

## Erosion and Sediment Control Model Ordinance

### Section I. Introduction / Purpose

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches and the dredging of lakes. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat.

As a result, the purpose of this local regulation is to safeguard persons, protect property, and prevent damage to the environment in \_\_\_\_\_ (*municipality*). This ordinance will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in (*municipality*).

### Section II. Definitions

**Certified Contractor** A person who has received acceptable training and is authorized by its employer to inspect and maintain erosion and sediment control practices.

**Construction Activity.** Activities subject to TPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 1 acre or more, or as defined by the TPDES program. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

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**Clearing** Any activity that removes the vegetative surface cover.

**Drainage Way** Any channel that conveys surface runoff throughout the site.

**Erosion Control** A measure that prevents erosion.

**Erosion and sediment control agency** Employees or designees of the director of the municipal agency, the TCEQ, and/or the EPA designated to enforce this ordinance and/or to enforce the TPDES and/or to enforce the NPDES regulations.

**Erosion and Sediment Control Plan** A set of plans prepared by or under the direction of a licensed professional engineer or other acceptable professional indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

**Grading** Excavation or fill of material, including the resulting conditions thereof.

**Perimeter Control** A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

Phasing	Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.
Sediment Control	Measures that prevent eroded sediment from leaving the site.
Site	A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.
Site Development Permit	A permit issued by the municipality for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading.
Stabilization	The use of practices that prevent exposed soil from eroding.
Start of Construction	The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.
Watercourse	Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water delineated by ( <i>municipality</i> ).
Waterway	A channel that directs surface runoff to a watercourse or to the public storm drain.

**Section III. Responsibility for administration and permits**

The \_\_\_\_\_ [*erosion and sediment control agency*] shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Director of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

Solely the authorized individual under this Section designated to enforce this Ordinance shall have the authority to enforce this Ordinance in its entirety and shall be designated as a **Certified** \_\_\_\_\_ TPDES Stormwater Manager and/or Inspector. The \_\_\_\_\_ [*erosion and sediment control agency*] shall issue these individuals a badge, identification credentials, and provide for annual training to assure compliance with the laws of the state and federal regulators.

All municipal departments shall comply with the requirements of this Ordinance and are required to incorporate the authority of the authorized individual into its respective daily operations.

A) No person shall be granted a site development permit for land-disturbing **construction** activity ~~that would require the uncovering of a minimum of one (1) acre~~ without the

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approval of an Erosion and Sediment Control Plan by \_\_\_\_\_ (*erosion and sediment control agency*).

- B) No site development permit is required for the following activities:
- 1) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
  - 2) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
- C) Each application shall bear the name(s) and address(es) of the owner or developer of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm and shall be accompanied by a filing fee.
- D) Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan and that a certified contractor shall be on site on all days when construction or grading activity takes place.
- E) The applicant will be required to file with \_\_\_\_\_ (*municipality*) a faithful performance bond, letter of credit, or other improvement security in an amount deemed sufficient by \_\_\_\_\_ (*erosion and sediment control agency*) to cover all costs of improvements, landscaping, maintenance of improvements for such period as specified by \_\_\_\_\_ (*municipality*), and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

Comment [T2]: Optional

#### **Section IV. Review and approval**

- A) \_\_\_\_\_ (*erosion and sediment control agency*) will review each application for a site development permit to determine its conformance with the provisions of this regulation. Within 30 days after receiving an application, \_\_\_\_\_ (*erosion and sediment control agency*) shall, in writing:
- 1) Approve the permit application;
  - 2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
  - 3) Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.
- B) Failure of the \_\_\_\_\_ (*erosion and sediment control agency*) to act on an original or revised application within 30 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and \_\_\_\_\_ (*erosion and sediment control agency*). Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by \_\_\_\_\_ (*erosion and sediment control agency*).

**Section V. Erosion and Sediment Control Plan**

- A) The Erosion and Sediment Control Plan shall include the following:
- 1) A natural resources map identifying soils, forest cover, and resources protected under other chapters of this code. This map should be at a scale no smaller than 1"=100'.
  - 2) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
  - 3) All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
  - 4) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
  - 5) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
- B) Modifications to the plan shall be processed and approved or disapproved in the same manner as Section IV of this regulation, may be authorized by (*erosion and sediment control agency*) by written authorization to the permittee, and shall include
- 1) Major amendments of the erosion and sediment control plan submitted to \_\_\_\_\_ (*erosion and sediment control agency*)
  - 2) Field modifications of a minor nature

**Section VI. Design Requirements**

- A) Grading, erosion control practices, sediment control practices, and waterway crossings shall be adequate to prevent transportation of sediment from the site to the satisfaction of \_\_\_\_\_ (*erosion and sediment control agency*). Cut and fill slopes shall be no greater than 2:1, except as approved by \_\_\_\_\_ (*erosion and sediment control agency*) to meet other community or environmental objectives.
- B) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other chapters of this Code. Clearing techniques that retain natural vegetation and drainage patterns, and shall be used to the satisfaction of \_\_\_\_\_ (*erosion and sediment control agency*).
- C) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- D) Phasing shall be required on all sites disturbing greater than 30 acres, with the size of each phase to be established at plan review and as approved by (*erosion and sediment control agency*).
- E) Erosion control requirements shall include the following:

- 1) Soil stabilization shall be completed within *five days* of clearing or inactivity in construction.
- 2) If seeding or another vegetative erosion control method is used, it shall become established within *two weeks* or \_\_\_\_\_ (*erosion and sediment control agency*) may require the site to be reseeded or a nonvegetative option employed.
- 3) Special techniques approved by the \_\_\_\_\_ (*erosion and sediment control agency*) on steep slopes or in drainage ways shall be used to ensure stabilization.
- 4) Soil stockpiles must be stabilized using approved BMP techniques or covered at the end of each workday.
- 5) The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction.
- 6) Techniques approved by the \_\_\_\_\_ (*erosion and sediment control agency*) shall be employed to prevent the blowing of dust or sediment from the site.
- 7) Techniques approved by the \_\_\_\_\_ (*erosion and sediment control agency*) that divert upland runoff past disturbed slopes shall be employed.

- F) Sediment controls requirements shall include, but are not limited to:
- 1) Settling basins, sediment traps, or tanks and perimeter controls.
  - 2) Settling basins that are designed in a manner that allows adaptation to provide long term stormwater management, if required by \_\_\_\_\_ (*erosion and sediment control agency*)
  - 3) Protection for adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls

All sediment control techniques shall be approved by the \_\_\_\_\_ (*erosion and sediment control agency*)

- G) Waterway and watercourse protection requirements shall include, but are not limited to:
- 1) A temporary stream crossing installed and approved by approved by the \_\_\_\_\_ (*erosion and sediment control agency*) if a wet watercourse will be crossed regularly during construction
  - 1) Stabilization of the watercourse channel before, during, and after any in-channel work
  - 2) All on-site stormwater conveyance channels shall be designed as approved by the \_\_\_\_\_ (*erosion and sediment control agency*)
  - 3) Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.

All waterway and watercourse protection requirements shall be approved by the \_\_\_\_\_ (*erosion and sediment control agency*).

- H) Construction site access requirements shall include, but are not limited to:
- 1) a temporary access road provided at all sites

- 2) other measures required by \_\_\_\_\_ (*erosion and sediment control agency*) in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drain.

All construction site access requirements shall be approved by the \_\_\_\_\_ (*erosion and sediment control agency*).

**Section VII. Inspection**

- A) \_\_\_\_\_ (*erosion and sediment control agency*) or designated agent shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the \_\_\_\_\_ (*erosion and sediment control agency*) shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify \_\_\_\_\_ (*erosion and sediment control agency*) at least two working days before the following:
  - 3) Start of construction
  - 4) Installation of sediment and erosion measures
  - 5) Completion of site clearing
  - 6) Completion of rough grading
  - 7) Completion of final grading
  - 8) Close of the construction
  - 9) Completion of final landscaping
- B) The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to \_\_\_\_\_ (*erosion and sediment control agency*) at the time interval specified in the approved permit.

- C) \_\_\_\_\_ (*erosion and sediment control agency*) or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under Section B.

### **Section VIII. Enforcement**

A) Stop-Work Order; Revocation of Permit

In the event that any person holding a site development permit pursuant to this ordinance violates the terms of the permit or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, \_\_\_\_\_ (*erosion and sediment control agency*) may suspend or revoke the site development permit.

B) Notice of Violation.

Whenever the \_\_\_\_\_ (*erosion and sediment control agency*) finds that a person or entity has violated a prohibition or failed to meet a \_\_\_\_\_ requirement of this Ordinance, the (*erosion and sediment control agency*) may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (a) The performance of monitoring, analyses, and reporting;
- (b) The elimination of illicit connections or discharges;
- (c) That violating discharges, practices, or operations shall cease and desist;
- (d) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (e) Payment of a fine to cover administrative and remediation costs; and
- (f) The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

C) Appeal of Notice of Violation.

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within \_\_\_\_\_ days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

D) Enforcement measures after appeal.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or , in the event of an appeal, within \_\_\_\_\_ days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation

and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

E) Cost of abatement of the violation

Within days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of percent per annum shall be assessed on the balance beginning on the st day following discovery of the violation.

F) Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, the *erosion and sediment control agency* may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

G) Compensatory action

In lieu of enforcement proceedings, penalties, and remedies authorized by this Ordinance, the authorized enforcement agency may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

H) Violations deemed a public nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

I) Criminal prosecution.

No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$ \_\_\_\_\_ for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration.

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty and/or imprisonment for a period of time not to exceed \_\_\_\_ days.

The *erosion and sediment control agency* may recover all attorney's fees court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.

J) Remedies no exclusive

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the *erosion and sediment control agency* to seek cumulative remedies.

K) Fines and policy

The \_\_\_\_\_ [*erosion and sediment control agency*] is authorized to develop a schedule of fines and to develop policy from time to time to assure the requirements of Section I are met. The schedule of fines shall adhere to all applicable local, state and federal laws. The policy shall include, but will not be limited to development of a comprehensive TPDES enforcement program, staff training requirements, development of job descriptions, assignment of fines to specific violations, budget requirements, and job assignments.

**Section IX. Separability**

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.