

## ORDINANCE NO. O2006-38

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF YUMA, ARIZONA, AMENDING TITLE 15 OF THE YUMA CITY CODE, BY ADDING CHAPTER 156 RELATING TO THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM/STORMWATER PHASE II PERMIT PROGRAM, AND PROVIDING A PENALTY FOR VIOLATIONS THEREOF

WHEREAS, on March 5, 2003, the City Council adopted Resolution No. R2003-13, which approved the execution of the State's program: Arizona Pollutant Discharge Elimination System (AZPDES) / Stormwater Phase II Permit Program and the establishment of the City's Stormwater Management Program (SWMP); and,

WHEREAS, on March 10, 2003, the City became a regulated community and began operating under the AZPDES Permit No. AZG2002-002, for stormwater discharges from small Municipal Separate Storm Sewer Systems (MS4s) to the waters of the United States; and,

WHEREAS, the Minimum Control Measure No. 4 of the City's SWMP, states that the City will adopt an Erosion and Sediment Control ordinance to reduce the discharge of polluted stormwater runoff from construction sites; and,

WHEREAS, during construction activities, soil is highly vulnerable to erosion by wind or water; and,

WHEREAS, when this eroded soil is transported by stormwater runoff to enter water bodies, it poses a serious threat to endangered and limited water resources by reducing water quality and harming aquatic, fish life and riparian vegetation; and,

WHEREAS, this ordinance is anticipated to be introduced to the City Council on June 7, 2006 with implementation to start on September 1, 2006; and

WHEREAS, control of sediment from construction sites is deemed to be essential in eliminating and reducing discharges of polluted stormwater runoff from these sites to the City's storm sewer system or the waters of the United States, thereby ensuring the safety of the City's residents.

NOW THEREFORE, BE IT ORDAINED by the City Council of the City of Yuma as follows:

**SECTION 1:** That the Yuma City Code, Title 15, be amended at Chapter 156, Section 156-01 through 156-09, to read as follows:

### **§ 156-01 Findings Of Facts.**

During construction activities, soil is highly vulnerable to erosion by wind and water. This soil poses a serious threat to endangered species and limited water resources, by reducing water quality and causing the siltation of aquatic habitat for fish, aquatic life and native riparian vegetation. Eroded soil also results in the accelerated need to clean storm drains, clear and clean ditches, and dredge lakes and river backwaters. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat and for retarding and reducing stormwater runoff.

### **§ 156-02 Purpose.**

The purpose of this ordinance is to safeguard persons, protect property, and prevent damage to the environment from the polluted stormwater runoff from construction sites as defined below. This ordinance will also promote the public welfare by guiding, regulating and controlling the design, construction and use of any development or other activity that disturbs one acre or more in public and private projects or one-half acre or more in the City-owned linear projects within the City's jurisdiction.

### **§ 156-03 Definitions.**

**ADEQ.** The Arizona Department of Environmental Quality.

**AZPDES CONSTRUCTION GENERAL PERMIT (CGP).** AZPDES General Permit No. AZG2003-001 for Stormwater Discharges from Large and Small Construction Activity in Arizona, except for those in Indian Country. This permit is administered by ADEQ.

**BEST MANAGEMENT PRACTICES (BMPs).** Means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent and reduce the discharge of pollutants to the waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**CITY.** The City of Yuma, being in Yuma County, State of Arizona.

**CITY ENGINEER.** Means the City Engineer or firm or person, and their properly authorized assistants and inspectors, designated by the City to prepare plans and administer the construction of work.

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

**CONSTRUCTION.** Any repair, construction, reconstruction, upgrading or enhancing of a structure, grading or landscaping that disturbs one or more acres of land in public or private development; OR, A City-owned linear project disturbing one-half acre or more of land.

**DESIGN CRITERIA.** Those requirements and criteria set forth by the City of Yuma Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended

**DESIGN ENGINEER.** Means a registered civil or environmental engineer in the State of Arizona, who prepares plans and administers construction of public or private development.

**DRAINAGE WAY.** Any waterway that conveys surface water throughout or from the site.

**EROSION.** The wearing away of land surface by running water, wind or other geological agents. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by human-made activities such as development, farming and agriculture.

**EROSION CONTROL.** A measure or activity that prevents erosion.

**EROSION AND SEDIMENT CONTROL PLAN (ESCP).** A set of plans with design calculations prepared by or under the direction of a Design Engineer indicating the specific measures and sequencing to be used to control erosion and sediment migration on a construction site before, during and after construction. The ESCP may be included as a part of the SWPPP.

**GRADING.** Excavation of or fill placement of material upon a land surface to create a desired slope or elevation.

**LINEAR PROJECT.** A Capital Improvement Program (C.I.P.) project that may involve construction of streets, roadways, water lines, sanitary and storm sewer facilities. Such projects typically have large length and small width with a higher pollution potential when compared to conventional construction projects.

**MAJOR MODIFICATION.** Any addition to or cancellation of the originally submitted SWPPP and their impacts, as deemed by the City Engineer, that may result in increased flood hazards or sediment track out to the public roads and/or to the City's storm sewer system.

**MAJOR STORM.** Any storm that drops 0.50 inch or more of rainfall.

**PERMIT.** An official document or certificate issued by the City, which authorizes the performance of a specific construction work, demolition, repair, reconstruction, upgrading or enhancing of a structure, grading or landscaping or alteration of ground features to create certain improvements and structures and is subjected to the requirements of this ordinance as defined in “Construction” above.

**PERIMETER CONTROL OR SEDIMENT CONTROL.** A physical barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

**PHASING.** Construction on a parcel of land in a distinct sequence of areas, with the stabilization of each area completed before construction of the next.

**QUALIFIED STORMWATER PERSON.** Means a person knowledgeable in the principles and practices of erosion and sediment controls and who possesses the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of stormwater discharges. Preferred to be a Certified Professional in Stormwater Quality (CPSWQ) or Certified Professional in Erosion and Sediment Control (CPESC).

**SEDIMENT.** Soil particles, both mineral and organic, that are in suspension, are being transported, or have been removed from its site of origin by air, water, and gravity and have come to rest on the earth’s surface.

**SEDIMENT BASINS AND SEDIMENT TRAPS.** Are temporary (or permanent) ponding areas formed by constructing an earthen embankment with a stone outlet used to detain and collect sediment and to prevent damaging erosion on site, which may cause silt-laden runoff from the site. Basins are generally larger in size than traps and serve 10 acres or more of a disturbed area at one time.

**SITE.** A parcel of land or a contiguous combination thereof, where construction work is performed as a single, unified or phased operation.

**STABILIZATION.** An erosion control technique, practice or procedure used to prevent or minimize exposed soil from eroding. Stabilization practices include but are not limited to: Pre-watering, applying dust-suppressant, vegetation (temporary and permanent seeding), gravel application, mulching, soil stabilizers, plastic covers and tarps.

**START OF CONSTRUCTION.** The first land-disturbing activity associated with a development, including but not limited to land operation such as clearing, grubbing, grading, and filling; installation of streets and walkways; excavation for footings, piers and foundations; erection of temporary forms; and installation of accessory buildings, such as garages.

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP).** Means a plan that is required by the City and includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. The SWPPP must include an ESCP.

**WATERCOURSE.** Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water delineated by the State of Arizona and/or the United States of America.

**WATERS OF THE UNITED STATES.** All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include all interstate waters and intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds.

**§ 156-04 Permits and Fees.**

(A) Development and construction for all sites falling under the authority of this ordinance shall submit a SWPPP that contains an ESCP for review and approval by the City. The City shall not grant any permit for site development or improvement activity that would fall under this ordinance without first having reviewed and approved the applicant's SWPPP and ensured that ADEQ has granted the applicant an AZPDES CGP permit coverage.

(B) No SWPPP is required for the following site development/improvement 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 permitted 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's principal contact at such firm and shall be accompanied by a filing fee as set by the City Engineer.

(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 ESCP and shall require a qualified stormwater person to visit site on days when construction or grading activity are taking place.

(E) The applicant shall pay the City during any and all construction phases, and if a major modification is required, the costs for engineering plan review and inspection visits, as specified in Section 156-08, as follows:

Application	Fees
SWPPP inspection	\$177 for the first 10 acres, plus an additional \$19 for each additional 5 acres.
SWPPP plan review	\$168 for the first 10 acres, plus an additional \$ 28 for each additional 5 acres.

An annual update in the above fees is to be made each subsequent July 1 equal to the change of the previous year West Urban Consumer Price Index.

#### **§ 156-05 Review and Approval.**

(A) The City will review each application for certain types of permits to determine its conformance with the provisions of this ordinance. After receiving an application, the City shall respond in one of the following ways:

1. Approve the permit application; or
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) If the City does not act on an original or revised application, within 30 calendar days of the submittal, the applicant may assume approval of application, and request issuance of the permit, unless additional agreements have been created between the applicant and the City.

#### **§ 156-06 Erosion and Sediment Control Plan.**

- (A) The City will require the submittal of a SWPPP that contains an ESCP for all projects that fall under the requirements of this ordinance, except if the project qualifies for an AZPDES CGP waiver for small construction sites and a copy of the waiver is provided to the City.
- (B) Regardless of the area disturbed, the City will require the submittal of stormwater BMPs, by a qualified stormwater person, and in accordance with the Design Criteria as defined above. The BMPs must contain the necessary control measures that will be taken to protect the MS4 if a land-disturbing activity is located within 50 feet or less from any component of the City’s stormwater collection system.
- (C) The ESCP shall include the following:
1. A map identifying soil type, vegetation cover, and resources protected under other chapters of this ordinance. This map shall be a normal engineering scale and should be at a scale no smaller than 1”=100’, and no larger than 1”=10’.
  2. Temporary sediment basins are preferred to serve disturbed areas of at least 10 acres and must have a volume adequate to contain the runoff calculated using the local 2-year, 24-hours storm, as described in Chapter 192 of the Yuma City Code, and runoff coefficient from each disturbed acre drained.
  3. Temporary sediment basins may be utilized in the post-construction phase as retention or detention basins provided that all sediment have been removed from beds and disposed properly.
  4. Temporary sediment basins shall be designed to contain the higher of the following values:
    - i.  $V = C P A$   
 Where: V: Volume in cubic feet  
 C: Runoff Coefficient as described in Chapter 192 of Yuma City Code.  
 P: 2-year, 24-hour rainfall in inches.  
 A: Drainage area in acres.
    - Or;
    - ii. Volume (cubic feet) = 3600 x Area (acres)
  5. Construction schedule prior to any site development, including stripping and clearing; rough grading; construction of utilities, infrastructure and buildings; and final grading and landscaping. The schedule 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 vegetative plantings.
  6. All erosion and sediment control measures necessary to meet the objectives of this ordinance and any additional state or federal requirements throughout all phases of construction and after completion of development of the site. Depending on the complexity of the project, the drafting of intermediate plans may be required before starting any phases of construction.
  7. Calculations to show sediment loads and yields before and after the application of erosion and sediment control measures for pre-construction, during construction and post-construction phases, with the maximum permissible soil loss as 5 tons per acre per year. Sediment calculations may be performed using the Revised Universal Soil Loss Equation (RUSLE) or the Modified Universal Soil Loss Equation (MUSLE) or any other method adopted by the United States Department of Agriculture, Natural Resources Conservation Service.

8. For development other than subdivisions, and wherever applicable, seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, irrigation requirements, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
9. Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance for post-construction stage.
10. The ESCP is a part of the SWPPP required by the City.

(D) Modifications to the SWPPP shall be processed and approved or disapproved in the same manner as § 155-05 of this regulation, may be authorized by the City by written authorization to the permittee, and shall include:

1. Major amendments of the SWPPP submitted to the City.
2. Field modifications of a minor nature.
3. A fee for each modified submittal that involves a major modification, as per the table mentioned in Section 156-04.

### **§ 156-07 Design Requirements.**

(A) Grading, erosion control practices, sediment control practices, and waterway crossings shall be constructed in accordance with the design criteria set forth by the City Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended, and shall be adequate to prevent transportation of sediment from the site as approved by the City Engineer. Cut and fill slopes shall be no greater than 4:1, except as approved by the City Engineer to meet other community or environmental objectives.

(B) Clearing, and grading of natural resources, such as natural desert and wetlands, shall not be permitted, except when in compliance with all other chapters of this ordinance. Clearing techniques that retain natural vegetation and drainage pattern as described in the City Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended, shall be used and are subject to approval by the City Engineer.

(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 40 acres, with the size of each phase to be established as a part of the plan review process and as approved by the City Engineer.

(E) Erosion control requirements shall include the following:

1. Soil stabilization shall be completed within 14 days of clearing or inactivity in construction.
2. If seeding or another vegetative erosion control method is used, such erosion control method shall become established within three weeks or the City shall require the site to be reseeded or a non-vegetative option employed.
3. Special techniques that meet the design criteria outlined in the City Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended, on steep slopes or in drainage ways shall be used to ensure stabilization.
4. Soil stockpiles must be stabilized or covered at the end of each workday if a major storm is expected.
5. The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion.
6. Techniques shall be employed to prevent the blowing of dust or sediment from the site.

7. Techniques that retard and divert upland runoff past disturbed slopes shall be employed.

(F) Sediment control requirements may include:

1. Sediment basins, sediment traps, or tanks and perimeter controls.
2. Sediment basins that are designed in a manner that allows adaptation to provide long-term stormwater management, if required by the City Engineer.
3. Protection for the adjacent properties by the use of a vegetated buffer strip or perimeter controls.

(G) Waterway and watercourse protection requirements shall include:

1. A temporary stream crossing installed and approved by the State or the City, if a wet watercourse will be crossed regularly during construction.
2. Stabilization of the watercourse channel before, during and after any in-channel work.
3. All on-site stormwater conveyance channels designed according to the criteria outlined in the Yuma City Code Title 19 Chapter 192.
4. Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.

(H) Construction site access requirements shall include:

1. A temporary stabilized access road provided at all sites.
2. Other measures as required by the City or Design Engineer in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains.

#### **§ 156-08 Inspections.**

(A) The City shall make site inspections for SWPPP compliance for the City-owned projects that are subjected to the AZPDES CGP as hereinafter stipulated and either shall approve the work or shall notify the applicant whether the SWPPP appears to be complaint with the State's requirements. The City shall, also, make site inspections for its own SWPPP for all public regulated projects within its jurisdiction as per Section 156-04 of this ordinance. For private projects, the City may monitor and advise the applicant of any apparent remarks for their SWPPP. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the City Engineer shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the City at least two working days before the day of inspection for:

1. Start of construction
2. Completion of site clearing and rough grading
3. Completion of final grading
4. Completion of final landscaping

(B) A permittee's qualified stormwater person shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved SWPPP. The aim of such inspections will be to determine the overall effectiveness of the SWPPP and the need for additional control measures. All inspections shall be documented in written form and submitted to the City at the time interval specified in the approved permit.

(C) The City/Design Engineer or a designated agent shall enter the property of the permittee as deemed necessary to make regular inspections to ensure the validity of the reports filed under Section § 156-08.

(D) The permittee shall maintain at the site, during the progress of work and until the final stabilization is achieved, an approved copy of the SWPPP.

**§ 156-09 Enforcement.**

(A) Stop-Work Order; Revocation of Permit

In the event that any person holding any type of permit pursuant to this ordinance violates the terms of the permit or implements site development in such a manner as to adversely affect the environment, 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, environment, or injurious to property or improvements in the neighborhood, the City may suspend or revoke the building permit.

(B) Violation and Penalties

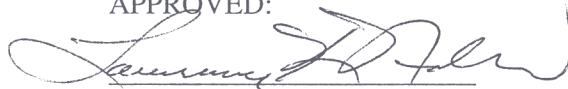
It shall be unlawful for any person, firm or corporation to construct, enlarge, alter, repair or maintain any demolition, grading, excavation, or fill, or cause such actions, contrary to or in violation of any terms of this ordinance. Any person, firm or corporation violating any of the provisions of this chapter shall be guilty of a class 1 misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed \$1,000 or by imprisonment for not more than ten days or both fine and imprisonment. Each separate day or part thereof, during which any violation of said sections shall be punishable as herein provided.

**SECTION 2:** That the Yuma City Code, Section 156-01 through Section 156-04, be renumbered to 156-10 through 156-13, respectively.

**SECTION 3:** If any provision of this ordinance is now or later amended or its application to any person or circumstance is held invalid or unconstitutional by the decision of any court of competent jurisdiction, the invalidity does not affect other provisions that can be given effect without the invalid provision or application.

Passed and adopted this 21st day of June, 2006.

APPROVED:




Lawrence K. Nelson  
Mayor

ATTESTED:



Brigitta M. Kuiper  
City Clerk

APPROVED AS TO FORM:



Steven W. Moore  
City Attorney