

January 31, 2008

STARK COUNTY STORM WATER QUALITY REGULATIONS



- ⊕ SECTION I - CONSTRUCTION SITE RUNOFF
- ⊕ SECTION II- POST CONSTRUCTION WATER QUALITY

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Stark County Storm Water Quality Regulations last revised in September 2007.

Stark County Storm Water Quality Regulations accepted and adopted by the Board of Stark County Commissioners on January 31, 2008 to become effective on March 2, 2008.

✦ SECTION I

101 Findings/Purpose and Scope

The Stark County Board of Commissioners find that land development projects and associated increases in impervious cover alter the hydrologic response of local watersheds resulting in the following:

- ✦ The increased risk of flooding. Streams and storm water facilities that receive excessive sediment have a reduced capacity to convey water. The increase of storm water runoff rates and volumes can cause flooding, stream channel erosion and sediment transport and deposition;
- ✦ Damage to fisheries and habitat quality in streams and wetlands when siltation clogs spawning gravel and when excessive turbidity impairs the survivability of aquatic organisms;
- ✦ The increase in public expenditures for maintenance of storm water facilities, ditches, culverts and storm sewers that receive excessive amounts of sediment;
- ✦ Damage to adjacent properties, including public right-of-ways, when sediment is deposited on these properties;
- ✦ Promotes transport of nutrients to lakes causing algal blooms and oxygen depletion;

Soil is most vulnerable to erosion by wind and water during construction activities. Eroded soil necessitates repair of sewers and ditches, dredging of rivers, streams and creeks. It accelerates downstream bank erosion and damages public and private properties. It can be controlled and minimized through the regulation of storm water runoff from development sites during, throughout and after construction.

These rules are adopted in accordance with and pursuant to the Ohio Revised Code, Section 307.79 and will apply to all soil disturbing activities on land within the unincorporated area of Stark County used or being developed for nonfarm commercial, industrial residential, or other nonfarm purposes, including, but not limited to: individual or multiple lots, subdivisions, multi-family developments, condominium units, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, aquaculture ponds, redevelopment of urban areas and all other uses unless expressly excluded as follows:

- 101.01** Activities related to producing agricultural crops and silviculture operations or areas regulated by the Ohio Agricultural Sediment Abatement Rules (H.B 88)
- 101.02** Strip mining and surface mining operations regulated under Revised Code 1513.01, 1514.01
- 101.03** Normal landscape maintenance activities and gardening/horticulture.
- 101.04** A Storm Water Pollution Prevention Plan is not required before clearing, grading, excavating, filling or otherwise wholly or partially less than 1 (one) contiguous acres of land owned by one person or operated as one development unit; however, areas of less than 1 (one) contiguous acre are not exempt from compliance with all other provisions of these rules.

102 ADMINISTRATION

The Stark Soil & Water Conservation District, acting as the Stark County Board of Commissioner’s duly authorized representative, shall administer these regulations. Staff of the Stark SWCD shall be responsible for the determination of compliance with these regulations and shall, through the Stark SWCD board of supervisors, issue notices and orders as may be necessary.

103 TERMS DEFINED

103.01 INTERPRETATION OF TERMS AND WORDS

.01.1 Words used in the present tense include the future tense and the singular includes the plural, unless the context clearly indicates the contrary.

.01.2 The term “shall” is always mandatory and not discretionary; the word “may” is permissive. The term “should” is permissive but indicates strong suggestion.

.01.3 The word or term not interpreted or defined by this section shall be construed according to the rules of grammar and common usage so as to give these Rules their most reasonable application.

Acre: A unit of measure equaling 43,560 square feet.

As-built survey: A survey shown on a plan or drawing prepared and sealed by a Registered Surveyor and/or Engineer indicating information such as, but not limited to: actual dimensions, elevations, and locations of any structures and their components, underground utilities, roads, swales, ditches, detention/retention facilities, storm and sanitary sewers, water quality practices, or other infrastructure and facilities after construction has been completed.

Channel: A natural bed that conveys water. A ditch excavated for water flow.

Cut: An excavation that reduces an existing elevation, as in road or foundation construction.

CPESC: Certified Professional in Erosion Sediment Control.

Detention Structure: A permanent storm water management structure whose primary purpose is to temporarily store water runoff and release the stored runoff at controlled rates. A detention structure remains dry between storm events.

Development Area: Any contiguous area owned by one person or persons, or operated as one development unit, and use being developed for nonfarm commercial, industrial, residential or other institutional construction or alteration which changes the runoff characteristics of a parcel of land.

Ditch: An open channel, either dug or natural, for the purpose of drainage or irrigation with intermittent flow.

Drainage: The removal of excess surface water or ground water from land by surface or subsurface drains.

Drainage Surface Area: An area, measured in a horizontal plane, enclosed by a topographic divide from which surface runoff from precipitation normally drains by gravity into a stream, river or lake above the specified point of measurement.

Drainage Improvement: As defined in O.R.C 6131.01 (C), and/or conservation works of improvement, O.R.C. 1511 and 1515.

Engineer: A Professional Engineer registered by the State of Ohio.

Erosion: The process by which the land surface is worn away by the action of wind, water, ice, gravity or any combination of those forces.

Erosion & Sediment Control: The control of soil material, both mineral and organic, during soil disturbing activity to prevent its transport out of the disturbed area by means of wind, water, ice or gravity.

Farm: Land or water devoted to growing crops and nursery crops.

Floodplain: The area adjacent to the channel of a stream or river that is subject to inundation by flood-flows.

Impervious: That which does not allow infiltration.

Land clearing: is any grading, grubbing, excavation, demolition, timbering, filling and any off-site borrow areas.

Landslide: A rapid mass movement of soil and rock materials downhill under the influence of gravity.

Maintenance Agreement- A legally recorded document that acts as a property deed restriction, and which provides for long term maintenance of the post construction water quality structure.

Multi-family development: Apartments, condominiums, duplexes or other similar buildings housing more than one family

One Hundred-Year Frequency Storm: A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 100 years. It may also be expressed as an exceedence probability with a 1 percent chance of being equaled or exceeded in any given year.

Ordinary high water mark: Defined by the line along the channel bank below which terrestrial vegetation cannot become established and above which aquatic vegetation cannot survive.

Outfall- An area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.

Person: Any individual, corporation, firm, trustee, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, the federal government or any combination thereof.

Pre-construction Meeting: A meeting between the Stark SWCD and all principal parties, prior to the start of any construction, at a site that requires a Storm Water Pollution Prevention Plan.

Pre-Winter Stabilization Meeting: A meeting between the Stark SWCD and all principal parties, prior to October 1, in order to plan winter erosion and sediment controls for a site that requires a Storm Water Pollution Prevention Plan.

Qualified Person: Professional Engineer or Surveyor, Landscape Architect, Soil Conservationist, Certified Professional in Erosion/Sediment Control or any person having completed a minimum of 20 hours of accredit training in erosion sediment control.

Retention Structure: A permanent structure whose primary purpose is to permanently store a given volume of storm water runoff for release of the given volume by infiltration and/or evaporation. A retention structure maintains a permanent pool of water.

Riparian area: Naturally vegetated land adjacent to watercourses which, if appropriately sized, helps to stabilize stream banks, limit erosion, reduce flood flows, and/or filter and settle out runoff pollutants.

Sediment: Soils or other surface materials that can be transported or deposited from its site of origin by the action of wind, water, ice or gravity as a product of erosion.

Sedimentation: Deposition of sediment particles in water bodies.

Sediment Basin: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.

Sediment Pollution: Degradation of Waters of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil disturbing activities on land used or being developed for commercial, industrial, residential or other nonfarm purposes.

Silviculture: The care/planning and harvesting of forested trees.

Sloughing: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the earth-disturbing activity of man.

Soil Conservation: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

Soil disturbing Activity: A clearing, grading, grubbing, excavating, demolition, timbering, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed.

Soil and Water Conservation District: The agency responsible for implementing these regulations as organized under Chapter 1515 of the Ohio Revised Code; referring either to the Soil and Water Conservation District Board or its designated employee(s), hereinafter referred to as the Stark SWCD.

Soil Loss: Soil moved from a given site by the forces of erosion, measured using "T".

Stabilization: The installation of vegetative and/or structural measures to establish a soil cover in order to reduce soil erosion by storm water runoff, wind, ice, and gravity.

Stark SWCD: The office responsible for administering sediment pollution and/or storm water runoff control programs.

Storm Drain: A conduit, pipe, or human-made structure, which serves to transport storm water runoff.

Storm Water Management: Runoff water safely conveyed or temporarily stored and released at an allowable rate to minimize erosion and flooding.

Storm Water Pollution Prevention Plan (SWPPP):

Storm Water Runoff: The direct response of a watershed to precipitation and includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following the precipitation.

Stream: A body of water running or flowing on the earth's surface in which flow may be perennial and/or seasonally intermittent.

Subsoil: That portion of the soil below the topsoil or plow layer, beginning 6-12" below surface down to bedrock parent material.

T: The soil loss tolerance expressed in tons per acre per year as determined by the USDA Revised Universal Soil Loss Equation (RUSLE)

Temporary Soil Erosion and Sediment Control Measures: Interim control measures which are installed or constructed to control soil erosion or sedimentation until permanent soil erosion control measures are established.

Timbering: removing trees in preparation of earthwork or site prep.

Top soil: The upper layer of soil that is usually darker in color and richer in organic matter and nutrients than the subsoil.

Unstable Soils: A portion on land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having a low soil strength.

Watercourse: A definite channel with bed and banks within which concentrated water flows, either continuously or intermittently; e.g. streams.

Watershed: The total drainage area contributing runoff to a single point.

Water quality volume (WQv): The volume equal to $\frac{3}{4}$ inch of runoff multiplied by the area draining to the BMP and the weighted runoff coefficient of the contributing area.

104 REGULATED ACTIVITIES

104.01 This regulation requires that when a proposed soil disturbing activity, land clearing, grading, excavating, filling and timbering project on land used or being developed, either wholly or partially, for nonfarm residential, commercial, industrial, recreational or other nonfarm purposes consisting of one (1) or more contiguous acres of land owned by one person or operated as one development unit for the construction of nonfarm buildings, structures, utilities, recreational areas or other limited nonfarm uses, the owner of said land shall prepare and file with the Stark SWCD a Storm Water Pollution Prevention Plan (SWPPP). Areas of less than one (1) contiguous acre shall not be exempt from compliance with other provisions of these rules including but not limited to installing and maintaining erosion/sediment control practices to prevent sediment from depositing into local creeks, ditches, ponds or onto existing landowners properties.

104.02 The submitted plan must be approved by the Stark SWCD before the start of any soil disturbing activity. The plan must be designed by a qualified professional preferably certified in the field of erosion/sediment control and be sealed by a Registered Professional Engineer in the State of Ohio.

104.03 The SWPPP plan shall be submitted to the Stark SWCD for review no less than thirty (30) days before any soil disturbing activity at the proposed site.

104.04 Erosion and sediment control practices used to satisfy the performance criteria of these rules shall meet the specifications provided in the most *current edition* of The Ohio Rainwater & Land Development Manual, Ohio's Standards for Storm Water Management & Land Development and Urban Stream Protection, published by the Ohio Department of Natural Resources or other

approved equals. The Stark SWCD shall review any new or innovative practice before incorporating them into a plan.

104.05 The SWPPP must meet minimum requirements listed in the most recent Ohio EPA Construction General Permit and shall be accompanied by proof of compliance and/or notification with required natural resource permits and documentation relevant to the project, including:

.1 Proof of compliance with the Ohio Environmental Protection Agency (OEPA) General Storm Water National Pollution Discharge Elimination System (NPDES) permit. Proof of compliance shall be a copy of NPDES permit Notice of Intent (NOI), and/or a copy of the NPDES permit number, and/or a copy of OEPA Director's Authorization letter for the NPDES permit.

.2 Proof of compliance with Section 404 of the Clean Water Act administered by the US Army Corps of Engineers for streams, wetlands, and waterways under its jurisdiction. Proof of compliance shall be a copy of the US Army Corps of Engineers permit number, and/or project approval letter from a US Army Corps of Engineers agent. A Wetland Delineation must be verified by the US Army Corps of Engineers.

.3 Proof of compliance with the Ohio Dam Safety Law administered by ODNR Division of Water: Proof of compliance shall be a copy of the ODNR permit number, and/or project approval letter. If the dam is exempt from the Ohio Dam Safety Laws, a letter from the site owner certifying and explaining the criteria for exemption is required.

.4 Proof of compliance with Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S Army Corps of Engineers at the time an application is made under this regulation.

104.06 The owner and/or developer of said land shall meet with the Stark SWCD for a pre-construction meeting no less than seven (7) days prior to soil disturbing activity at the site. It is the responsibility of the developer/contractor to contact the SWCD to schedule a meeting date.

104.07 The developer's delegated representative shall perform first inspection of erosion and sediment control practices to certify that the practices comply with the approved plan no less than two (2) working days after the start of the project. An inspection report confirming this should be completed by the developer's delegated representative and if requested, sent to the Stark SWCD confirming said inspection.

104.08 If the site is, or plans to remain active through the winter months, a pre-winter stabilization meeting shall be held by the developer of said land and/or delegated representative of the project and the Stark SWCD prior to October 1st.

104.09 Upon completion of all construction and final stabilization of the entire construction site, the owner or delegated representative of said land shall contact the Stark SWCD through written notification that construction is complete and final stabilization, as specified in the Rainwater & Land Development Book, has been achieved.

105 PERFORMANCE STANDARDS

105.01 All properties adjacent to the site of soil disturbing activity shall be protected to the maximum extent practicable from soil erosion and sediment runoff and drainage, including, but not limited to private properties, natural and artificial waterways, wetlands, storm sewers and public lands.

105.02 Construction site erosion and sediment control practices used to satisfy this requirement shall conform, as a minimum, to the Ohio EPA Construction General Permit, the most current edition of the Ohio Rainwater and Land Development Manual and shall conform and comply to the most current Ohio Environmental Protection Agency, Ohio Revised Code chapter 6111 requirements.

105.03 SWPPP approvals issued in accordance with these rules do not relieve the owner of responsibility for obtaining all other necessary permits and or approvals from federal state, and/or county agencies (see section 104.05). If local requirements vary or conflict, the most stringent requirements shall be followed.

105.04 An SWPPP plan is considered complete when it contains all items listed in these regulations and the Ohio EPA Construction General Permit Part III under SWP3 requirements.

105.05 Road and highway transportation projects that fall under these regulations may follow the specifications in the most current ODOT Manual for SWPPP submittals.

106 APPLICATION PROCEDURES FOR THE SWPPP

106.01 Two (2) copies of the SWPPP and one (1) full set of construction plans for all projects that will disturb 1 or more acres of land shall be submitted to the Stark SWCD for review and approval prior to any earth disturbing activity. Any plans which are subject to the Stark County Subdivision Regulations, as adopted and administered by the Stark County Regional Planning Commission in accordance with Sec. 711.10 of the Ohio Revised Code must have written approval of the Stark County Subdivision Engineer.

106.02 The Stark SWCD shall review the SWPPP and approve or return for revision with comments and recommendations for revision, within thirty (30) working days of receipt. A plan rejected because of deficiencies shall receive a narrative report stating specific problems and procedures for filing a revised plan. At the time of receipt of a revised plan, another 30-day review period shall commence. If no letter is received from the Stark SWCD after thirty (30) working days the plan is automatically approved.

106.03 Approved plans shall remain valid for two years from the date of approval. A variance may be requested in writing to the Stark SWCD Board for an SWPPP extension before the 2 year deadline or a revised SWPPP submitted for review.

107 FEE

Review Fee Schedule

<u>Plan Review</u>	Fee
Preliminary Plan	\$15.00 / acre Minimum charge - \$75.00
Storm Water Pollution Prevention (SWPPP) Plan	\$20.00 / acre * Minimum charge - \$100.00
*A revised SWPPP submitted for review after plan approval will be re-billed at \$20.00 per acre with a \$100.00 minimum.	
<i>Active sites are inspected every two weeks for compliance. The site inspection fee will be billed with the SWPPP review per phase.</i>	

<u>Site Inspections</u> **	<i>Fee</i>	
Sites 1 – 5 acres	\$250	
Sites 6 – 10 acres	\$800	
Sites 11 – 20 acres	\$1300	
Sites 21 – 50 acres	\$1700	
Sites larger than 50 acres	\$2000	
** Please note: Non-compliance sites will incur an additional inspection fee of \$45.00 / hour for each inspection required until site meets compliance		

108 MONITORING THE PERMIT FOR COMPLIANCE

108.01 Sites are immediately considered non-compliant for the following reasons:

- (1) Soil disturbing activities without an earth disturbance permit.
- (2) Soil disturbing activities without an approved SWPPP.
- (3) Soil disturbing activities without an Ohio EPA NPDES Permit.
- (4) Soil disturbing activities without a pre-construction meeting.

108.02 Following the initial inspection of erosion and sediment control devices by the developer’s delegated representative, regular inspections will be performed by the Stark SWCD for compliance with these rules. If it appears that a violation of any of these rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in writing through a notice of violation by proof of delivery mail. If within 30 days after receipt of the letter, the owner or developer has not rectified the deficiency or received approval of plans for its correction, a second notice of violation will be issued. The owner or developer has another 15 days to rectify the violation or a “stop work order “will be issued immediately.

108.03 If the Board of Stark County Commissioners or the Stark Soil & Water Conservation District, acting as the Stark County Board of Commissioner’s duly authorized representative, determines that a violation exists and requests the Prosecuting Attorney of Stark County in writing, the Prosecuting Attorney shall seek an injunction to cease work immediately until compliance with these rules.

A court may also order the construction of sediment control improvements or implementation or other control measures and may assess a civil fine of not less than \$100.00 or more than \$500.00 for each day of a rule or stop work order.

108.04 The Stark SWCD may require revisions to the SWPPP as necessary to achieve compliance to these rules.

108.05 A final inspection will be made to determine if the criteria of these rules have been satisfied and a report sent to the Board of Stark County Commissioners on the compliance status of the site.

109 VARIANCE TO RULES

109.01 The Stark SWCD with responsibility for plan review and approval may grant a written variance from any requirement of these rules if there are special conditions applicable to the site such that strict adherence to the provisions of these rules will result in unnecessary hardship and not fulfill the intent of these rules. A written request for variance shall be provided to the Stark SWCD and shall state the specific variances sought and the reasons with supporting data for their granting. The Stark SWCD shall not grant a variance unless and until the applicant provides sufficient specific reasons justifying the variance. The Stark SWCD will conduct its review of the request for variance within 20 (twenty) working days.

Adverse economic conditions shall not be a valid reason to grant a variance.

110 DISCLAIMER of LIABILITY

110.01 Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person or property otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

SECTION II



111 Post Construction Water Quality

In order to control Post Construction water quality damage and damage to public and private lands, the owner/developer of each development area or redevelopment area shall be responsible for incorporating appropriate water quality measures both structural and non structural practices into the Storm Water Pollution Prevention Plan (SWPPP) for the project. Post Construction BMP's are required on all sites where the larger common plan of development or sale calls for 1 or more acres of land disturbance and shall comply with the most recently amended Construction General Permit for storm water discharges associated with construction activities. If requirements vary, the most stringent requirements shall be followed.

Construction activities shall be exempt from these requirements if it can be demonstrated that these post construction storm water management requirements have been provided as part of a larger common plan of development or they are addressed in a regional or local storm water management plan. Linear projects which can show that they will not create impervious surfaces are exempted from these requirements.

Road and highway transportation projects that fall under these regulations may follow the requirements/specifications in the most current ODOT Location and Design Manual for Post Construction Water Quality submittals.

112 Water Quality Volume Determination Requirements

Water Quality Volume (WQv) shall be the equivalent to the volume of runoff from a $\frac{3}{4}$ inch rainfall. This shall be determined according to the methods and specifications outlined in the most recently amended Construction General Permit for storm water discharges associated with construction activities in addition to the following criteria:

- ⊕ The storm water quantity volume must be stacked on top of the storm water quality volume for any storm water facility that will also serve as the post construction water quality facility.
- ⊕ The water quality orifice cannot be less than 2 $\frac{1}{2}$ inches in diameter.
- ⊕ Non structural practices must be protected in perpetuity through the use of appropriate legal tools. All legal easements or buffer areas must appear on the final plat per the Stark County Sub-division Regulations and be disclosed to potential buyers.
- ⊕ Any manufactured water quality practice must be construction certified by a representative of the company or engineer representing the developer of its correct installation.

113 Maintenance Requirements

Any portion of the permanent post construction water quality management systems that are constructed by the landowner/developer will be continuously maintained into perpetuity. The project landowner/developer is only required to maintain all temporary and permanent facilities throughout the construction process and until the final inspection and as built documentation. At that time, maintenance responsibility will transfer to the controlling entity/operator (i.e. the person/parties named in the post construction maintenance plan). Workshops for these controlling entities will be made available through the Stark SWCD and local MS4 operator detailing the long term responsibilities.

The Stark SWCD will inspect post construction practices that fall under the categories in Table 2 of the Ohio EPA GCP. Separate Memorandums of Understanding (MOU's) with local Municipal Separate Storm Sewer System (MS4's) operators will outline the extent of these inspections and any applicable appropriations. Inspection reports, detailing the maintenance needs and a timeline to compete them, will be sent to the governing MS4 and person/parties responsible for long term maintenance. The governing MS4 operator shall ensure the work done.

An as built survey shall be submitted to the Stark SWCD for all water quality structural practices prior to the Notice of Termination (N.O.T) submittal and sealed by a professional Surveyor or Engineer licensed by the State of Ohio.

Detail drawings and maintenance plans shall be provided to Stark SWCD and/or the local MS4 for all Post Construction Best Management Practices (BMPs) prior to plan approval and shall include the following information:

- Cover sheet naming MS4 operator, site name and date.
- Name and number of the party or association responsible for post construction long term maintenance.
- List of all post-construction BMP's, structural and non-structural with all supporting design data.
- Instructions on how and when the practices are to be maintained along with an inspection schedule.
- A detail drawing of the BMP's listed.
- A copy of any required easements and/or deed restrictions.

Maintenance plans must ensure that pollutants collected within structural post construction BMP practices are disposed of in accordance with local, state and federal guidelines.

