
LAKE COUNTY EROSION & SEDIMENT CONTROL RULES

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Lake County Erosion and Sediment Control Rules

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Lake County Building Department

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Lake County Soil and Water Conservation District

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Lake County Mayors and City Managers

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Table of Contents

	<u>Page</u>
1. <u>Purpose and Scope</u>	
1.1 – 1.4 Purpose	5
1.5 – 1.6 Excluded Soil-Disturbing Activities	5
1.7 – 1.8 Regulated Activities	6
1.9 Disclaimer of Liability	6
1.10 Conflicts, Severability, Nuisances and Responsibility	6
2. <u>Terms Defined</u>	
2.1 Interpretation of Terms and Words	6 - 7
2.2 Words and Terms Defined	7 - 13
3. <u>Regulated Activities</u>	
3.1 – 3.3 Regulated Activities	13 - 14
3.4 – 3.6 Erosion and Sediment Control Plan Approval	14
3.7 Standards and Specifications for Erosion and Sediment Control Practices	14
3.8 Natural Resource Permits and Documentation	14 - 15
3.9 – 3.14 Plan Procedures	15 - 16
4. <u>Performance Standards</u>	
4.1 – 4.11 Performance Procedures	16 - 27
5. <u>Application Procedures for ESC Plan</u>	
5.1 Site Construction Plans	27
5.2 Contact Information	28
5.3 Natural Resource Permit Verification	28
5.4 Project Description	28 - 29
5.5 Existing Site Conditions	31
5.6 Grading Plan	31
5.7 Erosion and Sediment Control Plan	31
5.8 Storm Water Control Methods	32
5.9 Contractor's Construction Sequence	32
5.10 Review and Inspection Fee	32
5.11 Subcontractor Participation Form	32
6. <u>Monitoring for Compliance</u>	
6.0 Monitoring and Compliance Procedures	32
7. <u>Variances to Rules</u>	
7.0 Variances	33
<u>Review and Inspection Fee</u>	
Fees	35

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Adopted December 21, 1999

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1. Purpose and Scope

The Lake County Board of Commissioners adopts these Erosion and Sediment Control Rules, pursuant to Ohio Revised Code, Section 307.79, to establish technically feasible and economically reasonable standards to achieve a level of management and conservation practices in order to abate soil erosion and degradation of the waters of the State by soil sediment on land used or being developed for non-farm commercial, industrial, residential or other non-farm purposes, to establish criteria for determination of the acceptability of such management and conservation practices, and to implement Phase II of the storm water program of the National Pollutant Discharge Elimination System (NPDES) established in 40 CFR Part 122, and to promote the health, safety and well-being of the residents of Lake County. Specifically, the Rules are intended to protect:

- 1.1 Adjacent landowners from property loss due to sedimentation, erosion and flooding.
- 1.2 County and township ditches, culverts and storm sewers from loss of capacity due to siltation.
- 1.3 Water and habitat quality in streams and wetlands, with specific concern for the County's scenic-designated East Branch of the Chagrin River and wild-designated Grand River mainstream and Lake Erie.
- 1.4 Land development from the inconsistent application of state and regional guidance.

These Rules apply to soil-disturbing activities on land within the unincorporated area of Lake County used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes, including, but not limited to, individual or multiple lots, subdivisions, multi-family developments, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, redevelopment of urban areas and all other uses unless expressly excluded as follows:

- 1.5 Activities related to producing agricultural crops or silviculture operations or areas regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.
- 1.6 Strip mine and surface mine operations.

- 1.7 An Erosion and Sediment Control Plan is not required before clearing, grading, grubbing, excavating, or filling, individual lots of less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other similar non-farm uses; however, areas of less than one contiguous acre are not exempt from compliance with all other provisions of these Rules. This exemption does not apply to lots within a larger common plan of development or sales where the larger common plan disturbs more than one acre. See Section 3.1, 3.2, 3.3.
- 1.8 An Erosion and Sediment Control Plan is required for a public highway, transportation, or drainage improvement or maintenance thereof undertaken by a government agency or political subdivision in accordance with a statement of its Standard Sediment Control Policies that is approved by the Lake County Board of Commissioners or the Director of the Ohio EPA. This plan may be reviewed and enforced under an alternate authority.

1.9 **Disclaimer of Liability**

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person 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.

1.10 **Conflicts, Severability, Nuisances and Responsibility**

- (a) Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions shall prevail.
- (b) If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.
- (c) This regulation shall not be construed as authorizing any person to maintain a private or public nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.
- (d) Failure of the County to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting therefrom, and shall not result in the County its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

2. **Terms Defined**

2.1 INTERPRETATION OF TERMS AND WORDS

- A. Words used in the present tense include the future tense and the singular include the plural, unless the context clearly indicates the contrary.
- B. The term "shall" is always mandatory and not discretionary. The word "may" is permissive. The term "should" is permissive but indicates strong suggestion.

- C. 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.

2.2 WORDS AND TERMS DEFINED

Abbreviated Erosion and Sediment Control Plan (Abbreviated ESC Plan): The written document that sets forth the plans and practices to be used to meet the requirements of this regulation.

Accelerated Soil Erosion: The increased loss of the land surface that occurs as a result of human activities.

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

Administrator: The person or entity having the responsibility and duty of administering and ensuring compliance with these Rules. The Administrator shall be appointed by the Board of Lake County Commissioners.

Best Management Practices(BMPs): Schedules of activities, prohibitions of practices, maintenance procedures and other management practices (both structural and non-structural) to prevent or reduce the pollution of surface waters of the state. BMPs also include treatment requirements, operating procedures and practices to controls plant and/or construction site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

Bypass: The intentional diversion of waste streams (or storm water) from any portion of a treatment facility.

Buffer Area: A designated transitional area around a stream or wetland left in a natural, usually vegetated, state so as to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator.

Channel: A natural or manmade bed or ditch, existing or excavated for the conveyance of water.

Commencement of Construction: The initial disturbance of soils associated with clearing, grubbing, grading, placement of fill, or excavating activities or other construction activities.

Common Plan of Development: A term used to define the entire scope of a development project, both on-site and off-site, regardless of ownership, including phases of major and minor subdivisions (future and existing), sublots, parcels, large lots and lot splits, of development, associated easements, road and utility right of ways, and other land development or soil disturbances in support of the development project.

Concentrated Storm Water Runoff: Any storm water runoff which flows through a drainage pipe, ditch, diversion or other discrete conveyance channel.

Critical Area: Any portion of an area subject to this Rule the disturbance of which would cause soil erosion and sediment run-off and damage to private properties, waters of the state, storm sewers or

public lands due to topography, soil type, hydrology or proximity to a water course. These areas include, but are not limited to, riparian areas, wetlands and highly erodible soils.

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

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

Development Project: An area of land, parcel or parcels, portions of parcels, and associated land disturbance that is being developed, redeveloped, or disturbed in support of development, for non-farm commercial, industrial, residential or other institutional construction or alteration which changes, either permanently or temporarily, the runoff characteristics or grade of the lands therein.

Dewatering Volume: See current Ohio Rainwater and Land Development Manual

Discharge: The addition of any pollutant to the surface waters of the state from a point source.

Disturbance: Any clearing, grading, excavating, filling, or other alteration of land surface where natural or man-made cover is destroyed in the manner that exposes the underlying soils.

Disturbed Area: An area of land subject to erosion due to the removal of vegetative cover and/or soil moving activities, including filling.

Ditch: An open channel, dug, for the purpose of drainage or and does not otherwise meet the Clean Water Rule:40 CFR 230.3

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

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

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 above the specified point of measurement.

Drainage Watershed: For purposes of these regulations, the total contributing drainage area to a BMP, i.e. the “watershed” directed to the practice. This includes offsite contributing drainage.

Drainage Way: A natural or manmade channel, ditch, or waterway that conveys surface water in a concentrated manner by gravity. See also watercourse, channel, stream.

Dumping: A grading, pushing, piling, throwing, unloading or placing.

Earth Material: The soil, sediment, rock, sand, gravel and organic material or residue associated with or attached to the soil.

Engineer: A Professional Engineer registered in 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 and 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.

Erosion Sediment Control Plan: The written document meeting the requirements of Sections 3, 4 and 5 of these Rules which sets forth the plans and practices to be used to minimize soil erosion and prevent off-site disposal of soil sediment by containing sediment on-site or bypassing sediment-laden runoff through a sediment control measure during and after land development.

Farm: Land or water devoted to growing crops or cultivated in connection with raising or harvesting any agricultural or horticultural commodity, including nursery stock, and the raising, shearing, feeding, caring for, training, and management of livestock and poultry.

Final Stabilization: All soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 70% cover for all disturbed areas has been established or equivalent stabilization measures, such as the use of mulches or geo-textiles, have been employed.

Grading: The excavating, filling, or stockpiling of earth material, or any combination thereof, including the land in its excavated or filled condition.

Grassed Waterway: A broad or shallow natural watercourse or constructed channel, covered with erosion-resistant grasses or similar vegetative cover, used to convey surface water.

Impervious: That which does not allow infiltration.

Landscape Architect: A Professional Landscape Architect registered in the State of Ohio.

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

Larger Common Plan of Development: A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

Lot split: See Ohio Administrative Code 711.133 for definition

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

Natural Waterway: A waterway that is part of the natural topography, which usually maintains continuous or seasonal flow during the year and is characterized as being irregular in cross-section with a meandering course. See Surface Waters of the State/United States.

NPDES: National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, termination, monitoring and enforcing permits and enforcing pretreatment requirements, under sections 307, 402, 318, 405 under the Clean Water Act.

Operator: Any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with an SWP3 for the site or other permit conditions. (they are authorized to direct workers at a site to carry out activities required by the SWP3, or comply with other permit conditions)

Ordinary High Water Mark: The line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Owner or Operator: Means the owner or operation of any facility or activity subject to this regulation.

Parcel: Means a tract of land occupied or intended to be occupied by a use, building or group of buildings and their accessory uses and buildings as a unit, together with such open spaces and driveways as are provided and required. A parcel may contain more than one contiguous lot individually identified by a 'Permanent Parcel Number' assigned by the Lake County Auditor's Office.

Permanent Stabilization: The establishment of permanent vegetation, decorative landscape mulching, matting, sod, rip rap and landscaping techniques to provide permanent erosion control on areas where construction operations are complete or where no further disturbance is expected for at least one year.

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

Phasing: Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

Pre-Construction Meeting: A meeting between the Administrator and all principal parties, prior to the start of any construction, at a site that requires an Erosion Sediment Control Plan.

Pre-Winter Stabilization Meeting: A meeting between the Administrator and all principal parties, prior to October 1, in order to plan winter erosion and sediment controls for a site that requires an Erosion Sediment Control Plan.

Property line Adjustment: See Ohio Administrative Code 711.001 for definition

Point Source: Any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, leachate collection system, from which pollutants are, or may be discharged.

Qualified Inspection Personnel: A person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess all conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measure selected to control the quality of storm water discharges from the construction activity.

Rainwater and Land Development Manual: Ohio's standards for storm water management, land development, and urban stream protection. Developed by the Ohio Department of Natural Resources, the U.S. Department of Agriculture Natural Resource Conservation Service, and the Ohio Environmental Protection Agency. The most current edition of these standards shall be used with this regulation.

Riparian Area: The transition area between flowing water and terrestrial ecosystems composed of trees, shrubs, and surrounding vegetation which serve to stabilize erodible soil, improve both surface and ground water quality, increase stream shading and enhance wildlife habitat.

Runoff Coefficient: The fraction of total rainfall that will appear at the conveyance as runoff.

Sediment: The 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: The deposit of sediment in water bodies.

Sediment Basin or Pond: A sediment trap, sediment basin or permanent basin that has been temporarily modified for sediment control, as described in the latest edition of the Rainwater and Land Development Manual.

Sediment Pollution: The 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 non-farm purposes.

Sediment Storage Volume: See current Ohio Rainwater and Land Development Manual

Sloughing/Slumping: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the soil-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, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed, which may result in, or contribute to,

erosion and sediment pollution. Grubbing and stump removal that occurs during clearing or timber activities constitutes a soil disturbing activity.

Soil and Water Conservation District: An entity 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 Lake SWCD.

Soil Loss: The soil moved from a given site by the forces of erosion

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.

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

Storm Water Pollution Prevention Plan: (SWP3): The written document that sets forth the plans and practices to be used to meet the requirements of the NPDES permit. This typically contains the Erosion and Sediment Control Plan for the site.

Storm Water Runoff: The direct response of a watershed to precipitation, which 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, seasonally intermittent and/or ephemeral.

Subdivision: See Ohio Administrative Code 711.001 for definition

Subdivision, Major: See Ohio Administrative Code 711.001 for definition

Subdivision, Minor: See Ohio Administrative Code 711.001 for definition

Surface Waters of the State / United States: All streams, lakes, reservoirs, marshes, wetlands, or other waterways situated wholly or partly within the boundaries of the state, except those private waters which do not combine or affect a junction with surface water. See Clean Water Rule: 40 CFR 230.3. Waters defined as sewerage systems, treatment works or disposal systems in Section 6111.01 of the Ohio Revised Code are not included.

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

SWP3: Storm Water Pollution Prevention Plan.

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

Temporary Stabilization: The establishment of temporary vegetation, mulching, geotextiles, sod, preservation of existing vegetation and other techniques capable of quickly establishing cover over disturbed areas to provide erosion control between construction operations.

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

TOTAL MAXIMUM DAILY LOAD: The sum of the existing and/or projected point source, nonpoint source, and background loads for a pollutant to a specified watershed, water resource or wetland, or water resource or wetland segment. A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into the water and still ensure attainment and maintenance of water quality standard.

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

Water Quality Volume (WQv): The volume of storm water runoff which must be captured and treated prior to discharge from the developed site after construction is complete. WQv is based on the expected runoff generated by the mean storm precipitation volume from post-construction site conditions at which rapidly diminishing returns in the number of runoff events captured begins to occur.

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

Water Resource: Any public or private body of water including lakes or ponds, and streams, gullies, swales, or ravines having banks, a defined bed, a permanent water mark and a definite direction of course, either continuously or intermittently flowing. May also be known as jurisdictional waters.

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

Wetland: Those areas, either hydraulically isolated or connected to a water resource that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas (40 CFR 232, as amended).

3. Regulated Activities.

No person shall cause or allow soil-disturbing activities, land clearing, grading, excavating or filling within the scope of these Rules without full compliance with the requirements set forth in these Rules.

- 3.1 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes disturbing more than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm uses, the owner of said land shall prepare and file with the Administrator an Erosion and Sediment Control (ESC) plan.

- 3.2 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes expressly stated in the most current Ohio EPA General Construction permit, disturbing less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm use, which is part of a larger common plan of development (major and minor subdivision, and lot splits), the owner of said land shall prepare and file with the Administrator an Abbreviated Erosion and Sediment Control (ESC) plan, which shall consist of items listed in Section 4.11 of this document. A copy of the Ohio EPA Notice of Intent or General Permit authorization shall be provided.
- 3.3 When a residential dwelling unit on an individual lot is proposed, which is not part of a larger common plan of development (major and minor subdivisions, and lot splits) and less than one acre, the owner of said land shall not be required to prepare and file an Erosion and Sediment Control Plan; however, said owner shall comply with all other provisions of these Rules.
- 3.4 The submitted ESC plan must be approved by the Administrator of these Rules prior to the start of any soil-disturbing activity. The owner of said land shall notify the Administrator no less than two (2) working days before the start of soil-disturbing activity. The Administrator shall also be notified by the owner no later than two (2) working days after project completion.
- 3.5 The ESC plan shall be submitted to the Administrator for review no less than thirty (30) working days prior to any soil-disturbing activity at the proposed site.
- 3.6 The ESC plan shall contain narrative and drawings and calculations that explain practices to be used to prevent soil erosion and off-site discharge of soil sediment during and after land development. (See Section 5 for plan requirements and review schedules.)
- 3.7 Erosion and sediment control practices used to satisfy the performance criteria of these Rules shall meet the specifications provided in the current online edition of Rainwater & Land Development Manual, Ohio's Standards for Storm Water Management and Land Development, and Urban Stream Protection, published by the Ohio Department of Natural Resources, provisions of the Lake County Floodplain Regulations, and OEPA/USEPA TMDL requirements. (See Section 4 for performance standards and requirements.)
- 3.8 Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from the Ohio EPA, the US Army Corps of Engineers, and other federal, state, and/or county agencies. If requirements vary, the most restrictive requirement shall prevail. These permits may include, but are not limited to, those listed below. All submittals required showing proof of compliance with these state and federal regulations shall be submitted with Erosion and Sediment Control Plans or Abbreviated Erosion and Sediment Control Plans.
- (1) Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof. Proof of compliance with these requirements shall be the applicant's Notice of Intent (NOI) number from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.

- (2) Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality 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 of application of this regulation.
- (3) Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit 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 Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
- (4) Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:
 - (1) A letter from a qualified professional certifying that Section 404 of the Clean Water Act is not applicable to the site.
 - (2) A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit. 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 of application of this regulation.
- (e) Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.

3.9 The ESC plan shall be certified by a professional engineer, professional surveyor or certified professional erosion and sediment control specialist or landscape architect registered in the State of Ohio.

3.10 The owner of said land and the developer, engineer and contractor of the project, and other principal parties, shall meet with the Administrator for a Pre-Construction Meeting no less than seven (7) days prior to soil-disturbing activity at the site in order to ensure that erosion and sediment control devices are properly installed, limits of disturbance and buffer areas are properly delineated and construction personnel are aware of such devices and areas. Pre-Construction Meetings for Abbreviated ESC Plans may be waived at the discretion of the Administrator.

3.11 The approved erosion and sediment control plan shall be kept at the development site and made available to contractors, site managers, and inspectors, and the administrators of these regulations.

- 3.12 The approved erosion and sediment control plan, and the sediment and erosion controls, and non-sediment pollution controls contained therein, shall be implemented upon the commencement of construction. Perimeter controls must be installed two working days prior to the commencement of construction. The approved erosion and sediment control plan must be implemented until the site reaches final stabilization.
- 3.13 All project activity shall be subject to monitoring. A record of site inspections and compliance and non-compliance shall be maintained by the Administrator.
- 3.14 If site is, or planned, to remain active through the winter months, a Pre-Winter Stabilization Meeting shall be held by the owner of said land and the developer, engineer and contractor of the project and the Administrator prior to October 1, in order to plan and approve winter erosion and sediment controls as defined in the most current edition of Rainwater and Land Development Manual Ohio's Standards for Storm Water Management and Land Development and Urban Stream Protection published by the Ohio Department of Natural Resources.
- 3.15 Upon completion of all construction and final stabilization of the entire construction site, the owner of said land shall contact the Administrator through written notification that construction is complete and final stabilization has been achieved. Obligations under this section (3.15) shall not be completed until installation of post-construction BMPs is verified

4. Performance Standards

All properties adjacent to the site of soil-disturbing activity shall be protected from soil erosion and sediment run-off and damage, including, but not limited to, private properties, natural and artificial waterways, wetlands, storm sewers and public lands.

Construction site erosion and sediment control practices used to satisfy this requirement shall conform, as a minimum, to State of Ohio standards as set forth in the most-current edition of the *Rainwater and Land Development Manual* and as defined by the Ohio Department of Natural Resources Division of Soil and Water Conservation and Natural Resource Conservation Service and shall conform to the most current Ohio Environmental Protection Agency, Ohio Revised Code Chapter 6111, requirements. The ESC Plan is intended to be the same as the erosion control portion of the SWP3 required in the Ohio EPA's General Storm Water permit. All SWP3 requirements listed in the General permit must also be met.

Erosion and sediment control plan 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. If requirements vary, the most stringent requirement shall be followed.

Erosion and sediment control practices at the site, and as identified in the ESC plan, shall comply with the following:

The ESC Plan must contain a description of the controls appropriate for each construction operation and the applicant must implement such controls. The ESC Plan must clearly describe for each major construction activity the appropriate control measures; the general sequence during the construction process under which the measures will be implemented; and the contractor responsible for implementation (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization).

The controls shall include the following minimum components:

4.1 NON-STRUCTURAL PRESERVATION MEASURES: The ESC Plan must make use of practices that preserve the existing natural condition to the maximum extent practicable. Such practices may include preserving riparian areas, preserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time, and designation of tree preservation areas or other protective clearing or grubbing practices.

4.2 EROSION CONTROL PRACTICES: The ESC Plan must make use of erosion controls that are capable of providing cover over disturbed soils. A description of control practices, labeled with unique identifying numbers, designed to restabilize disturbed areas after grading or construction shall be included in the ESC Plan. The ESC Plan must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, the use of construction entrances, and the use of alternative ground cover.

Erosion control practices must meet the following requirements:

- (a) Stabilization. Disturbed areas must be stabilized as specified in Tables 1 and 2 below.

Table 1: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a critical area and at final grade.	Within 2 days of reaching final grade.
Any area at final grade.	Within 7 days of reaching final grade within that area.

Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a critical area and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 14 days.
For all construction activities, any disturbed area, including soil stockpiles that will be dormant for more than 14 days but less than one year.	Within 7 days of the most recent disturbance within the area. For residential subdivisions, disturbed areas must be stabilized at least 7 days prior to transfer of ownership or operational responsibility.
Disturbed areas that will be idle over winter.	Prior to November 1.
Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.	

- (b) Permanent stabilization of conveyance channels. Applicants shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding, mulching, erosion control

matting, sodding, riprap, natural channel design with bioengineering techniques, or rock check dams, all as defined in the most recent edition of Rainwater and Land Development Manual or the Field Office Technical Guide available at www.nrcs.usda.gov/technical/efotg/.

4.3 RUNOFF CONTROL PRACTICES. The SWP3 Plan shall incorporate measures that control the flow of runoff from disturbed areas so as to prevent erosion. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected

4.4 SEDIMENT CONTROL PRACTICES. The ESC Plan shall include a description of, and detailed drawings for, all structural practices, labeled with unique identifying numbers, that shall store runoff, allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, among others: sediment settling ponds, silt fences, storm drain inlet protection, and earth diversion dikes or channels which direct runoff to a sediment settling pond. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless used in conjunction with a sediment settling pond.

Sediment control practices must meet the following requirements:

- (a) Timing. Sediment control structures shall be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and within seven (7) days from the start of grubbing. They shall continue to function until the up slope development area is restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.
- (b) Sediment settling ponds, basins and traps. Sediment settling ponds or basins shall be provided in the form of a sediment trap or sediment basin as defined by the latest edition of the Rain Water and Development Manual and labeled with unique identifying numbers. The allowable contributing drainage area to a sediment trap shall be limited to less than 5 acres. Contributing drainage areas of 5 acres or more shall be treated with a sediment basin. An equivalent BMP may be utilized upon approval from the administrator of these rules.

A sediment settling basin, or equivalent best management practice is required for any one of the following conditions, as determined in Table 3 below:

- (1) Concentrated storm water runoff.

- (2) Runoff from drainage areas that exceeds the design capacity of silt fence or inlet protection. See Table 3.
- (3) 10-acres of disturbed drainage.

The sediment-settling basin shall provide both a sediment storage zone and a dewatering zone. The volume of the dewatering zone shall be at least 67 cubic yards of storage per acre of total contributing drainage area and have a minimum of 48-hour drain time for sediment basins serving a drainage area over 5 acres.

When post-construction detention/water quality ponds are to be used as temporary sediment trapping BMPs, a skimmer discharge device consistent with the Ohio Rainwater and Land Development Manual shall be utilized during the construction phase and until the site is deemed permanently stabilized by the administrator.

The skimmer shall be designed per the equivalent requirements of sediment basins and the operator must ensure that the outlet structure of the pond provides and equivalent or better sediment storage zone and dewatering zone. As such, temporarily while the site is under construction, there shall be no discharge of runoff below the elevation required to store the sediment storage zone and the discharge of storm water within the dewatering zone shall only occur through the skimmer.

The volume of the sediment storage zone shall be calculated by one of the following methods:

- (4) The volume of the sediment storage zone shall be 1000ft³ per disturbed acre within the watershed of the basin.
- (5) The volume of the sediment storage zone shall be the volume necessary to store the sediment as calculated with a generally accepted erosion prediction model.

When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment-laden runoff. The depth of the dewatering zone must be less than or equal to five (5) feet. The configuration between the inlets and the outlet of the sediment settling basin must provide at least two units of length for each one unit of width (> 2:1 length to width ratio), however a length to width ratio of 4:1 is recommended. Sediment must be removed from the sediment-settling pond when the design capacity of the sediment storage zone has been completely filled. When designing sediment settling ponds, the applicant must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal is encouraged.

- (c) Silt fence and diversions. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties, water resources, and wetlands from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour and shall be capable of temporarily ponding runoff. The relationship between the maximum drainage area to silt fence for a particular slope range is shown in Table 3 below. Placing silt fence in a parallel series does not extend the size of the permissible drainage area.

Table 3: Maximum Drainage Area to Silt Fence

Maximum Drainage Area (acres) to 100 linear feet of silt fence	Range of Slope for a drainage area (%)
0.5	<2%
0.25	≥ 2% but < 20%
0.125	≥ 20% but < 50%

Alternative perimeter controls for sheet flow discharges may be considered by the Administrator, but their use shall not exceed the limitations indicated in Table 3 above. Detail drawings and plan notes shall specify the diameter of filter socks, straw wattles and other such alternative perimeter controls if used instead of silt fence.

Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

- (d) Inlet protection. Erosion and sediment control practices, such as boxed inlet protection (unique identifying numbers required), shall be installed to minimize sediment-laden water entering active storm drain systems. All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond. Straw or hay bales and filter socks around catch basins are not acceptable forms of inlet protection.
- (e) Off-site tracking of sediment and dust control. Best management practices must be implemented to ensure sediment is not tracked off-site and that dust is controlled. These best management practices must include, but are not limited to, the following:
1. Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete or cement sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual.
 2. Streets directly adjacent to construction entrances and receiving traffic

from the development area, shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall also be cleaned weekly and protected from sediment laden runoff, if feasible without posing a safety hazard.

Based on site conditions the Administrator may require additional best management practices to control off site tracking and dust. These additional BMPs may include:

3. Fencing installed around the perimeter of the development area to ensure that all vehicle traffic adheres to designated construction entrances.
4. Designated wheel-washing areas. Wash water from these areas must be directed to a designated sediment trap, the sediment-settling pond, or to a sump pump for dewatering in conformance with Section 4.7 of this regulation.
5. Applicants shall take all necessary measures to comply with applicable regulations regarding fugitive dust emissions, including obtaining necessary permits for such emissions. The Administrator may require dust controls including the use of water trucks to wet disturbed areas, tarping stockpiles, temporary stabilization of disturbed areas, and regulation of the speed of vehicles on the site.

(f) Surface Waters of the State Protection. Construction vehicles shall avoid water resources and wetlands. A 50-foot undisturbed natural buffer shall be provided around surface water of the state, critical areas, protected areas, or riparian setback, whichever is greater, unless infeasible. If the applicant is permitted to disturb areas within 50 feet of a water resource or wetland, the following conditions shall be addressed in the ESC Plan:

1. All BMPs and stream crossings shall be designed as specified in the most recent edition of the Rainwater and Land Development Manual.
2. Structural practices shall be designated and implemented on site to protect water resources or wetlands from the impacts of sediment runoff.
3. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond in-stream) shall be used in a water resource or wetland.
4. Where stream crossings for roads or utilities are necessary and permitted, the project shall be designed such that the number of stream crossings and the width of the disturbance are minimized.
5. Temporary stream crossings shall be constructed if water resources or wetlands will be crossed by construction vehicles during construction.
6. Construction of bridges, culverts, or sediment control structures shall not place soil, debris, or other particulate material into or close to the water resources or wetlands in such a manner that it may slough, slip, or erode.

7. Concentrated storm water runoff from BMPs to natural wetlands shall be converted to diffuse flow through the use of level spreaders or other such measure before the runoff enters the wetlands in a manner that does not cause erosion.
 8. Onsite protected/critical areas including wetlands and riparian areas shall be physically marked in the field prior to earth disturbing activities.
- (g) Modifying controls. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the applicant shall replace or modify the control for site conditions.

4.5 NON-SEDIMENT POLLUTANT CONTROLS: No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The applicant must implement site best management practices to prevent toxic materials, hazardous materials, or other debris from entering water resources or wetlands. These practices shall include but are not limited to the following:

- (a) Waste Materials: A covered dumpster shall be made available for the proper disposal of garbage, plaster, drywall, grout, gypsum, and other waste materials.
- (b) Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be made available.
- (c) Fuel/Liquid Tank Storage: All fuel/liquid tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of the largest container in the storage area.
- (d) Toxic or Hazardous Waste Disposal: Any toxic or hazardous waste shall be disposed of properly.
- (5) Contaminated Soils Disposal and Runoff: Discovery of previously unknown contaminated soils onsite shall be self-reported to Ohio EPA and local authorities. Contaminated soils from redevelopment sites shall be disposed of properly. Runoff from contaminated soils shall not be discharged from the site. Proper permits shall be obtained for development projects on solid waste landfill sites or redevelopment sites. Where construction activities are to occur on sites with contamination from previous activities, operators shall be aware that concentrations of materials that meet other criteria (i.e. not considered a Hazardous Waste, meeting Voluntary Action Program (VAP standards)) may still result in storm water discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this code. Control measures which may be utilized to meet this requirement include, but are not limited to:
 - i. Use berms, trenches, pits or tanks to collect contaminated runoff and prevent discharge.
 - ii. Pump runoff from contaminated soils to the sanitary sewer with the prior approval of the sanitary sewer system operator, or pump into a container

- for transport to an appropriate treatment or disposal facility; and
- iii. Cover areas of contamination with tarps, daily cover or other such methods to prevent storm water from coming into contact with contaminated materials.

The SWP3 must include methods to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, stormwater runoff, and snow melt. The SWP3 shall include measures to prevent and respond to chemical spills and leaks. Applicants may also reference the existence of other plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) provided that such plan addresses this requirement and a copy of such plan is maintained on site.

4.6 COMPLIANCE WITH OTHER REQUIREMENTS. The ESC Plan shall be consistent with applicable State and/or local waste disposal, sanitary sewer, or septic system regulations, including provisions prohibiting waste disposal by open burning, and shall provide for the proper disposal of contaminated soils located within the development area.

4.7 TRENCH AND GROUND WATER CONTROL. There shall be no sediment-laden or turbid discharges to water resources or wetlands resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment-settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

4.8 INTERNAL INSPECTIONS. All controls on the site shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period. The inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized or runoff is unlikely due to weather conditions (e.g., site is covered with snow, ice, or the ground is frozen). A waiver of inspection requirements is available until one month before thawing conditions are expected to result in a discharge if prior written approval has been attained from the Administrator and all of the following conditions are met:

1. The project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e. more than one (1) month).
2. Land disturbance activities have been suspended, and temporary stabilization is achieved.

3. The beginning date and ending dates of the waiver period are documented in the SWP3.

The applicant shall assign qualified inspection personnel to conduct these inspections to ensure that the control practices are functional and to evaluate whether the SWP3 is adequate, or whether additional control measures are required. Qualified inspection personnel are individuals with knowledge and experience in the installation and maintenance of sediment and erosion controls.

These inspections shall meet the following requirements:

- (a) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of or the potential for, pollutants entering the drainage system.
- (b) Erosion and sediment control measures identified in the SWP3 shall be observed to ensure that they are operating correctly. The applicant shall utilize an inspection form provided by the Administrator or an alternate form acceptable to the Administrator (typically the most current form provided by the Ohio EPA). The inspection form shall include at a minimum:
 1. The inspection date.
 2. Names, titles and qualifications of personnel making the inspection.
 3. Weather information for the period since the last inspection, including a best estimate of the beginning of each storm event, duration of each storm event and approximate amount of rainfall for each storm event in inches, and whether any discharges occurred.
 4. Weather information and a description of any discharges occurring at the time of inspection.
 5. Locations of discharges of sediment or other pollutants from site.
 - i. BMPs that need to be maintained.
 - ii. BMPs that failed to operate as designed or proved inadequate for a particular location.
 - iii. Where additional BMPs are needed that did not exist at the time of inspection.
 6. Corrective action required including any necessary changes to the SWP3 and implementation dates.

Additional inspection details as need to adequately describe site BMPs and conditions or to meet OEPA/USEPA permit requirements.

- (c) Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving water resource or wetlands.
- (d) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.
- (e) The applicant shall maintain for three (3) years following final stabilization the results of these inspections, the names and qualifications of personnel making the inspections, the dates of inspections, major observations relating to the implementation of the SWP3, a certification as to whether the facility is in compliance with the SWP3, and information on any incidents of non-compliance determined by these inspections.

4.9 MAINTENANCE. The ESC Plan shall be designed to minimize maintenance requirements. All control practices shall be maintained and repaired as needed to ensure continued performance of their intended function until final stabilization. All sediment control practices must be maintained in a functional condition until all up slope areas they control reach final stabilization. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices and shall ensure a responsible party and adequate funding to conduct this maintenance.

When inspections reveal the need for repair, replacement, or installation of erosion and sediment control BMPs, the following procedures shall be followed:

- (a) When practices require repair or maintenance. If an internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, it must be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.
- (b) When practices fail to provide their intended function. If an internal inspection reveals that a control practice fails to perform its intended function as detailed in the ESC plan and that another, more appropriate control practice is required, the ESC plan must be amended and the new control practice must be installed within ten (10) days of the inspection.
- (c) When practices depicted on the ESC Plan are not installed. If an internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the internal inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

4.10 FINAL STABILIZATION. Final stabilization shall be determined by the Administrator. Once a definable area has achieved final stabilization, the

applicant may note this on the SWP3/ESC plan and no further inspection requirement applies to that portion of the site.

4.11 ABBREVIATED EROSION AND SEDIMENT CONTROL PLAN.

- (a) The applicant shall submit an Abbreviated ESC Plan in accordance with the requirements of this regulation. See 3.1,3.2,3.3
- (b) The Abbreviated ESC Plan shall be certified by a professional engineer, a registered surveyor, certified professional erosion and sediment control specialist, or a registered landscape architect.
- (c) The Abbreviated ESC Plan shall include a minimum of the following BMPs. The Administrator may require other BMPs as site conditions warrant.
 - 1. Construction Entrances: Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual.
 - 2. Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be indicated on plan. Use for other waste and wastewater is prohibited.
 - 3. Street Sweeping: Streets directly adjacent to construction entrances and receiving traffic from the development area, shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall be cleaned weekly.
 - 4. Stabilization: The development area shall be stabilized as detailed in Table 4.

Table 4: Stabilization

Area requiring stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a stream and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 14 days
For all construction activities, any disturbed area, including soil stockpiles, that will be dormant for more than 14 days but less than one year.	Within 7 days of the most recent disturbance within the area
Disturbed areas that will be idle over winter	Prior to November 1.
Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.	

- 5. Inlet Protection. Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering

active storm drain systems, including yard drains. Straw or hay bales are not acceptable forms of inlet protection.

6. Silt fence and other perimeter control practices shall be used to protect adjacent properties and water resources from sediment discharged via sheet flow. Silt fence shall be placed along level contours and the permissible drainage area limited to those indicated in Table 3 in part 4.4 of this regulation.
7. **Internal Inspection and Maintenance.** All controls on the development area shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period. Maintenance shall occur as detailed below:
 - A. When practices require repair or maintenance. If the internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, it must be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.
 - B. When practices fail to provide their intended function. If the internal inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Abbreviated ESC Plan must be amended and the new control practice must be installed within ten (10) days of the inspection.
 - C. When practices depicted on the Abbreviated ESC Plan are not installed. If the internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

Final Stabilization: Final stabilization includes removal of temporary erosion and sediment BMPs and greater than 70% vegetative cover of all exposed areas. Final Stabilization determination shall be made by the Administrator

5. Application Procedures for ESC Plan

ESC Plans or Abbreviated ESC plans for development projects shall be submitted to the Administrator after the approval of the preliminary plans and prior to the approval of improvement plans or drawings by the Lake County Planning Commission in the case of subdivisions; concurrently with the submittal of construction drawings to the Lake County Engineer in the case of other construction projects; and thirty (30) working days prior to any soil-disturbing activity for general clearing projects.

The Administrator shall review the ESC plan and approve, or return for revision with comments and recommendations for revision, within twenty-one (21) working days after receipt of said plan. A plan

rejected because of deficiencies shall receive a narrative report stating specific problems and the procedure for filing a revised plan. At the time of receipt of a revised plan, another 21-day review period shall be commenced.

Approved plans shall remain valid for two years from the date of approval. A copy of the approved plan and its review report shall be forwarded by the Administrator to the Lake Soil & Water Conservation District, County Planning Commission, and County Engineer.

A plan is considered complete when it contains two sets of the following:

5.1 Site construction plans intended for contractor's bid.

5.2 Contact information for the owner of the land, the developer and project engineer; project engineer's certification; project name; and, project vicinity map.

5.3 Permit Verification

(a) **Jurisdictional Wetlands:** In areas where jurisdictional wetlands as defined by an on-site delineation verified by the United States Army Corps of Engineers will be affected, a copy of the wetland delineation report shall be submitted with the ESC Plan. If an Individual Permit is required, a copy of that Permit, showing project approval and any restrictions that apply to site activities, shall also be submitted. If an Individual Permit is not required for the proposed project, the site owner shall submit proof of compliance with the Nationwide Permit Program as detailed under Section 3.8. If an Ohio EPA Section 401 Water Quality Certification and/or an Ohio EPA Isolated Wetland Permit is required the site owner shall submit proof of compliance with the Ohio EPA Water Quality Certification and/or Isolated Wetland Permit program as detailed in Section 3.8.

(b) An Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System permit with permit verification number or Notice of Intent shall be submitted with the ESC Plan.

5.4 Project Description: A brief description of the project and types of soil-disturbing activities. Note specifically items not self-evident from the plan drawings. The project description shall list total project acreage, north arrow and adjacent property boundaries.

(1) Site description: The ESC Plan shall provide:

(a) A description of the nature and type of the construction activity (e.g. residential, shopping mall, highway, etc.).

(b) Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavation, filling or grading, including off-site borrow areas).

(c) Existing data describing the soil and, if available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.

(d) A description of prior land uses at the site.

- (e) An implementation schedule which describes the sequence of major soil-disturbing operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion and sediment controls to be employed during each operation of the sequence.
 - (f) The location and name of the immediate receiving stream or surface water(s) and the first subsequent receiving water(s).
 - (g) The aerial (plan view) extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.
 - (h) For subdivided developments where the ESC Plan does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices. This does not remove the responsibility to designate specific erosion and sediment control practices in the SWP3 for areas such as steep slopes, stream banks, drainage ways, and riparian zones.
 - (i) Location and description of any storm water discharges associated with dedicated asphalt and dedicated concrete plants associated with the development area and the best management practices to address pollutants in these storm water discharges.
 - (j) Each temporary and permanent storm water practice shall be designated with an individual identification number.
- (2) Site map showing:
- i. Limits of soil-disturbing activity of the site, including off site spoil and borrow areas.
 - ii. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils.
 - iii. Existing and proposed one-foot (1') contours. This must include a delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed in acres.
 - iv. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
 - v. Existing and planned locations of buildings, roads, parking facilities, and utilities.
 - vi. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site

development.

- vii. Sediment ponds, including their sediment settling volume and contributing drainage area and the maximum expected disturbed area that will be directed to the sediment pond during construction. The ESC plan shall include a summary of the following:
 - (a) the required sediment storage and dewatering volumes
 - (b) the provided sediment storage and dewatering volumes
 - (c) the weir length or skimmer size required, as applicable
 - (d) the weir length or skimmer size provided.

The ESC plan shall also include a separate plan and profile view of each individual sediment-settling pond and its outlet structure. Detail drawings of the outlet structure shall indicate the following elevations

- (i) pond bottom
- (ii) the elevation required to store the required sediment storage volume
- (iii) for sediment basins, the elevation at which the skimmer is attached
- (iv) for sediment traps, the top and bottom of the stone outlet section
- (v) the elevation required to store the dewatering volume, exclusive of the sediment storage volume
- (vi) the elevation of the top of embankment
- (vii) the crest of the emergency spillway

Where used as a sediment-settling pond during construction, the ESC plan shall include a detail drawing of the temporary outlet configuration of the permanent storm water basin with the following information specified:

- (a) the storage volume provided below the elevation at which the skimmer or other surface dewatering device is attached
- (b) the elevation at which the skimmer or other surface dewatering device is attached
- (c) the elevation at which the full dewatering zone is stored above the skimmer invert and
- (d) any temporary modification to permanent outlet orifices or weirs required to ensure no discharge below the skimmer invert and only the skimmer controls the discharge up to the top of the dewatering volume. Calculations of the sediment storage volume, dewatering volume and skimmer drawdown time shall also be provided.
- (e) the location of permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed.

- viii. Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for concrete truck washout, and vehicle fueling.
- ix. The location of designated stoned construction entrances where the vehicles will ingress and egress the construction site.
- x. Methods to minimize the exposure of building materials, building products,

construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, storm water runoff, and snow melt.

- xi. Measures to prevent and respond to chemical spills and leaks. Applicants may also reference the existence of other plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) provided that such plan addresses this requirement and a copy of such plan is maintained on site.
- xii.
- xiii. Methods to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. No detergents may be used to wash vehicles. Wash waters shall be treated in a sediment basin or alternative control that provides equivalent treatment prior to discharge.
- xiv. The location of any in-stream activities including stream crossings.

(3) The Administrator may require the ESC Plan to include a Soils Engineering Report based upon the determination that the conditions of the soils are unknown or unclear to the extent that additional information is required to protect against erosion or other hazards. This report shall be based on adequate and necessary test borings, and shall contain all the information listed below. Recommendations included in the report and approved by the Administrator shall be incorporated in the grading plans and/or other specifications for site development.

- (a) Data regarding the nature, distribution, strength, and erodibility of existing soils.
- (b) If applicable, data regarding the nature, distribution, strength, and erodibility of the soil to be placed on the site.
- (c) Conclusions and recommendations for grading procedures.
- (d) Conclusions and recommended designs for interim soil stabilization devices and measures, and for permanent soil stabilization after construction are completed.
- (e) Design criteria for corrective measures when necessary.
- (f) Opinions and recommendations covering the stability of the site.

5.5 Existing site conditions shown with maximum scale of 1"=200' and 2' contour intervals; locations and names of soil type boundaries, vegetation, ditches, springs, streams, lakes, wetlands, woods, agricultural fields; location of downstream lakes and wetlands within 1000' of project; and, existing drainage patterns including direction of flow and watershed acreage.

5.6 Grading plan showing types of soils and boundaries; limits of disturbance; areas of excavation and fill; final contours; and, proposed drainage pattern including storm sewer inlets and permanent storm water basins. Basin detail shall be drawn to scale and show volumes and size of contributing drainage area.

5.7 Erosion and Sediment Control plan showing location, type and construction detail for perimeter controls; sediment settling devices; limits of disturbance; buffers for streams, wetlands,

ponds and drainages; seeding mixtures and rates; and, type and quantity of mulching; application of water or fertilizer. Erosion and Sediment Control plans shall also provide a detailed construction sequence. Updates and/or corrections to schedules and/or sequencing shall be clearly marked or listed on approved plans, which shall be located at the site.

5.8 Storm Water Control Methods adequate to prevent pollution of public waters by soil sediment from accelerated storm water runoff from development areas.

5.9 Contractor's Construction Sequence that estimates the time frame required for the following:

- (a) Pre-Construction meeting.
- (b) Initial clearing and grubbing to gain access and installation of perimeter controls within seven (7) days of clearing and grubbing.
- (c) Clearing and grubbing followed by excavation of sediment traps and basins and temporary soil stabilization for these sediment settling devices within seven (7) days of excavation.
- (d) Project engineer's initial inspection of erosion and sediment controls for "as-built" certification.
- (e) Maintenance inspection schedule and party responsible for inspection and repair of erosion and sediment control devices.
- (f) Pre-Winter Stabilization meeting if project is to be through the winter.
- (g) Final grading and permanent soil stabilization within 7 days of finishing final grade.
- (h) Removal of temporary sediment control devices.

5.10 Review and Inspection Fee shall be submitted with the Erosion and Sediment Control Plan. ESC Plans shall not be reviewed until the fee has been paid. The fee is based on project size and paid by the owner or developer directly to the Administrator. The review and inspection fee shall be established by the Board of Lake County Commissioners by Resolution.

5.11 A completed Lake County Erosion and Sediment Control Rules "Subcontractor Participation" form identifying all subcontractors engaged in activities that could impact storm water runoff. The SWP3 shall contain signatures and contact information from all of the identified subcontractors indicating that they have been informed and understand their roles and responsibilities in complying with the SWP3.

6. Monitoring for Compliance

Following the initial inspection of erosion and sediment control devices by the project engineer, regular inspections will be performed by the Administrator 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 the form of a notice of violation in writing by US 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; the Administrator shall issue a second notice of violation. If within 14 days after receipt of the

second notice of violation, the owner or developer has not rectified the deficiency or received approval of plans for correction; the deficiency or noncompliance shall be reported to the Board of Lake County Commissioners for consideration of a "finding of violation."

If the Board of Lake County Commissioners determines that a violation exists and requests the Prosecuting Attorney of Lake County in writing, the Prosecuting Attorney shall seek an injunction or other appropriate relief to abate excessive erosion or sedimentation and secure compliance with these Rules. In granting relief, a court may order the construction of sediment control improvements or implementation of other control measures.

The Administrator shall have the authority to make immediate on-site adjustments to the ESC Plan in order to achieve compliance with these Rules.

A final inspection will be made to determine if the criteria of these Rules have been satisfied and a report will be presented to the Board of Lake County Commissioners on the site's compliance status.

The Administrator will monitor soil-disturbing activities for non-farm residential, commercial, industrial, or other non-farm purposes on land of less than one contiguous acre to ensure compliance required by these Rules.

The Administrator shall notify the U.S. Army Corps of Engineers when there is a violation on a development project covered by an Individual or Nationwide Permit. The Administrator shall notify the Ohio Environmental Protection Agency when there is a violation on a development project covered by a Section 401 Water Quality Certification and/or Isolated Wetland Permit.

The Administrator shall not review or approve erosion and sediment control plans, of any type, for applicants that have an existing development project or site(s) that is not in compliance with its approved erosion and sediment control plan, or a project site(s) that is otherwise not in compliance with the Lake County Erosion and Sediment Control Rules.

The Administrator shall not review or approve erosion and sediment control plans for sublots or other areas within existing development projects that are not in compliance with its approved erosion and sediment control plan or otherwise not in compliance with the Lake County Erosion and Sediment Control Rules. Such development projects include but not limited to, subdivisions or other common plans of development

The County of Lake reserves the right to withhold relevant inspections and/or other approvals from its departments and/or agencies, to the extent permitted by law, for development projects or activities in support of development projects that are not in compliance with these Rules.

The County may not issue building permits for projects regulated under the Lake County Erosion and Sediment Control Rules that have not received approval for an Erosion and Sediment Control Plan for said project(s). The issuance of required approvals for work regulated by the Ohio Building Code and the Residential Code of Ohio is controlled by Ohio Administrative Code Chapters 4101:1-01 and 4101:8-1-01, respectively

7. Variances to Rules

The Lake County Board of Commissioners, or its designated agent, may grant a variance to these Rules if all of the following are found to exist:

- (a) There are exceptional or extraordinary circumstances or conditions applying to the land.
- (b) Literal enforcement of the Rules would cause undue hardship or practical difficulties.
- (c) The exceptional or extraordinary circumstances or conditions and the undue hardship or practical difficulties were not the result of any prior actions of the owner of the land.
- (d) The variance is necessary for the preservation and enjoyment of substantial property rights of the owner of the land.
- (e) The variance will not be a substantial detriment to adjacent land and will not materially impair the purposes of these Rules.

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

A request for a variance shall be in writing and shall state specifically the reasons for the request and shall include all data and information in support of the request. The request shall be reviewed and approved, disapproved or approved with modifications within twenty (20) working days. Failure to act within said time will result in the variance request being approved.

Review and Inspection Fee

Full ESC Plan		
Commercial, Industrial, Residential Subdivision	10 acres or less	\$300.00
	More than 10 to and including 20 acres	\$500.00
	More than 20 to and including 50 acres	\$700.00
	More than 50 acres	\$1,000.00
Non-Residential Individual Development Site	Individual Development one acre or greater	\$250.00
Multi Family Development Site	Any acreage development site	\$250.00
A Non-Residential lot within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$100.00
General Clearing/Grading Recreational Multi-Family development within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$100.00

Abbreviated ESC Plan		
All new, single-family residential projects	Any project one acre or greater or part of a common plan of development	\$50.00
Any residential additions, accessory buildings, or general clearing	Any project one acre or greater	\$50.00
Non-residential individual development site.	Any project one acre or greater	\$50.00