum width of the buffer is more than 30 ft at any measured location.

Every effort should be made of construction activities not to take place within the buffer and the buffer should remain in its undisturbed state of vegetation. BMPs providing equivalent protection to a receiving stream as a natural riparian buffer zone may be used at a construction site. Such BMPs shall be designed to be effective in protecting the receiving water from effects of stormwater runoff as a natural riparian zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at a construction project typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, Roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc. Enhancements, restoration and re-establishment may be allowed with proper permit(s).

The Authority may allow a variance to the water quality buffer requirements. A variance may be obtained by application under Section 7 of this Resolution. When a variance is allowed by the Authority, mitigation must be at least as protective of the natural resources and the environment as the undisturbed buffer. A determination that standards cannot be met may not be based solely on the difficulty or cost associated with implementation.

(2) Integrity of existing storm water system

Any alteration to existing drainage channels, pipes or other storm water systems that convey public water is prohibited without authorization from the Authority. Any alteration must maintain the intended performance of the drainage channel.

(3) Existing locations and developments

The Sevier County Storm Water Authority may, when conditions warrant, conduct inspections to

verify that existing storm water management facilities are functioning within design limits. These inspections shall be based on violations and complaints which identify developments, 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 municipalities NPDES storm water permit. 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.

## **Section 10 Enforcement**

### (1) Enforcement authority

(a) The Authority through its Inspector and other agents shall have the authority to issue notices of violation and to enforce the provisions of this Resolution.

(b) Enforcement procedures follow a standardized progression of events that are collectively known as a force continuum to be applied by the Authority's Inspector and all other authorized agents. Each enforcement action shall be based on its own merit and all steps of this continuum, therefore, may be bypassed based on the (1) discretion of the Inspector, (2) egregiousness of violation, (3) amount of discharge, (4) damage to public or private property, (5) number of previous violations, (6) and any other pertinent circumstances.

(c) The establishment of this continuum shall include but not be limited to:

- (i) Site inspection;
- (ii) Verbal or written notice of inspection findings and corrective actions suggested;
- (iii) Follow up inspection;
- (iv) Notice of Violation, Compliance Order, or Consent Order;
- (v) Cease and Desist Order or Stop Work Order;
- (vi) Civil penalty assessment;
- (vii) Suspension or revocation of permit

### (2) Enforcement Actions

(a) Notice of Violation or Compliance Order of whenever the Authority's Inspector or other agent determines that any permittee or any other person or entity discharging storm water has violated or is violating this Resolution or a permit or order herein, the Inspector or agent may serve upon such person or entity written notice of the violation. This Notice of Violation shall contain such requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installment of devices, self-monitoring, and management practices. The Notice may also direct that, following a specific time period, adequate structures or devices be installed or procedures

implemented and properly operated. Within ten (10) days of this Notice, a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Authority. 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.

(b) Consent Orders. The Authority 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 other paragraphs of this Resolution.

(c) Cease and Desist Order or Stop Work Order - When the Inspector determines that any person or entity has violated or continues to violate this Resolution or any permit or order issued hereunder, the Inspector may issue an order to cease and desist all such violations and direct those in noncompliance:

- (i) To comply forthwith; or
- (ii) To take such appropriate remedial or preventive action as may be needed properly to address a continuing or threatened violation, including halting operations and terminating the discharge.

(d) Referrals to TDEC for enforcement – Where the Authority has used “progressive enforcement” to achieve compliance with this ordinance, and in the judgment of the Authority has not been successful, the Authority may refer the violation to TDEC for enforcement. For the purposes of this provision, “progressive enforcement” shall mean two (2) follow-up inspections and two (2) warning letters. In addition, enforcement referrals to TDEC must include, at a minimum, the following:

- (i) Construction project or industrial facility location;
- (ii) Name of the operator or owner;
- (iii) Estimated construction project size or type of industrial activity (including SIC code, if known);
- (iv) Records of communications with the owner or operator regarding the violation, including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator.

(e) Where there are outstanding or unpaid civil penalties, pending civil penalty appeals, and/or appeals in any governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8, the permit holder nor his/ her representative(s) may receive any additional land disturbance permit until such time as all civil penalties have been paid in full and all matters have been adjudicated.

(f) Conflicting standards

Whenever there is a conflict between any standard contained in this Resolution and the manual

adopted by Sevier County under this Resolution or the Tennessee Department of Environment and Conservation regulations at that time, the strictest Best Management Practices standard shall prevail.

## **Section 11 Penalties**

(1) Any person or entity that violates the provisions of this Resolution shall be subject to a civil penalty of not less than fifty dollars (\$50.00) or more than five thousand dollars (\$5,000.00) per day for each day of violations. Further, the Authority shall also be entitled to recover all damages proximately caused to Sevier County or the Authority by such violations.

(2) The Inspector in assessing a civil penalty may consider the following factors:

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

(b) Whether the civil penalty imposed will be 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 Sevier County or the Authority;

(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.

(h) Repeat offenses.

(3) The Inspector may also assess damages proximately caused by the violator to Sevier County or the Authority that may include any reasonable expenses incurred in investigating and enforcing violations of this Resolution, or any other actual damages caused by the violation.

(4) Appeals may be made to the Construction Board of Appeals.

(5) Whenever any civil penalty or damage assessment has become final, the Inspector may apply to the Sevier County Chancery Court for a judgment and seek execution of such judgment.

(6) In addition to other remedies the Inspector shall have the power to file complaints in the

Sevier County Chancery Court for injunctions and other appropriate relief to abate the violation of this Resolution or the provisions of any permit issued thereunder.

(7) The Inspector shall also have the power to prosecute criminally violators of this Resolution upon the Sevier County legislative body's authorization to set criminal penalties for the violation of this Resolution.

(8) 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 12 Appeals**

A person or entity incurring a civil penalty, damage assessment or other order or ruling may appeal to the Construction Board of Appeals ("Board").

(1) If appeal is sought, application for appeal shall be made within thirty (30) days after a civil penalty, damage assessment or other matter (e.g. the Authority's refusal to issue a permit or variance) has been rendered.

(2) Upon receipt of an appeal, the Construction Board of Appeals shall schedule a hearing for the appeal within thirty (30) days after receiving the appellant documents from the municipality official or at the stated periodic meeting. Ten (10) days prior notice of the date, time, and location of said hearing shall be published in a daily newspaper of general circulation.

(3) The appellant shall make a written application for appeal to the office of the Authority within thirty (30) days, the application containing sufficient information for the Board to consider. (An appellant may obtain sample appeals applications at the office of the Authority.)

(4) The appellant shall, at the time of application for appeal, with the appropriate appeals fee.

(5) Once a ruling has been issued by the Construction Board of Appeals, an appellant who is not satisfied with this ruling may by law file an appeal in any governing body pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8.

**Section 13 Effective date**

This Resolution shall take effect upon its adoption, the public welfare requiring it.

ADOPTED this 20<sup>th</sup> day of October, 2014.

Larry Waters  
County Mayor

Attest:

Karen Cotter  
County Clerk