

**US Army Corps  
Of Engineers**  
Fort Worth District

**PL 84-99 PROJECT INFORMATION REPORT  
AND  
INTEGRATED ENVIRONMENTAL ASSESSMENT  
(PIREA)**

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**KAUFMAN LEVEE #1**  
Rosser, Texas  
Kaufman County

April 2010

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## Part I. Executive Summary

a. This report is a combined report that integrates a project information report and an environmental assessment (PIREA). The project information report is required for obtaining funds for restoration actions under the Emergency Rehabilitation Assistance Provisions of PL 84-99, as amended which authorizes repair of previously serviceable structures to a pre-damage condition. The EA is required to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, Public Law (PL) 91-1990, as amended, and the implementing regulations in Engineering Regulations (ER) 200-2-2 and ER 1105-2-60. This is an emergency action and therefore the two documents are combined in one step and the comment period is reduced to a 15 day period.

b. The levee for Kaufman County Levee Improvement District No. 1 is located just east of the Trinity River, from approximately river mile 445 to river mile 452 on the southwestern corner of Kaufman County. This levee system also extends into Henderson County and becomes Henderson County Levee Improvement District No. 1. The levee is located about 15 miles east of Ennis, Texas, and 15 miles southwest of Kaufman, Texas. State Highway 34 crosses the levee. Figure 1 is a location map for Kaufman Levee Improvement District (LID) #1.

c. High energy flows produced from heavy precipitation within the Trinity River watershed in September 2009 and January 2010 caused erosion within the Kaufman County Levee District No. 1. During the September 2009 event high energy flows eroded away about half of the existing levee at Station 302+00 and caused erosion at Station 241+25 and Station 199+00. Another event occurred in January 2010 that eroded almost three fourths of the levee at Station 302+00, leaving no way for maintenance vehicles to use the top of levee. By letter dated 29 September 2009, the levee sponsor requested assistance under PL 84-99 to repair damage to the levee.

d. Three areas along the levee have been identified as needing repairs. In addition to the no action alternative, there were three rehabilitation alternatives considered. The no-action alternative does not accomplish the objective of mitigating flood related damages to the previously protected area. Alternative 1 would consist of a 3,100 foot long setback levee and a 150 foot long quarry run stone buttress at site 1 and 1b; a 2020-foot long setback levee at site 2; and a 120-foot long quarry run stone buttress at site 3. Alternative 2 would consist of a 3,350 foot long setback levee at site 1 extending beyond Site 1b; a 2,020-foot long setback levee at site 2; and a 120-foot long quarry run stone buttress at site 3. Alternative 3 would consist of a 3,350 foot long setback levee at site 1 extending beyond Site 1b; a 2,020-foot long setback levee at site 2; and green bank stabilization with bendway weirs from site 3 to site 1.

Alternative 3 was chosen because it had the highest positive benefit-to-cost ratio and also would enhance environmental resources by adding additional aquatic and terrestrial habitats.

d. Placement of earth to rehabilitate the levees to their previous functional conditions would have no significant adverse effect on the quality of the human or natural environment. This activity would not be contrary to the Flood Insurance Act of 1968, PL 90-448 as amended, nor result in any increase of the 100-year flood level.

e. Expected annual damages without levee rehabilitation were estimated at \$245,107. Expected annual damages with levee rehabilitation are estimated to be \$48,466. Therefore, the total average annual benefits are estimated to be \$196,641. The cost to repair the levee was estimated at \$1,907,502, yielding an annual cost of \$127,672. The resulting benefit-to-cost ratio would be 1.54. A 1.00 or higher is considered a positive cost-to-benefit ratio therefore;

rehabilitation of the Kaufman County Levee Improvement District #1 system is economically feasible.

f. In summary, the project is environmentally sound and economically feasible. SWF recommends that the project be approved for rehabilitation under PL 84-99.

## Part II. Basic Report

### 1. Project Identification

- a. **Project Name:** Kaufman Levee #1
- b. **Project's Funding Classification:** Class 317
- c. **Project's CWIS Number:** 330168

### 2. Project Authority

- a. **Classification:** Non-Federal Flood Control Work (Levee)
- b. **Authority:** PL 84-99
- c. **Estimated Original Cost of Project:** Unknown; however the estimated construction at current prices is \$5,000,000.
- d. **Original Construction Completion of Project:** 1915
- e. **Major Modifications and Improvements:** The current damaged set back levee just south of Rosser was constructed in 1998.

### 3. Public Sponsors

- a. **Sponsor Identification:** Kaufman County Levee Improvement District #1  
Adam Sinclair, Director  
P.O. Box 373  
Ferris, Texas 75125  
W (972) 544 - 2508  
C (817) 320 - 0984
- b. **Application for Assistance:**
  - 1.) **Issuance of District's Public Notice:** NA
  - 2.) **Date of Sponsor's Request:** 29 September 2009 (Appendix A)

### 4. Project Location

The levee for Kaufman County Levee Improvement District No. 1 is located just east of the Trinity River, from approximately river mile 445 to river mile 452 on the southwestern corner of Kaufman County. This levee system also extends into Henderson County and becomes Henderson County Levee Improvement District No. 1. The levee is located near the town of Rosser about 15 miles east of Ennis, Texas, and 15 miles southwest of Kaufman, Texas. State Highway No. 34 crosses the levee. Location of the levee is shown on Figure 1.

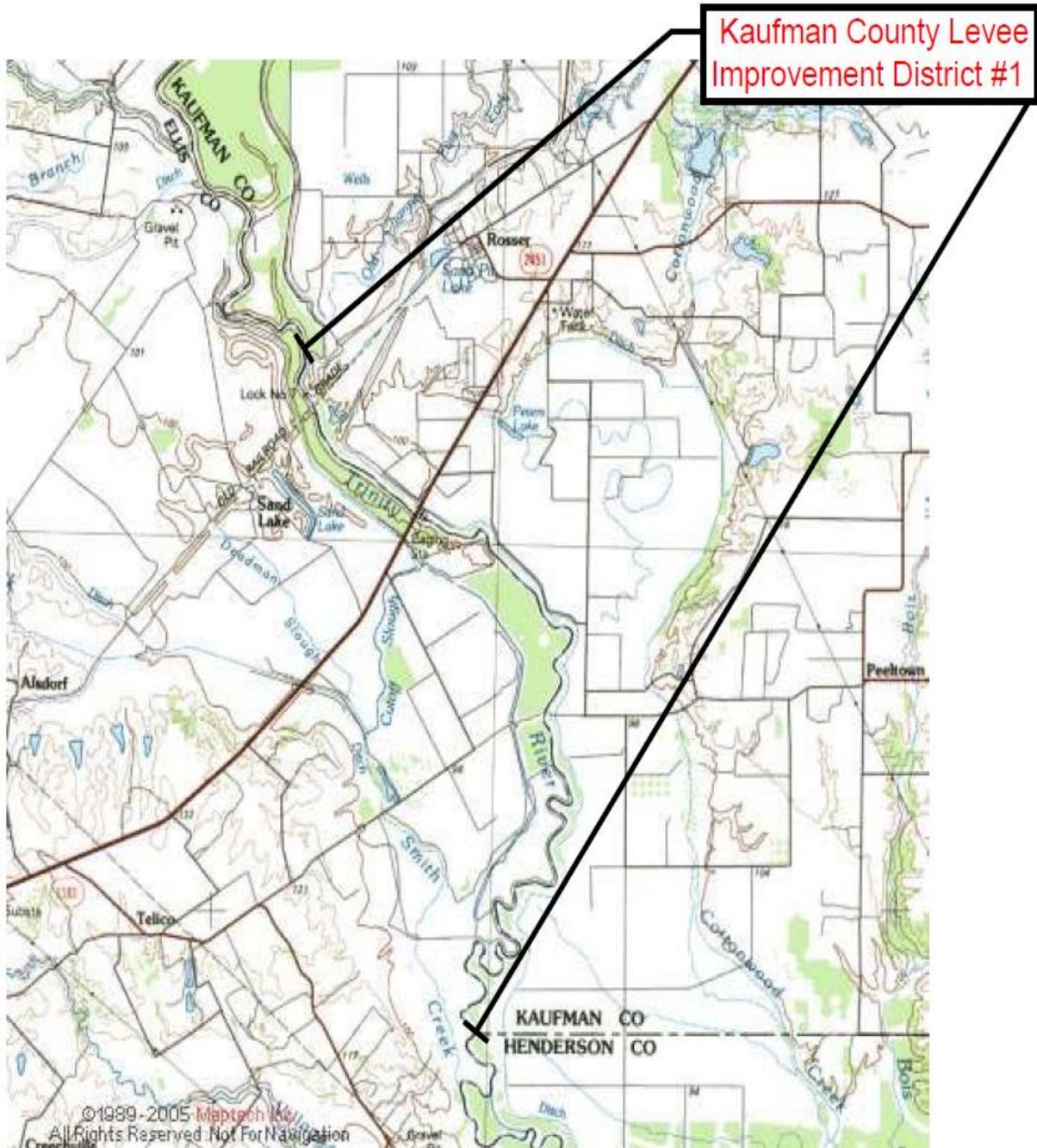


Figure 1: Location of Kaufman County Levee Improvement District # 1

## 5. Project Design

a. The levees have a crown width of 10 to 15 feet, with side slopes of 2 horizontal units to 1 vertical unit (2H: 1V), and an average height of 16 feet. The levee is located on the left bank of the Trinity River looking downstream. This levee is about 52,100 feet in length within Kaufman County and 28,300 feet in length within Henderson County, for a total length of 80,400 linear feet. Interior drainage for the levee system consists of three 5' by 5' double box culverts. The levee system was constructed using locally borrowed material by shaping and pushing the material into a levee cross section. Based on visual inspection of the levee and on area geotechnical data, the levee is constructed of low and high plasticity (CL and CH) clays.

b. This levee system will provide protection against the 4 percent chance (25-year) flood event.

## 6. Disaster Incident

a. Date of incident: The high flows within the Trinity River which caused the latest damage to the levee occurred from September 14<sup>th</sup> thru the 19<sup>th</sup> of 2009. The levee also experienced high flows again from January 29<sup>th</sup> thru the 31<sup>st</sup> 2010. In July of 2007, the Trinity River experienced a very wet summer season from June 27<sup>th</sup> thru July 8<sup>th</sup>. One other period of high flows occurred from March 19<sup>th</sup> thru the 22<sup>nd</sup> of 2008. Even though it is very difficult to determine exactly which flows caused the most damage to the levee, all high flows listed contributed to the erosion.

b. Description of the Flood: Widespread and heavy precipitation over the majority of the Trinity River watershed, upstream from the project area, has occurred often over the last several years. The September 2009 event created erosion problems for this particular reach of the levee which eroded away about half of existing levee. The January 2010 event eroded almost three fourths of the levee, leaving no way for vehicles to use the top of levee. Future heavy rain events could eventually cause the levee to fail.

c. Frequency and Duration of Flood: The U.S. Geological Survey (USGS), in cooperation with the U.S. Army Corps of Engineers (USACE) Fort Worth District, operates a stream flow gage at the State Highway 34 Bridge over the Trinity River that also crosses the subject levee. The gage is referred to as Trinity River near at the "near Rosser" Gage. A fairly continuous data record exists since 1957. Preliminary readings during the September 2009 flood show that this event peaked on the 15<sup>th</sup> at a stage of 32.92 feet. Based on the latest official hydraulic rating curve, this translates to an estimated peak discharge of 33,700 cubic feet per second (cfs) and remained in high flows for two more days. After the flood water had receded erosion was noticed along the riverside of the levee. In order to reasonably assess the frequency of this peak discharge, a brief analysis was undertaken; applying the Texas Department of Transportation (TXDOT) regionalized regression equations. The total drainage area at the "Rosser" gage is about 8,147 square miles. For application of the regionalized equations, however, this value was reduced based on the amount of drainage area which is controlled by existing flood control dams. The resulting frequency analysis is shown in Data Table 1 below.

**Data Table 1  
Event Analyzed**

MON	DAY	FLOW YEAR	(cfs)	RECURRENCE INTERVAL (years)
5	29	1957	56000	8
5	3	1958	34000	3
6	24	1959	10200	1
10	8	1959	15600	1
1	10	1961	12000	1
7	30	1962	19500	2
5	1	1963	16400	1
9	25	1964	26000	2
2	12	1965	38000	4
5	1	1966	63400	10
6	2	1967	7580	1
3	23	1968	22400	2
5	9	1969	56200	8
4	26	1970	17200	2
10	28	1970	8830	1
12	12	1971	53400	7
6	6	1973	34100	3
10	16	1973	16700	1
2	4	1975	47800	6
4	20	1976	39600	4
3	30	1977	47600	6
2	14	1978	6820	1
5	6	1979	25600	2
5	16	1980	12500	1
6	17	1981	25200	2
5	27	1982	41300	4
2	21	1983	15500	1
3	25	1984	12600	1
4	30	1985	21300	2
12	11	1985	23000	2
2	28	1987	15700	1
12	27	1987	11200	1
5	19	1989	66900	12
5	4	1990	122000	129
4	15	1991	31700	3
12	23	1991	92900	38
2	27	1993	25500	2
10	20	1993	21100	2
5	9	1995	56800	8
9	2	1996	6860	1
2	15	1997	31700	3
12	21	1997	38600	4
12	5	1998	25200	2
6	5	2000	24700	2
2	17	2001	37400	4

**Data Table 1**  
**Event Analyzed Continued**

RECURRENCE		FLOW	INTERVAL
MON	DAY	YEAR	(years)
4	3	2002	4
10	21	2002	2
7	3	2004	3
11	24	2004	2
3	21	2006	3
6	30	2007	4
3	20	2008	4
9	15	2009	3

This is a very "balanced" record, which has a fairly evenly distributed array of points along a generally straight-lined frequency curve (in log versus probability scale). In other words, the frequency curve appears to be highly reliable and defensible, considering that it only includes 53 years of applicable record.

The major floods of 1989, 1990, and 1991 should have had a significant impact upon flooding in the otherwise levee-protected agricultural lands behind Kaufman County Levee Improvement District (LID) #1. However, based on information relayed through our team members whom have visited the site recently, the serious erosion problems along this levee may have little to do with the magnitude of actual flood events. The most threatened segment of the levee is being gradually "washed out" from beneath, by the progression of a river oxbow. Many years ago, "jacks" were installed as a means of reducing the channel velocities around this particular bend (and hopefully contributing to an aggradation of sedimentary material in the eroded reach). The "jacks" are now gone and the river is "having its way". Based on eye witness accounts of the last few months, the agricultural levee is already eroded past its central axis. The scoured area is almost vertical, since the process first removes material from the embankment toe and then gravity takes care of the material above as well as saturated banks which will collapse once the river drops.

It is very difficult to make an accurate determination of the expected timeframe before this reach of the levee is completely destroyed. The river flow rate seldom approaches zero, and with any flow rate at all, the scouring action around this bend continues. Based purely on the average lateral movement of the "toe of slope", experts suggest that this stretch of the levee would last only another month or two based on the average releases for this water year of 2010. Observations reveal that a significant flood (one capable of exceeding the levee crest elevation) would result in the destruction of this reach of the levee, due to the lack of a "complete" cross section and its already weakened structural condition.

## **7. Project Damages**

Heavy rainfall events during June and July 2007, March 2008, September 2009, January 2010, and reservoirs upstream releasing water contributed to the river sustaining rapid high flows for several days. Each of these events contributed to continued erosion along the Trinity River banks reaching into the Kaufman County Levee #1 between stations 199+00 and 302+00. The September 2009 event created erosion problems for this particular reach of the levee which eroded away about half of the existing levee within the vicinity of station 302+00. The January 00

2010 event eroded almost three- fourths of the levee with in the vicinity of station 302+00, leaving no way for maintenance vehicles to use the top of levee.

**Site 1 and 1b:** Site one includes two erosion sites located within an oxbow of the river. Site 1 is located at approximately Station 302+00. The bank erosion was 1097 feet long and had undermined 725 feet of levee as of 25 February 2010. Site 1b is located at approximately Station 279+80. This localized bank erosion was within 40 feet of the existing riverside levee toe for a length of approximately 150 feet. The river depth was estimated to be between 44 to 52 feet at this location. This erosion was probably caused by breaching of pounded water between the existing setback levee and the river. When the existing setback levee was constructed about ten years ago, excavations for fill material were taken from both sides of the levee foot print leaving permanent low areas that filled with storm run-off.

**Site 2:** Site 2 is located at approximately Station 241+25. The bank erosion was 633 feet long and was in the riverside levee slope for a length of 367 feet as of 25 February 2010.

**Site 3:** Site 3 is located at approximately Station 199+00. The bank erosion was at the existing riverside levee toe for a length of 111 feet as of 25 February 2010. The erosion was probably caused by storm run-off as this appeared to be a low elevation on the river bank. The river depth was estimated to be approximately 35 feet at this location. The stability of the levee is likely affected.

Table 2 provides a summation of the location and damages to the Kaufman County Levee system. Figure 2 shows a map of these damaged areas.

**Table 2 – Summation Damage Location**

<b>Site Id</b>	<b>Station</b>	<b>Type of Failure</b>	<b>Length (Feet)</b>
1	302+00	Bank erosion	1097
		Undermined Levee	725
1b	279+80	Bank erosion	150
2	241+25	Bank erosion	633
3	199+00	Bank erosion	111



Figure 2: Location of Damaged Areas of Kaufman County LID #1

## 8. Project Performance Data

- a. PL 84-99 eligibility inspections of the levee were conducted in August 1996, October 2003, and November 2006. Based on the results of the field inspection, the levee is being maintained at the minimally acceptable standard in accordance with ER 500-1-1.
- b. The District reports annual maintenance cost ranging from \$10,000.00 to \$20,000.00.

## 9. Project Repair Alternatives Considered

It has been determined that without proposed repairs, the levee will continue to scour and erode compromising the integrity of the levee foundation and resulting in a levee failure extending to the crown of the levee. Three areas along the levee have been identified as needing repairs. In addition to the no action alternative, there were three rehabilitation alternatives considered.

**No-Action Alternative:** The no-action alternative does not accomplish the objective of mitigating flood related damages to the previously protected area.

**Alternative 1:** Activities would consist of constructing a 3,100-foot long setback levee and a 150-foot long quarry run stone buttress at site 1 and 1b; construction of a 2,020-foot long setback levee at site 2; and placement of a 120-foot long quarry run stone buttress at site 3.

Environmental impacts associated with this alternative would be minimal, and the rip-rap would add some aquatic habitat, but this alternative had a negative benefit-to-cost ratio and therefore is not economically feasible. Benefit cost ratios and other economic information can be found in Appendix D.

**Alternative 2:** Activities would consist of constructing a 3,350-foot long setback levee that would repair site 1 and 1b; constructing a 2,020-foot long setback levee at site 2; and placement of a 120-foot long quarry run stone buttress at site 3.

This alternative has a positive benefit-to-cost ratio and construction activities necessary to carry out this action would have minimal impacts to environmental resources. This option would accomplish the objective of mitigating flood related damages, but it does not offer any bank stabilization methods for sites 1, 1b and 2.

**Alternative 3:** Activities for this action would consist of constructing a 3,350-foot long setback levee that would repair site 1 and 1b; constructing a 2,020-foot long setback levee at site 2; and green bank stabilization with bendway weirs from site 3 to site 1.

This alternative has the highest positive benefit-to-cost ratio and construction of the set back levees would result in minor environmental impacts. Stone bendway weirs and strategically placed plantings would enhance environmental resources by adding additional aquatic and terrestrial habitats.

There would be environmental impacts associated with implementation of all three alternatives for the proposed project. Alternative 3 is the most desirable action and alternative 2 would be ranked as the next desirable action. Alternative 3 was chosen as the recommended plan

because of having the highest benefit-to-cost ratio and because it added additional environmental benefits to the project area.

## 10. **Recommended Alternative**

The recommended alternative activities would involve: For sites 1 and 1b construction of a 3,350-foot long setback levee located 100 to 390 feet landward of the existing levee toe drainage ditch. The setback levee would tie northward into a previously constructed setback levee and southward into the existing levee. The excavation for borrow material will be located on the riverside of the levee and the borrow area will be graded to drain through a culvert. For site 2 construction of a 2,020-foot long setback levee located approximately 100 feet landward of the existing levee toe drainage ditch. The setback levee would tie northwest and southwest into the existing levee. The excavation for borrow material will be located on the riverside of the levee and the borrow area will be graded to drain to a controlled drain location.

In addition to these two setback levees, the U.S. Army Engineer Research & Development Center (ERDC) Coastal & Hydraulics Laboratory will assist in the design of innovative green bank stabilization measures and bendway weirs to stabilize the river banks and to redirect the energy of water flows toward the middle of the channel. The first measure of stabilization would involve the placement of peaked stone toe protection that would tie into a stable position of the bank just upstream of Site 3 and continue down stream to tie into the bank just downstream from Site 1. The next stabilization measure would involve the strategic placement of stone bendway weirs and locked logs that will allow the energy of the flow to be diverted toward the center of the channel. The final stabilization measure would be plantings added above the top of the peaked stone to add roughness to the bank that will help dissipate energy and will also hold soils in place.

## 11. **Real Estate**

This project is part of an existing levee under the ownership of the Kaufman County Levee Improvement District, Kaufman, TX. All lands, easements, rights-of-way, relocations, and disposal/dredge areas (LERRDs) will be provided by the Kaufman County Levee Improvement District at no cost to the government.

Three additional ownerships have been identified for acquisition. Fifty (50) acres valued at approximately \$3,000 per acre are required for a Levee Easement Estate. Possible damages may be incurred if crops are being produced at the time of construction. Also, approximately 4 additional acres will be required for a temporary work area easement, estimated at a cost of \$1,200 per year. The Kaufman County Levee Improvement District will need to provide certification of the acquisition of these estates and execute a right-of-entry for construction to the Corps of Engineers to carry out this project.

## 12. **Economics**

a. In September of 2009 and January of 2010, damage occurred along the Kaufman County Levee #1 near Rosser, TX. A total of 15,000 to 16,000 acres of agricultural land are protected by this levee system. The total land value of the protected area is estimated at \$67,500,000.

b. Expected annual damages without levee rehabilitation were estimated at \$245,107. Expected annual damages with levee rehabilitation are estimated to be \$48,466. Therefore, the total average annual benefits are estimated to be \$196,641.

c. The first cost to repair the levee was estimated at \$1,907,502, yielding an annual cost of \$127,672. The expected annual benefits for the project are \$196,641, net annual benefits are \$68,969. The resulting benefit-to-cost ratio is 1.54.

### **13. Environmental Conditions and Effects**

a. Land Use & Soils – Lands within the project area support a variety of agricultural crops and commercial industries. Agricultural uses include pasture lands, row crop production of corn, soybeans, wheat, and cotton. Commercial land uses include sand, gravel, rock and stone mining.

The Kaufman County levees are situated in the transitional area between the Blackland Prairies and Post Oak Savannah vegetation areas. Dominant soils in the project area include Trinity Clays and Kaufman Clays. Upper horizons of these soils are known to consist of a mixture of clay loams and sandy clay loams. These calcareous soils are somewhat poorly drained, and have a high available water capacity. Approximately 48,000 cubic yards of excavated material, 240,000 cubic yards of compacted fill and 57,600 cubic yards of topsoil would be required to repair the damaged levee sections to pre-flood condition. These areas, totaling 96,328 square feet would then be seeded for erosion control after construction. Borrow material will be taken from already existing borrow areas located within the proposed project area on the landward side of the levee system. Borrow material taken would have no significant adverse environmental impact on the soils of the proposed project area. A variety of best management practices such as those stated in appendix E, would be strategically placed to minimize erosion and to prevent sediment movement during construction activities. All affected areas would also be seeded with native vegetation once ground disturbing activities are completed.

b. Water Resources – Water resources in the area include the Trinity River. This section of the Trinity River is gentle slow moving with flow regimes dependent upon upstream reservoir releases and local rain fall. During heavy rain fall and when upstream reservoirs are releasing water this portion of the river changes character to a rapid moving water with peak flows reaching at or above bank full stages. The banks of the Trinity River at the project area are steep deeply under cut, have no herbaceous cover, have several visible root wads and fragmented strips of bottomland hardwood forests along the corridors. River bed material is composed of unconsolidated sand, fine silt and gravel. Aquatic habitat features in the project area include gravel beds, deep and shallow pools, emergent aquatic plants, undercut banks, root wads, logs and snags. Based on the diversity of aquatic habitat features, the project area could generally be described as having high quality aquatic habitat. Best management practices would be installed prior to construction activities to minimize sediment movement and erosion effects from construction activities.

Under Section 404 of the Clean Water Act the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into Waters of the United States. Consultation with USACE Fort Worth Regulatory revealed that under 33 CFR 323.4 (A)(2) the levee repair activities are categorized as Exemption Discharges not requiring permits.

Section 402 of the Clean Water Act and Chapter 26 of the Texas Water code require construction activities that disturb areas greater than 1 acre to obtain a National Pollution Discharge Elimination System (NPDES) Construction General Permit. Levee repair construction operations would meet water quality standards set forth by Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code by preparing and following a Storm Water Pollution Plan (SWPPP) approved by the Texas Commission of Environmental Quality (TCEQ). This SWPPP will outline measures for the contractor to implement during construction activities to minimize pollution in storm water runoff. A TCEQ Notice of Intent (NOI) would be filed at least 48 hours prior to any ground disturbing activities. As required a copy of this NOI and the prepared SWPPP will be posted on site. A copy of the TCEQ general permit for construction activities can be found in appendix E.

The spirit and intent of Executive Order 11988 flood plain Management has been considered in preparation of this report. No changes of elevation will occur in the existing flood plain as a result of levee repair construction activities.

Fish species common within the Trinity River watershed include rough fish such as Carp (*Cyprinus carpio*), Gizzard Shad (*Dorosoma cepedianum*), Long-nose Gar (*Lepisosteus osseus*), and pollution tolerant species such as Sunfish (*Lepomis* spp.), freshwater drum (*Aplodinotus grunniens*), blue catfish (*Ictalurus furcatus*), yellow catfish (*Pylodictus olivaris*), channel catfish (*Ictalurus punctatus*) yellow bass (*Morone mississippiensis*), white crappie (*Pomoxis Annularus*) Red Shiner (*Notropis lutrensis*), and Bullhead Minnow (*Pimephales vigilax*). Until re-vegetation occurs, fish and aquatic biota would be temporarily impacted from the turbidity generated from suspended silt and other material in the runoff from the repaired sections of the levee. These temporary impacts may cause a short-term decrease in algae, aquatic plants, and microorganisms that fish species may feed on. Fish species generally adapt by moving onto other areas to feed and rest. Over time vegetation on affected areas would stabilize soils and minimize the movement of soil particles and other debris allowing for improved water quality comparable to pre-flood conditions. As water quality increases plant and microorganisms will increase allowing fish to return to the impacted areas.

c. Riparian and Terrestrial Resources – The riparian resources within the project area and through out the flood plain include strips of bottomland hardwoods comprised of hackberry (*Celtis laevigata*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvania*), burr oak (*Quercus macrocarpa*), live oak (*Quercus virginiana*) and pecan trees (*Carya illinoensis*), Herbaceous species within the project area and scattered though out the flood plain include Johnson grass (*Sorghum helepense*), Giant Ragweed (*Ambrosia trifida*), Annual Sunflower (*Heleanthus annus*), Godenrod (*Solidago* sp.), Bermuda Grass (*Cynodon dactylon*), Canada Rye grass (*Elymus canadensis*), Texas Winter Grass (*Stipa leucetricha*), Rye Grass (*Lolium multiflorum*), Poison Ivy (*Toxicodendron radicans*), Common Green Briar (*Smilax rotundifolia*), Milkweed (*Asclepias syriaca*), Smartweed (*Polygonum* sp.), Button bush (*Cephalanthus occidentalis*), Blue mud-plantain (*Heteranthera limosa*), Common Cocklebur (*Xanthium strumarium*), and Trumpet Creeper (*Campsis radicans*).

Johnson grass, Bermuda grass, and Giant Ragweed are the dominant herbaceous species that would be temporarily impacted from the project due to grading activities within the proposed setback levee construction areas (see Appendix B for limits of designed levee construction areas).

By taking borrow material from landside areas adverse environmental impacts to riparian habitat would be minimized. Hackberry (*Celtis laevigata*), American elm (*Ulmus americana*), and green ash (*Fraxinus pennsylvanica*) are the dominant tree species that will be impacted from snagging and grubbing activities necessary to clear the proposed setback levee construction areas. These tree species range in size from saplings to mature trees and canopy coverage is very sparse and fragmented. The fragmentation of the riparian areas is due to heavy erosion and flooding in these areas. No trees would be removed beyond the levee proper or the toe of the levee. Woody vegetation collected during the snagging and grubbing process would be windrowed on the landside of the new levee portions to provide habitat for terrestrial wildlife species during the interim period when the native vegetation is becoming reestablished. All impacted areas would be protected using best management practices during construction to minimize sediment movement and erosion. In addition all impacted areas would be reseeded with native vegetation once the ground disturbing activities are completed.

Open fields which are used primarily for grazing pastures and for raising row crops such as cotton or grains are located on both sides of the river surrounding the riparian zone. Implementation of levee repair activities would result in minor losses of pasture lands adjacent to the levee construction activities. These losses would occur on the outer fringes of the native pasture lands bordering the construction areas and would be temporary in nature. These areas would be reseeded once ground disturbing activities are completed.

Wildlife species vary within the study area. The creek channel, forested areas and open pasture areas support a variety of wildlife species with abundant cover, food, and nesting areas. Bird species reported to have been observed within the study area include Eastern Meadowlark (*Sturnella magna*), Morning Dove (*Zenaidura macroura*), Bobwhite Quail (*Colinus virginianus*), Little Blue Heron (*Egretta caerulea*), American crow (*Corvus brachyrhynchos*), Northern Cardinal (*Cardinalis cardinalis*), Blue Jay (*Cyanocitta cristata*), Downy Woodpecker (*Picoides pubescens*), Northern Mockingbird (*Mimus polyglottos*), American Robin (*Turdus migratorius*), Killdeer (*Charadrius vociferus*), Grackle (*Quiscalus sp*), and sparrow. Amphibians, reptiles and mammals common to the area include smallmouth salamander (*Ambystoma texanum*), lesser siren (*Siren intermedia*), cricket frog (*Acris crepitans*), green toad (*Bufo debilis*), southern leopard frog (*Rana sphenoccephala*), Bullfrog (*Rana catesbeiana*), Eastern Mud Turtle (*Kinosternon subrubrum*), Eastern Box Turtle (*Terrapene carolina*), Texas Spotted Whiptail (*Cnemidophorus gularis*), Eastern Collard Lizard (*Crotaphytus collaris*), Texas Spiny Lizard (*Sceloporus olivaceus*), Fence Lizard (*Sceloporus undulates*), Corn Snake (*Elaphe guttata*), Common Kingsnake (*Lampropeltis getula*), Southern Water Snake (*Nerodia fasciata*), Ground Snake (*Sonora semiannulata*), Virginia opossum (*Didephis virginiana*), Southern Short-tailed Shrew (*Blarina carolinensis*), Eastern Mole (*Scalopus aquaticus*), Eastern Cottontail (*Sylvilagus floridanus*), Raccoon (*Procyon lotor*), Striped Skunk (*Mephitis mephitis*), Fox Squirrel (*Sciurus niger*), White-footed Mouse (*Peromyscus leucopus*), and other numerous small rodents. Slow moving wildlife species living in the borrow areas or levee damage areas would be lost during excavation of borrow material and repair of levees. Other, mobile animals associated with the borrow area would be temporarily displaced to adjoining fields, woodland, and pasture areas during construction. Noise associated with construction activities would temporarily disturb terrestrial wildlife species in adjacent areas.

d. Threatened and Endangered Species - Table 3 on the following page summarizes information available from the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department concerning the threatened or endangered species proposed to occur in Kaufman County. The American Peregrine Falcon (*Falco peregrinus anatum*),

Arctic Peregrine Falcone (*Falco peregrinus tundrius*), Bald Eagle (*Haliaeetus leucocephalus*), Peregrine Falcone (*Falco peregrinus*), Interior Least Tern (*Sterna antillarum athalassos*), Piping Plover (*Charadrius melodus*), Whooping Crane (*Grus americana*), and the Red wolf (*Canis rufus*) are all reported to migrate through the Kaufman County area. Other species known to occasionally occur in the Kaufman County area during winter months include the Henslow's Sparrow (*Ammodramushenslowii*), Western Burrowing Owl (*Athene cunicularia hypugaea*), White-faced Ibis (*Plegadis chihi*), Wood Stork (*Mycteria americana*), and Plains spotted skunk (*Spilogale putorius interrupta*). Four reptiles known to occur in Kaufman County include Alligator snapping turtle (*Macrochelys temminckii*), Texas garter snake (*Thamnophis sirtalis annectens*), Texas horned lizard (*Phrynosoma cornutum*), and the Timber/Canebrake rattlesnake (*Crotalus horridus*).

Due to the fragmented nature of the area and impacts from heavy erosion, it is unlikely that the subject property would support any of the protected wildlife species for other than transitory purposes. Should any protected wildlife species be sited during construction, all activities would stop. U.S. Fish & Wildlife and Texas Parks and Wildlife Department biologists would be contacted to determine if construction activities can continue without adverse affects to protected wildlife species.

**Table 3**  
**Kaufman County**  
**Federal & State Threatened & Endangered List**  
**January 2010**

	Federal Status	State Status
<b>Birds</b>		
American Peregrine Falcone ( <i>Falco peregrinus anatum</i> )	DL	T
Arctic Peregrine Falcone ( <i>Falco peregrinus tundrius</i> )	DL	
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	DL	T
Henslow's Sparrow ( <i>Ammodramus henslowii</i> )		
Interior Least Tern ( <i>Sterna antillarum athalassos</i> )	LE	E
Peregrine Falcone ( <i>Falco peregrinus</i> )	DL	T
Western Burrowing Owl ( <i>Athene cunicularia hypugaea</i> )		
Piping Plover ( <i>Charadrius melodus</i> )	LT	T
White-faced Ibis ( <i>Plegadis chihi</i> )		T
Whooping Crane ( <i>Grus americana</i> )	LE	E
Wood Stork ( <i>Mycteria americana</i> )		
<b>Mammals</b>		
Plains spotted skunk ( <i>spilogale putorius interrupta</i> )		
Red wolf ( <i>Canis rufus</i> )	LE	E
<b>Reptiles</b>		
Alligator snapping turtle ( <i>Macrochelys temminckii</i> )		T
Texas garter snake ( <i>Thamnophis sirtalis annectens</i> )		
Texas horned lizard ( <i>Phrynosoma cornutum</i> )		T
Timber/Canebrake rattlesnake ( <i>Crotalus horridus</i> )		T

**Status Key:**

- LE, LT - Federally Listed Endangered/Threatened
- PE, PT - Federally Proposed Endangered/Threatened
- SAE, SAT - Federally Listed Endangered/Threatened by Similarity of Appearance
- C - Federal Candidate for Listing; formerly Category 1 Candidate
- DL, PDL - Federally Delisted/Proposed for Delisting
- NL - Not Federally Listed
- E, T - State Listed Endangered/Threatened
- NT - Not tracked or no longer tracked by the State
- "blank" - Rare, but with no regulatory listing status

e. Air Quality - The Environmental Protection Agency (EPA) uses "six criteria" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Areas of the country where air pollution levels persistently exceed the NAAQS may be designated as in non-attainment areas. The federal air quality program in Texas is administered by the Texas Commission of Environmental Quality (TCEQ). The State Implementation Plan developed by TCEQ designates Kaufman County, where the recommended project is located, as an attainment area.

Impacts to air quality would be temporary in nature during construction primarily from the use of heavy equipment such as front-end loaders, back hoes and dump trucks. Limiting the number of units required for construction activities and routine equipment inspections will be used to minimize emissions from heavy equipment. Using these practices will allow air quality to stay within attainment standards during construction.

f. HTRW – No visual indication of possible contamination concerns are present at the proposed site. A review of Kaufman county records indicates there is no history of past storage, use, release, and disposal of any hazardous substances or petroleum products within the study area.

g. Cultural Resources - Any proposed undertaking under the responsibility of the USACE must follow all Federal and State cultural resources laws and regulations, Executive Orders, and US Army Corps of Engineers Regulations, including the National Historic Preservation Act, (NHPA), 1966 (PL 89-665 et seq.) the National Environmental Policy Act (NEPA) of 1969 (PL 90-190), the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (PL 101-601), Executive Order 13007 (accommodation of Sacred Sites (24 May 1996), Government-to-Government Relations with Native American Indian Tribal Governments (Presidential Memorandum of 29 April 1994), and Engineers Regulation (ER) 1105-2-100 (Guidance for Conducting Civil Works Planning Studies). In accordance with the NHPA, the US Army Corps of Engineers must identify cultural resources within a project's Area of potential Effect (APE) and consider impacts the project may have on those resources.

To date, no cultural resources are known within the APE of the proposed project, nor have any been identified in the vicinity. However, the presence of the creek indicates a reasonable expectation that archaeological sites may be present within the project APE. In accordance with the NHPA and its implementing regulations 36 CFR Part 800, an archaeological survey will be conducted prior to any ground disturbing activities within the APE, including all borrow areas, staging area, and disposal areas, to identify cultural resources. If cultural resources are present a determination of eligibility to the National Register of Historic Places will be made by the USACE. The project's effect on any historic properties eligible for listing on the NRHP will be considered. Adverse effects to NRHP eligible properties will be avoided or mitigated prior to construction. The USACE will consult with the State Historic Preservation Office as well as with all federally recognized Native American Tribes who historically occupied the region on all determinations of eligibility, effect and on any mitigation.

h. Socioeconomics and Environmental Justice – The levee system is located on a series of agricultural easements in an area where there are no residential properties. Any displacement of residential households, businesses, or community facilities is considered to be a significant impact.

However, no displacement of businesses, residences or community facilities would be required for the construction activities necessary for repairing the levee system. There would be no permanent, long-term anticipated effects to the regional economy from implementing the preferred alternative.

The proposed project will not affect, separate, or isolate any distinct neighborhoods, ethnic groups, or other specific groups. There do not appear to be any disproportionate impacts on any minority and/or low-income populations associated with the project. Therefore the requirements of Executive Order 12898 (on Environmental Justice) appear to be satisfied.

i. Cumulative Effects – Past actions at the site include the initial construction of the Kaufman County Levee District #1 and periodic repairs to the levee after flood events. Other past actions at the site include the operations associated with sand, gravel, rock and stone mining areas by Trinity Materials Corporation, and adjacent pastures used for row crop production and grazing. Present actions at the site include the ongoing operation of the Trinity Materials Corporation, and ongoing agricultural operations including row crop fields and grazing pastures. Continued operations associated with sand, gravel, rock and stone mining areas by Trinity Materials Corporation and continued agricultural operations, are the only foreseeable future actions in the vicinity of the project. Since the impacts are site specific and there are no other significant actions in the area, there would be no cumulative impacts.

Cumulative effects to soils from the no action plan would be the continued sloughing of the levee wall and increased sediment deposits into the Trinity River channel. Cumulative effects to soils from the recommended alternative would be minimal due to the fact that the goal of this alternative is soil stabilization.

Cumulative effects to water resources from the no action plan would result in lower water quality from sediment deposits as the levee wall continues to erode. Eventually the sediment load would alter or restrict water flow within the Trinity River channel and the levee would no longer be a functioning flood control structure. Cumulative effects to water resources from the recommended alternative would result in improved water quality as the levee walls would be stabilized and would be comparable to pre-flood conditions.

Cumulative effects to riparian and terrestrial resources from the no action plan would allow erosion to continue causing the already exposed tree roots to give way allowing trees to fall into the creek channel. Adjacent agricultural fields would begin to slough into the creek channel if no action is taken. Cumulative effects from the recommended alternative would be minimal as the riparian and terrestrial resources would return to conditions comparable to pre-flood conditions.

Cumulative effects to air quality from the no action plan would be minimal due to the fact that no construction activities would take place. Cumulative effects from the recommended alternative to air quality would be temporary in nature from emission releases of construction equipment. These cumulative effects would be minimal due to the fact that only a limited number of heavy machinery is needed for a short period of time to perform the necessary tasks for repairing the levee wall and stabilizing the bank.

#### **14. Public Agency and Interest Review**

A Notice of Availability is being distributed for agency and public comment concerning

the proposed action. Agencies included in the review process include Texas Parks and Wildlife Department (TPWD), Environmental Protection Agency (EPA), Texas Commission on Environmental Quality (TCEQ), U.S. Fish and Wildlife Service (USFWS) and the State Historical Preservation Office (SHPO). The comment period will be closing on June 28, 2010.

**15. Project Management**

**D. Funding Authority:** PL 84-99

- i. **Project Funds:** Program and Appropriation: FCCE, 96x3125
- ii. **Class:** 317
- iii. **CWIS Number:** 330168

**E. Project Funds**

A cost estimate as prepared by Engineering and Construction Division is shown in table 4

**Table 4 – Cost Estimate**

	<b>Total Cost</b>	<b>Federal Share</b>	<b>Local Share</b>
<b>Kaufman County Levee #1</b>			
Construction	\$1,814,428	\$1,451,543	\$362,885
Engineering & Design	\$61,574	\$61,574	-
Supervision & Inspection	\$31,500	\$25,200	\$6,300
Adjustment (Maint. Defic.)	NA	NA	NA
<b>Total</b>	<b>\$1,907,502</b>	<b>\$1,538,317</b>	<b>\$369,185</b>

**Table 5 – Proposed Project Schedule**

<b>Milestone</b>	<b>Date</b>
Expected project approval date	June 28, 2010
Complete construction plans and specs	August 27, 2010
Contract advertisement	September 10, 2010
Contract bid opening	September 20, 2010
Contract award	September 22, 2010
Notice to proceed issuance	September 24, 2010
Construction start	September 28, 2010
Construction completion	October 30, 2010
Construction final inspection	November 5, 2010
Fiscal closeout completed	November 30, 2010

**PROJECT AUTHENTICATION:**

**Prepared By:** Melanie Ellis, Project Manager

**Emergency Management approval by:** Anthony Semento

**District-level approval by:** Robert P. Morris Jr., PE

**Technical Points of Contact:**

<b>Emergency Management:</b>	Anthony Semento
<b>Economics:</b>	Norman Lewis
<b>Environmental &amp; Cultural:</b>	Kathy Mitchell & Nancy Parrish
<b>Engineering and Design:</b>	Michael Velasquez

**APPENDIX A**  
**Project Sponsor's Request for  
Rehabilitation Assistance**

Sep-29-2009 05:07 PM Trinity Industries 2145898066

1 / 1

U.S. Army Corps of Engineers, Fort Worth District      Date of September 29, 2009  
Request: Assistance for Rehabilitation of Trinity River Levee in Kaufman County  
ATTN: COL Richard Muraski  
P.O. Box 17300  
Fort Worth, TX 76102-0300

Dear Sir:

The purpose of this letter is to request Rehabilitation Assistance from the Corps of Engineers under Public Law 84-99 for the repair of the Trinity River levee that was damaged by flood during 9/10/2009 to 9/15/2009. The project is Active in the Rehabilitation and Inspection Program, and was last inspected by the Corps of Engineers on November 3, 2006. The location of the levee and a brief description of the damage are as follows:

Project Identification Number: Near Levee Station 313+00      River: Trinity River  
Bank: East  
Description of Damage: A section of levee has been eroded by the river channel. The levee crest is not passable due to erosion.

City: Rosser      County: Kaufman      State: Texas

Location: North 32.40281 degrees latitude  
West 96.43669 degrees longitude

Public Sponsor Point of Contact:

Adam Sinclair  
P.O. Box 373  
Ferris, TX 75125  
972-544-2508 office  
817-320-0984 mobile

If this project is eligible for PL 84-99 Rehabilitation Assistance, I further request that the Corps of Engineers take all necessary steps to accomplish the appropriate repairs. It is agreed that the required items of local cooperation will be provided should the levee be eligible for Rehabilitation Assistance under PL 84-99 and the repair work is accomplished by the Corps of Engineers.

I hereby certify that the right-of-way which is required for any authorized repair work is presently available, and this letter constitutes permission for the Government and its agents to enter and use said right-of-way in undertaking authorized repair work.

Sincerely,

  
\_\_\_\_\_

**APPENDIX B**  
**Project Location and Design Data, Maps and  
Related Information**

**APPENDIX C**  
**Damage Photos**



Site 1: View of the bank and the levee erosion looking south from the middle of the erosion.



Site 1b: View of the 40 feet high levee erosion looking north from the middle of the erosion.



Site 2: View of the 40 feet high levee erosion looking north from the middle of the erosion.



Site 2: View of the 40 feet high levee erosion looking north from the middle of the erosion.



Site 3: View of the 40 feet high levee erosion looking north from the middle of the erosion

**APPENDIX D**  
**Economic Analysis**

Kaufman County Levee Improvement District No. 1

### **Economic Determination**

The levee in its current state offers minimal protection of the 15,000 to 16,000 acres of agricultural land within the district. Periodic and imminent flooding of these previously protected areas is expected if this levee is not rehabilitated.

On an annual basis, approximately 50 percent (7,500 acres) of the farmland is protected by this levee is used for soybeans, 30 percent (4,500 acres) is used for wheat, and 20 percent (3,000 acres) for corn. There are no residential structures in the area affected.

Three areas along the levee have been identified as needing repairs. In addition to the no action alternative, there are three rehabilitation alternatives.

Alternative 1 consisted of a 3,100 foot long setback levee and a 150 foot long quarry run stone buttress at site 1 and 1b; a 2,020-foot long setback levee at site 2; and a 120-foot long quarry run stone buttress at site 3.

Alternative 2 consists of a 3,350 foot long setback levee at site 1; 2,020-foot long setback levee at site 2; and a 120-foot long quarry run stone buttress at site e.

Alternative 3 consists of a 3,350 foot long setback levee at site 1; 2,020-foot long setback levee at site 2; and green bank stabilization with bendway weirs from site 3 to site 1.

Utilizing the current Federal discount rate of 4.375 percent an economic analysis was performed to investigate the feasibility of levee rehabilitation. ER500-1-1 requires that the period of economic analysis must be 50 years or be based on the pre-flood degree of protection provided by the flood control structure or the anticipated remaining project life, whichever is less. The degree of protection was estimated at the 25-year level and the anticipated remaining project life is greater than 2 years. Therefore, the adopted period of analysis is 25 years.

Based on information from the Texas Real Estate Center at Texas A&M University, value per acre for cropland in 2008 was \$4,500. The estimated value of the total protected acres would be \$67,500,000.

To compute average annual benefits, the following assumptions were made:

- a. If the levee is not repaired, maintaining it and repairing it will grow increasingly difficult and expensive.
- b. The floodplain is flat to gently sloping across the entire 15,000 acres.
- c. If the levee is not repaired to its pre-flood conditions, the types of crops planted would not be changed.
- d. Benefits from the mining operations (sand and gravel quarry) were not accounted for.

The expected annual damages (EAD) for the without rehabilitation scenario is \$245,107. The EAD for the with levee rehabilitation scenario is \$48,466, yielding an annual benefit of \$196,641.

**Table 1.**  
**Expected Annual Damages Without Levee Rehabilitation**

Recurrence Interval Year	Probability	Single Event Damages	Recurrence Interval	Damage Interval	Expected Annual Damages
1	1	\$0			
			0.5	48,745	\$24,373
2	0.5	\$97,490			
			0.3	148,562	\$44,568
5	0.2	\$199,633			
			0.1	553,412	\$55,341
10	0.1	\$907,191			
			0.06	1,017,885	\$61,073
25	0.04	\$1,128,579			
			0.02	1,242,822	\$24,856
50	0.02	\$1,357,064			
			0.01	1,455,048	\$14,550
100	0.01	\$1,553,031			
			0.006	1,651,016	\$9,906
250	0.004	\$1,749,001			
			0.002	2,324,401	\$4,649
500	0.002	\$2,899,800			
			0.002	2,894,800	\$5,790
0	0	\$2,889,800			
<b>Total EAD</b>					<b>\$245,107</b>

**Table 2.**  
**Expected Annual Damages With Levee Rehabilitation**

Recurrence Interval Year	Probability	Single Event Damages	Recurrence Interval	Damage Interval	Estimated Annual Damages
1	1	\$0			
			0.5	0	\$0.0
2	0.5	\$0			
			0.3	0	\$0.0
5	0.2	\$0			
			0.1	0	\$0.0
10	0.1	\$0			
			0.06	0	\$0.0
25	0.04	\$0			
			0.02	678532	\$13,570.6
50	0.02	\$1,357,064			
			0.01	1455047.5	\$14,550.5
100	0.01	\$1,553,031			
			0.006	1651016	\$9,906.1
250	0.004	\$1,749,001			
			0.002	2324400.5	\$4,648.8
500	0.002	\$2,899,800			
			0.002	2894800	\$5,789.6
0	0	\$2,889,800			
<b>Total EAD</b>					<b>\$48,466</b>

Analysis of Alternatives

Table 3 shows the determination of the net annual benefits for Alternative 1. The first cost is \$3,903,075. Using a Federal interest rate of 4.375 percent and a period of analysis of 25 years, the annual cost for this alternative is \$261,239. Using an expected annual benefit of \$196,641, net annual benefits are -\$64,598. The resulting benefit to cost ratio is 0.75.

Table 3. Determination of Net Annual Benefits for Alternative 1

<b>Kaufman County Levee District #1</b>	
Alternative 1	
<i>Benefit-to-Cost Ratio Worksheet</i>	
<b>INVESTMENT</b>	
ESTIMATED FIRST COST	\$3,903,075
ANNUAL INTEREST RATE	0.04375
PROJECT LIFE (years)	25
CONSTRUCTION PERIOD (months)	3
COMPOUND INTEREST FACTOR	3.010950792
CAPITAL RECOVERY FACTOR	0.0665741
INTEREST DURING CONSTRUCTION	\$20,964
INVESTMENT COST	\$3,924,039
<b>ANNUAL CHARGES</b>	
INTEREST	\$171,677
AMORTIZATION	\$89,563
OPERATION/MAINTENANCE (\$/year)	\$0
REPLACEMENTS	\$0
<b>TOTAL ANNUAL CHARGES</b>	<b>\$261,239</b>
<b>ANNUAL BENEFITS</b>	
ANNUAL AG BENEFITS	\$196,641
<b>TOTAL BENEFITS</b>	<b>\$196,641</b>
 NET BENEFITS	 <b>(\$64,598)</b>
 BENEFIT-TO-COST RATIO	 <b>0.75</b>

Table 4 shows the determination of the net annual benefits for Alternative 2. The first cost is \$2,125,805. Using a Federal interest rate of 4.375 percent and a period of analysis of 25 years, the annual cost for this alternative is \$142,284. Using an expected annual benefit of \$196,641, net annual benefits are \$54,357. The resulting benefit to cost ratio is 1.39.

Table 4. Determination of Net Annual Benefits for Alternative 2

<b>Kaufman County Levee District #1</b>	
Alternative 2	
<i>Benefit-to-Cost Ratio Worksheet</i>	
<b>INVESTMENT</b>	
ESTIMATED FIRST COST	\$2,125,805
ANNUAL INTEREST RATE	0.04375
PROJECT LIFE (years)	25
CONSTRUCTION PERIOD (months)	3
COMPOUND INTEREST FACTOR	3.010950792
CAPITAL RECOVERY FACTOR	0.0665741
INTEREST DURING CONSTRUCTION	\$11,418
INVESTMENT COST	\$2,137,223
<b>ANNUAL CHARGES</b>	
INTEREST	\$93,504
AMORTIZATION	\$48,780
OPERATION/MAINTENANCE (\$/year)	\$0
REPLACEMENTS	\$0
<b>TOTAL ANNUAL CHARGES</b>	<b>\$142,284</b>
<b>ANNUAL BENEFITS</b>	
ANNUAL AG BENEFITS	\$196,641
<b>TOTAL BENEFITS</b>	<b>\$196,641</b>
 NET BENEFITS	 <b>\$54,357</b>
 BENEFIT-TO-COST RATIO	 <b>1.38</b>

Table 5 shows the determination of the net annual benefits for Alternative 3. The first cost is \$1,907,502. Using a Federal interest rate of 4.375 percent and a period of analysis of 25 years, the annual cost for this alternative is \$127,672. Using an expected annual benefit of \$196,641, net annual benefits are \$68,969. The resulting benefit to cost ratio is 1.54.

Table 5. Determination of Net Annual Benefits for Alternative 3

<b>Kaufman County Levee District #1</b>	
Alternative 3	
<i>Benefit-to-Cost Ratio Worksheet</i>	
<b>INVESTMENT</b>	
ESTIMATED FIRST COST	\$1,907,502
ANNUAL INTEREST RATE	0.04375
PROJECT LIFE (years)	25
CONSTRUCTION PERIOD (months)	3
COMPOUND INTEREST FACTOR	3.010950792
CAPITAL RECOVERY FACTOR	0.0665741
INTEREST DURING CONSTRUCTION	\$10,245
INVESTMENT COST	\$1,917,747
<b>ANNUAL CHARGES</b>	
INTEREST	\$83,901
AMORTIZATION	\$43,771
OPERATION/MAINTENANCE (\$/year)	\$0
REPLACEMENTS	\$0
<b>TOTAL ANNUAL CHARGES</b>	<b>\$127,672</b>
<b>ANNUAL BENEFITS</b>	
ANNUAL AG BENEFITS	\$196,641
<b>TOTAL BENEFITS</b>	<b>\$196,641</b>
NET BENEFITS	<b>\$68,969</b>
BENEFIT-TO-COST RATIO	<b>1.54</b>

A positive net benefit is considered to 1 or greater. Based on positive net benefits for all alternatives investigated, rehabilitation of Kaufman LID levee #1 is economically feasible for alternatives 2 and 3.

## **APPENDIX E**

### **Section 402, Water Quality & Best Management Practices Guidelines**

**TPDES GENERAL PERMIT NUMBER TXR150000 RELATING TO STORM WATER  
DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES**



TCEQ Docket No. 2007 1588 WQ  
TPDES General Permit No. TXR150000

**TEXAS COMMISSION ON ENVIRONMENTAL  
QUALITY**  
P.O. BOX 13087  
Austin, TX 78711-3087

This is a renewal of TPDES  
General Permit No. TXR150000,  
issued March 5, 2003.

GENERAL PERMIT TO DISCHARGE WASTES  
under provisions of  
Section 402 of the Clean Water Act  
and Chapter 26 of the Texas Water Code

Construction sites that discharge storm water associated with construction activity  
located in the state of Texas

may discharge to surface water in the state

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of storm water and certain non-storm water discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit and the authorization contained herein shall expire at midnight on March 5, 2013.

EFFECTIVE DATE: March 5, 2008

ISSUED DATE: **FEB 15 2008**

*Buddy Garcia*  
For the Commission

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## **TPDES GENERAL PERMIT NUMBER TXR150000 RELATING TO STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES**

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### **Part I. Flow Chart and Definitions**

#### **Section A. Flow Chart to Determine Whether Coverage is Required**

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#### **Section B. Definitions**

**Arid Areas** - Areas with an average annual rainfall of 0 to 10 inches.

**Best Management Practices (BMPs)** - Schedules of activities, prohibitions of practices, maintenance

procedures, structural controls, local ordinances, and other management practices to prevent or reduce the

discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to

control construction site runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

**Commencement of Construction** - The initial disturbance of soils associated with clearing, grading, or

excavation activities, as well as other construction-related activities (e.g., stockpiling of fill material, demolition)

**Common Plan of Development** - A construction activity that is completed in separate stages, separate

phases, or in combination with other construction activities. A common plan of development (also known as

a “common plan of development or sale”) is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate “common plans,” with only the interconnected parts of a project being considered part of a “common plan” (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located ¼ mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, provided that any interconnecting road, pipeline or utility project that is part of the same “common plan” is not included in the area to be disturbed.

**Discharge** – For the purposes of this permit, the drainage, release, or disposal of pollutants in storm water and certain non-storm water from areas where soil disturbing activities (e.g., clearing, grading, excavation, stockpiling of fill material, and demolition), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

**Edwards Aquifer** - As defined under Texas Administrative Code § 213.3 of this title (relating to the Edwards Aquifer) that portion of an accurate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Lime stones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil’s River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable

aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less permeable

Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less permeable

Del Rio Clay regionally.

**Edwards Aquifer Recharge Zone** - Generally, that area where the stratigraphic units constituting the

Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards

Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for

recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated

as such on official maps located in the offices of the Texas Commission on Environmental Quality and the

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appropriate regional office. The Edwards Aquifer Map Viewer, located at

[http://www.tceq.state.tx.us/compliance/field\\_ops/eapp/mapdisclaimer.html](http://www.tceq.state.tx.us/compliance/field_ops/eapp/mapdisclaimer.html), can be used to determine where

the recharge zone is located.

**Edwards Aquifer Contributing Zone** - The area or watershed where runoff from precipitation flows

downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is located upstream

(upgradient) and generally north and northwest of the recharge zone for the following counties: all areas

within Kinney County, except the area within the watershed draining to Segment 2304 of the Rio Grande

Basin; all areas within Uvalde, Medina, Bexar, and Comal Counties; all areas within Hays and Travis

Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles

upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment 1403 of

the Colorado River Basin; and all areas within Williamson County, except the area within the watersheds

draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment 1216 of the Brazos

River Basin. The contributing zone is illustrated on the Edwards Aquifer map viewer at

[http://www.tceq.state.tx.us/compliance/field\\_ops/eapp/mapdisclaimer.html](http://www.tceq.state.tx.us/compliance/field_ops/eapp/mapdisclaimer.html).

**Facility or Activity** – For the purpose of this permit, a construction site or construction support activity that

is regulated under this general permit, including all contiguous land and fixtures (e.g., ponds and materials

stockpiles), structures, or appurtenances used at a construction site or industrial site described by this general permit.

**Final Stabilization** - A construction site status where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

(1) the homebuilder completing final stabilization as specified in condition (a) above; or  
(2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. If temporary stabilization is not feasible, then the homebuilder may fulfill this requirement by retaining perimeter controls or other best management practices, and informing the homeowner of the need for removal of temporary controls and the establishment of final stabilization.

(c) For construction activities on land used for agricultural purposes (e.g. pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

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(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

**Hyperchlorination of Waterlines** – Treatment of potable water lines or tanks with chlorine for disinfection

purposes, typically following repair or partial replacement of the waterline or tank, and subsequently flushing the contents.

**Indian Country Land** – (from 40 CFR 122.2) (1) all land within the limits of any Indian reservation under

the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including

rights-of-way running through the reservation; (2) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

**Indian Tribe** - (from 40 CFR 122.2) any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation.

**Large Construction Activity** - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.)

**Municipal Separate Storm Sewer System (MS4)** - A separate storm sewer system owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, that discharges to surface water in the state.

**Notice of Change (NOC)** – Written notification to the executive director from a discharger authorized under this permit, providing changes to information that was previously provided to the agency in a notice of intent form.

**Notice of Intent (NOI)** - A written submission to the executive director from an applicant requesting coverage under this general permit.

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**Notice of Termination (NOT)** - A written submission to the executive director from a discharger

authorized under a general permit requesting termination of coverage.

**Operator** - The person or persons associated with a large or small construction activity that is either a

primary or secondary operator as defined below:

**Primary Operator** – the person or persons associated with a large or small construction activity that

meets either of the following two criteria:

(a) the person or persons have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

(b) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan (SWP3) for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

**Secondary Operator** – The person whose operational control is limited to the employment of other

operators or to the ability to approve or disapprove changes to plans and specifications. A secondary

operator is also defined as a primary operator and must comply with the permit requirements for primary operators if there are no other operators at the construction site.

**Outfall** - For the purpose of this permit, a point source at the point where storm water runoff associated with

construction activity discharges to surface water in the state and does not include open conveyances

connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect

segments of the same stream or other water of the U.S. and are used to convey waters of the U.S.

**Permittee** - An operator authorized under this general permit. The authorization may be gained through

submission of a notice of intent, by waiver, or by meeting the requirements for automatic coverage to

discharge storm water runoff and certain non-storm water discharges.

**Point Source** – (from 40 CFR §122.2) Any discernible, confined, and discrete conveyance, including but

not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock

concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from

which pollutants are, or may be, discharged. This term does not include return flows from irrigated

agriculture or agricultural storm water runoff.

**Pollutant** - Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any surface water in the state. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated rangeland, pastureland, and farmland. For the purpose of this permit, the term "pollutant" includes sediment.

**Pollution** - (from Texas Water Code §26.001(14)) The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

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**Rainfall Erosivity Factor (R factor)** - the total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE).

**Semiarid Areas** - areas with an average annual rainfall of 10 to 20 inches

**Separate Storm Sewer System** - A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), designed or used for collecting or conveying storm water; that is not a combined sewer, and that is not part of a publicly owned treatment works (POTW).

**Small Construction Activity** - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original

purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.)

**Storm Water (or Storm Water Runoff)** - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

**Storm Water Associated with Construction Activity** - Storm water runoff from a construction activity

where soil disturbing activities (including clearing, grading, excavating) result in the disturbance of one (1)

or more acres of total land area, or are part of a larger common plan of development or sale that will result in

disturbance of one (1) or more acres of total land area.

**Structural Control (or Practice)** - A pollution prevention practice that requires the construction of a

device, or the use of a device, to capture or prevent pollution in storm water runoff. Structural controls and

practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps,

check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining

systems, gabions, and temporary or permanent sediment basins.

**Surface Water in the State** - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks,

estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from

the mean high water mark (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water,

natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and

banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the

state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized

by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are

not considered to be water in the state.

**Temporary Stabilization** - A condition where exposed soils or disturbed areas are provided a protective

cover or other structural control to prevent the migration of pollutants. Temporary stabilization may include

temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either

permanent stabilization can be achieved or until further construction activities take place.

**Waters of the United States** - (from 40 CFR, Part 122, Section 2) Waters of the United States or waters of

the U.S. means:

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(a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) all interstate waters, including interstate wetlands;

(c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) which are used or could be used for industrial purposes by industries in interstate commerce;

(d) all impoundments of waters otherwise defined as waters of the United States under this definition;

(e) tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) the territorial sea; and

(g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of

CWA (other than cooling ponds as defined in 40 CFR '423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies

of water which neither were originally created in waters of the United States (such as disposal area

in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean

Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

## **Part II. Permit Applicability and Coverage**

### **Section A. Discharges Eligible for Authorization**

#### **1. Storm Water Associated with Construction Activity**

Discharges of storm water runoff from small and large construction activities may be authorized under this general permit.

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#### **2. Discharges of Storm Water Associated with Construction Support Activities**

Examples of construction support activities include, but are not limited to, concrete batch plants, rock crushers, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas. Discharges of storm water runoff from construction support activities may be authorized under this general permit, provided that the following conditions are met:

- (a) the activities are located within one (1)-mile from the boundary of the permitted construction site and directly support the construction activity;
- (b) a storm water pollution prevention plan is developed according to the provisions of this general permit and includes appropriate controls and measures to reduce erosion and discharge of pollutants in storm water runoff from the construction support activities; and
- (c) the construction support activities either do not operate beyond the completion date of the construction activity or are authorized under separate TPDES authorization. Separate TPDES authorization may include the TPDES Multi Sector General Permit, TXR050000 (related to storm water discharges associated with industrial activity), separate authorization under this general permit if applicable, coverage under an alternative general permit if available, or authorization under an individual water quality permit.

### 3. Non-Storm Water Discharges

The following non-storm water discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

- (a) discharges from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- (b) uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);
- (c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;
- (d) uncontaminated water used to control dust;

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- (e) potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
- (f) uncontaminated air conditioning condensate;
- (g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) lawn watering and similar irrigation drainage.

#### 4. Other Permitted Discharges

Any discharge authorized under a separate NPDES, TPDES, or TCEQ permit may be combined with discharges authorized by this general permit, provided those discharges comply with the associated permit.

#### **Section B. Concrete Truck Wash Out**

The washout of concrete trucks associated with off-site production facilities may be conducted at regulated construction sites in accordance with the requirements of Part V of this general permit.

#### **Section C. Limitations on Permit Coverage**

##### 1. Post Construction Discharges.

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under this general permit. Discharges originating from the sites are not authorized under this general permit following the submission of the notice of termination (NOT) for the construction activity.

##### 2. Prohibition of Non-Storm Water Discharges

Except as otherwise provided in Part II.A. of this general permit, only discharges that are composed entirely of storm water associated with construction activity may be authorized under this general permit.

##### 3. Compliance With Water Quality Standards

Discharges to surface water in the state that would cause or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit (see Parts II.H.2. and 3.) to authorize discharges to surface water in the state from any activity that is determined to cause a violation of water quality standards or is found to cause, or contribute to, the loss of a designated use. The executive director may also require an application for an individual permit considering factors described in Part II.H.2. of this general permit.

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##### 4. Discharges to Water Quality-Impaired Receiving Waters.

New sources or new discharges of the constituents of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standards and are listed on the EPA approved Clean Water Act Section 303(d) list.

Constituents of concern are those for which the water body is listed as impaired.

Discharges of the constituents of concern to impaired water bodies for which there is a total maximum daily load (TMDL) are not eligible for this permit unless they are consistent with the approved TMDL. Permittees must incorporate the limitations, conditions, and requirements applicable to their discharges, including monitoring frequency and reporting required by TCEQ rules, into their storm water pollution prevention plan in order to be eligible for coverage under this general permit.

##### 5. Discharges to the Edwards Aquifer Recharge Zone

Discharges cannot be authorized by this general permit where prohibited by 30 Texas Administrative Code (TAC) Chapter 213 (relating to Edwards Aquifer). **In addition,**

**commencement of construction (i.e., the initial disturbance of soils associated with clearing, grading, or excavating activities, as well as other construction-related activities such as stockpiling of fill material and demolition) at a site regulated under 30 TAC Chapter 213, may not begin until the appropriate Edwards Aquifer Protection Plan has been approved by the TCEQ's Edwards Aquifer Protection Program.**

(a) For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

(b) For existing discharges located within the Edwards Aquifer Recharge Zone, the requirements of the agency-approved Water Pollution Abatement Plan under the Edwards Aquifer Rules are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural storm water controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in storm water runoff are in addition to the requirements in this general permit for this pollutant.

For discharges from large construction activities located on the Edwards Aquifer recharge zone or the Edwards Aquifer contributing zone, applicants must submit a copy of the NOI to the appropriate TCEQ regional office. For discharges from small construction activities located on the Edwards Aquifer recharge zone or the Edwards Aquifer contributing zone, and for discharges from large construction activities by operators not required to submit an NOI under this general permit, applicants must submit a copy of the construction site notice to the appropriate TCEQ regional office where required by the Edwards Aquifer Rules at 30 TAC Chapter 213:

Counties: Contact:

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Comal, Bexar, Medina, Uvalde, TCEQ  
and Kinney Water Program Manager  
San Antonio Regional Office  
14250 Judson Rd.

San Antonio, Texas

(210) 490-3096

Williamson, Travis, and Hays TCEQ

Water Program Manager

Austin Regional Office

2800 South IH 35, Suite 100

Austin, Texas 78704-5712

(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges otherwise eligible for coverage cannot be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Other Governmental Entities

This general permit does not limit the authority or ability of federal, other state, or local governmental entities from placing additional or more stringent requirements on construction activities or discharges from construction activities. For example, this permit does not limit the authority of a home-rule municipality provided by Texas Local Government Code §401.002.

#### 8. Indian Country Lands

Storm water runoff from construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of storm water require authorization under federal National Pollutant Discharge Elimination System (NPDES) regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

#### 9. Oil and Gas Production

Storm water runoff from construction activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline, are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of storm water require authorization under federal NPDES regulations, authority for these discharges must be obtained from the EPA.

#### 10. Storm Water Discharges from Agricultural Activities

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Storm water discharges from agricultural activities that are not point source discharges of storm water are not subject to TPDES permit requirements. These activities may include clearing and cultivating ground for crops, construction of fences to contain livestock, construction of stock ponds, and other similar agricultural activities. Discharges of storm water runoff associated with the construction of facilities that are subject to TPDES regulations, such as the construction of confined animal feeding operations, would be point sources regulated under this general permit.

#### 11. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC ' 70.7.

### **Section D. Deadlines for Obtaining Authorization to Discharge**

#### 1. Large Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Operators of large construction activities continuing to operate after the effective date of this permit, and authorized under TPDES general permit TXR150000 (issued March 5, 2003), must submit an NOI to renew authorization under this general permit within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the previous TPDES permit.

## 2. Small Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Discharges from ongoing small construction activities that commenced prior to the effective date of this general permit, and that would not meet the conditions to qualify for termination of this permit as described in Part II.E. of this general permit, must meet the requirements to be authorized, either under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the previous TPDES permit.

### **Section E. Obtaining Authorization to Discharge**

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#### 1. Automatic Authorization for Small Construction Activities With Low Potential for Erosion:

If all of the following conditions are met, then a small construction activity is determined to occur during periods of low potential for erosion, and a site operator may be automatically authorized under this general permit without being required to develop a storm water pollution prevention plan or submit a notice of intent (NOI):

- (a) the construction activity occurs in a county listed in Appendix A;
- (b) the construction activity is initiated and completed, including either final or temporary stabilization of all disturbed areas, within the time frame identified in Appendix A for the location of the construction site;
- (c) all temporary stabilization is adequately maintained to effectively reduce or prohibit erosion, permanent stabilization activities have been initiated, and a condition of final stabilization is completed no later than 30 days following the end date of the time frame identified in Appendix A for the location of the construction site;
- (d) the permittee signs a completed construction site notice (Attachment 1 of this general permit), including the certification statement;
- (e) a signed copy of the construction site notice is posted at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and maintained in that location until completion of the construction activity;
- (f) a copy of the signed and certified construction site notice is provided to the operator of any municipal separate storm sewer system (MS4) receiving the discharge at least two days prior to commencement of construction activities;
- (g) any supporting concrete batch plant or asphalt batch plant is separately authorized for discharges of storm water runoff or other non-storm water discharges under an individual TPDES permit, another TPDES general permit, or under an individual TCEQ permit where storm water and non-storm water is disposed of by evaporation or irrigation (discharges are adjacent to water in the state); and
- (h) any non-storm water discharges are either authorized under a separate permit or authorization, or are not considered to be a wastewater.

Part II.G. of this general permit describes how an operator may apply for and obtain a waiver from permitting, for certain small construction activities that occur during a period with a low potential for erosion, where automatic authorization under this section is not available.

#### 2. Automatic Authorization For All Other Small Construction Activities:

Operators of small construction activities not described in Part II.E.1. above may be automatically authorized under this general permit, and operators of these sites shall not be required to submit an NOI, provided that they meet all of the following conditions:

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(a) develop a SWP3 according to the provisions of this general permit, that covers either the entire site or all portions of the site for which the applicant is the operator, and implement that plan prior to commencing construction activities;

(b) sign and certify a completed construction site notice (Attachment 2 of this general permit), post the notice at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, prior to commencing construction, and maintain the notice in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities); and

(c) provide a copy of the signed and certified construction site notice to the operator of any municipal separate storm sewer system receiving the discharge at least two days prior to commencement of construction activities.

Operators of small construction activities as defined in Part I of this general permit shall not submit an NOI for coverage unless otherwise required by the executive director.

As described in Part I (Definitions) of this general permit, large construction activities include those that will disturb less than five (5) acres of land, but that are part of a larger common plan of development or sale that will ultimately disturb five (5) or more acres of land, and must meet the requirements of Part II.E.3. below.

#### 3. Authorization for Large Construction Activities:

Operators of large construction activities that qualify for coverage under this general permit must meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit that covers either the entire site or all portions of the site for which the applicant is the operator, and implement that plan prior to commencing construction activities;

(b) primary operators must submit a Notice of Intent (NOI), using a form provided by the executive director, at least seven (7) days prior to commencing construction activities, or if utilizing electronic submittal, prior to commencing construction activities. If an additional primary operator is added after the initial NOI is submitted, the new primary operator must submit an NOI at least seven (7) days before assuming operational control, or if utilizing electronic NOI submittal, prior to assuming operational control. If the primary operator changes after the initial NOI is submitted, the new primary operator must submit a paper NOI or an electronic NOI

at least ten (10) days before assuming operational control;

(c) all primary operators must also post a copy of the signed NOI at the construction site in a location where it is readily available for viewing by the general public, local, Construction General Permit TPDES General Permit TXR150000

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state, and federal authorities prior to commencing construction activities, and must maintain the NOI in that location until completion of the construction activity;

(d) all operators of large construction activities must post a site notice in accordance with Part III.D.2. of this permit. The site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction, and must be maintained in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities); and

(e) all primary operators must provide a copy of the signed NOI to the operator of any municipal separate storm sewer system (MS4) receiving the discharge and to any secondary operator, at least seven (7) days prior to commencing construction activities, and must list in the SWP3 the names and addresses of all MS4 operators receiving a copy.

(f) All persons meeting the definition of “secondary operator” in Part I of this permit are hereby notified that they are regulated under this general permit, but are not required to submit an NOI, provided that another operator(s) at the site has submitted an NOI, or is required to submit an NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage (with records of notification available upon request). Any secondary operator notified under this provision may alternatively submit an NOI under this general permit, may seek coverage under an alternative TPDES individual permit, or may seek coverage under an alternative TPDES general permit if available.

#### 4. Waivers for Small Construction Activities:

Part II.G. describes how operators of certain small construction activities may obtain a waiver from coverage.

#### 5. Effective Date of Coverage

(a) Operators of small construction activities as described in either Part II.E.1. or II.E.2. above are authorized immediately following compliance with the applicable conditions of Part II.E.1. or II.E.2. Secondary operators of large construction activities as described in Part II.E.3. above are authorized immediately following compliance with the applicable conditions in Part II.E.3. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator’s responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(b) Primary operators of large construction activities as described in Part II.E.3. above

are provisionally authorized seven (7) days from the date that a completed NOI is  
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postmarked for delivery to the TCEQ, unless otherwise notified by the executive director. If electronic submission of the NOI is provided, and unless otherwise notified by the executive director, primary operators are authorized immediately following confirmation of receipt of the NOI by the TCEQ. Authorization is nonprovisional when the executive director finds the NOI is administratively complete and an authorization number is issued for the activity. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(c) Operators are not prohibited from submitting late NOIs or posting late notices to obtain authorization under this general permit. The TCEQ reserves the right to take appropriate enforcement actions for any unpermitted activities that may have occurred between the time construction commenced and authorization was obtained.

#### 6. Notice of Change (NOC)

If relevant information provided in the NOI changes, an NOC must be submitted at least 14 days before the change occurs, if possible. Where 14-day advance notice is not possible, the operator must submit an NOC within 14 days of discovery of the change. If the operator becomes aware that it failed to submit any relevant facts or submitted incorrect information in an NOI, the correct information must be provided to the executive director in an NOC within 14 days after discovery. The NOC shall be submitted on a form provided by the executive director, or by letter if an NOC form is not available. A copy of the NOC must also be provided to the operator of any MS4 receiving the discharge, and a list must be included in the SWP3 that includes the names and addresses of all MS4 operators receiving a copy.

Information that may be included on an NOC includes, but is not limited to, the following: the description of the construction project, an increase in the number of acres disturbed (for increases of one or more acres), or the operator name. A transfer of operational control from one operator to another, including a transfer of the ownership of a company, may not be included in an NOC. A transfer of ownership of a company includes changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing number (or charter number) that is on record with the Texas Secretary of State must be changed.

An NOC is not required for notifying TCEQ of a decrease in the number of acres disturbed. This information must be included in the storm water pollution prevention plan (SWP3) and retained on site.

#### 7. Signatory Requirement for NOI Forms, Notice of Termination (NOT) Forms, NOC Letters, and Construction Site Notices

NOI forms, NOT forms, NOC letters, and Construction Site Notices that require a signature must be signed according to 30 TAC ' 305.44 (relating to Signatories for Applications).

#### 8. Contents of the NOI

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The NOI form shall require, at a minimum, the following information:

- (a) the TPDES CGP authorization number for existing authorizations under this general permit, where the operator submits an NOI to renew coverage within 90 days of the effective date of this general permit;
- (b) the name, address, and telephone number of the operator filing the NOI for permit coverage;
- (c) the name (or other identifier), address, county, and latitude/longitude of the construction project or site;
- (d) the number of acres that will be disturbed by the applicant;
- (e) confirmation that the project or site will not be located on Indian Country lands;
- (f) confirmation that a SWP3 has been developed, that it will be implemented prior to construction, and that it is compliant with any applicable local sediment and erosion control plans;
- (g) name of the receiving water(s);
- (h) the classified segment number for each classified segment that receives discharges from the regulated construction activity (if the discharge is not directly to a classified segment, then the classified segment number of the first classified segment that those discharges reach); and
- (i) the name of all surface waters receiving discharges from the regulated construction activity that are on the latest EPA-approved CWA § 303(d) list of impaired waters.

#### **Section F. Terminating Coverage**

##### **1. Notice of Termination (NOT) Required**

Each operator that has submitted an NOI for authorization under this general permit must apply to terminate that authorization following the conditions described in this section of the general permit. Authorization must be terminated by submitting a Notice of Termination (NOT) on a form supplied by the executive director. Authorization to discharge under this general permit terminates at midnight on the day the NOT is postmarked for delivery to the TCEQ. If electronic submission of the NOT is provided, authorization to discharge under this permit terminates immediately following confirmation of receipt of the NOT by the TCEQ. Compliance with the conditions and requirements of this permit is required until an NOT is submitted.

The NOT must be submitted to TCEQ, and a copy of the NOT provided to the operator of any MS4 receiving the discharge (with a list in the SWP3 of the names and addresses of all MS4 operators receiving a copy), within 30 days after any of the following conditions are met:

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- (a) final stabilization has been achieved on all portions of the site that are the responsibility of the permittee;
- (b) a transfer of operational control has occurred (See Section II.F.4. below); or
- (c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

##### **2. Minimum Contents of the NOT**

The NOT form shall require, at a minimum, the following information:

- (a) if authorization was granted following submission of an NOI, the permittee's sitespecific TPDES authorization number for the construction site;
- (b) an indication of whether the construction activity is completed or if the permittee is simply no longer an operator at the site;
- (c) the name, address, and telephone number of the permittee submitting the NOT;
- (d) the name (or other identifier), address, county, and latitude/longitude of the construction project or site; and
- (e) a signed certification that either all storm water discharges requiring authorization under this general permit will no longer occur, or that the applicant to terminate coverage is no longer the operator of the facility or construction site, and that all temporary structural erosion controls have either been removed, will be removed on a schedule defined in the SWP3, or have been transferred to a new operator if the new operator has applied for permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

### 3. Termination of Coverage for Small Construction Sites and for Secondary Operators at Large Construction Sites

Each operator that has obtained automatic authorization and has not been required to submit an NOI must remove the site notice upon meeting any of the conditions listed below, complete the applicable portion of the site notice related to removal of the site notice, and submit a copy of the completed site notice to the operator of any MS4 receiving the discharge (or provide alternative notification as allowed by the MS4 operator, with documentation of such notification included in the SWP3), within 30 days of meeting any of the following conditions:

- (a) final stabilization has been achieved on all portions of the site that are the responsibility of the permittee;
  - (b) a transfer of operational control has occurred (See Section II.F.4. below); or
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- (c) the operator has obtained alternative authorization under an individual or general TPDES permit.

Authorization to discharge under this general permit terminates immediately upon removal of the applicable site notice. Compliance with the conditions and requirements of this permit is required until the site notice is removed.

### 4. Transfer of Operational Control

Coverage under this general permit is not transferable. A transfer of operational control includes changes to the structure of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State.

When the primary operator of a large construction activity changes or operational control is transferred, the original operator must submit a Notice of Termination (NOT) within ten (10) days prior to the date that responsibility for operations terminates, and the new operator must submit an NOI at least ten (10) days prior to the transfer of operational control, in accordance with condition (a) or (b) below. A copy of the NOT must be provided to the operator of any MS4 receiving the discharge in accordance with Section II.F.1. above.

Operators of regulated construction activities who are not required to submit an NOI must remove the original site notice, and the new operator must post the required site notice prior to the transfer of operational control, in accordance with condition (a) or (b) below. A copy of the completed site notice must be provided to the operator of any MS4 receiving the discharge, in accordance with Section II.F.3. above.

A transfer of operational control occurs when either of the following criteria is met:

(a) Another operator has assumed control over all areas of the site that have not been finally stabilized; and all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator, provided that the permitted operator has attempted to notify the new operator in writing of the requirement to obtain permit coverage. Record of this notification (or attempt at notification) shall be retained by the operator in accordance with Part VI of this permit. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

(b) A homebuilder has purchased one or more lots from an operator who obtained coverage under this general permit for a common plan of development or sale. The homebuilder is considered a new operator and shall comply with the requirements listed above, including the development of a SWP3 if necessary. Under these circumstances, the homebuilder is only responsible for compliance with the general permit requirements as they apply to lot(s) it has operational control over, and the original operator remains responsible for common controls or discharges, and must amend its SWP3 to remove the lot(s) transferred to the homebuilder.

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### **Section G. Waivers from Coverage**

The executive director may waive the otherwise applicable requirements of this general permit for

storm water discharges from small construction activities under the terms and conditions described

in this section.

#### **1. Waiver Applicability and Coverage**

Operators of small construction activities may apply for and receive a waiver from the requirements to obtain authorization under this general permit, where all of the following conditions are met. This waiver from coverage does not apply to non-storm water discharges. The operator must insure that any non-storm water discharges are either authorized under a separate permit or authorization, or are not considered to be a wastewater.

- (a) the calculated rainfall erosivity (R) factor for the entire period of the construction project is less than five (5);
- (b) the operator submits to the TCEQ a signed waiver certification form, supplied by the executive director, certifying that the construction activity will commence and be completed within a period when the value of the calculated rainfall erosivity R factor is less than five (5); and
- (c) the waiver certification form is postmarked for delivery to the TCEQ at least two (2) days before construction activity begins.

## 2. Steps to Obtaining a Waiver

The construction site operator may calculate the R factor to request a waiver using the following steps:

- (a) Estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.
- (b) Find the appropriate Erosivity Index (EI) zone in Appendix B of this permit.
- (c) Find the EI percentage for the project period by adding the results for each period of the project using the table provided in Appendix D of this permit, in EPA Fact Sheet 2.1, or in USDA Handbook 703, by subtracting the start value from the end value to find the percent EI for the site.
- (d) Refer to the Isoerodent Map (Appendix C of this permit) and interpolate the annual isoerodent value for the proposed construction location.
- (e) Multiply the percent value obtained in Step (c) above by the annual isoerodent value obtained in Step (d). This is the R factor for the proposed project. If the value is less than 5, then a waiver may be obtained. If the value is five (5) or more, then a waiver may not be obtained, and the operator must obtain coverage under Part II.E.2. of this permit.

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Alternatively, the operator may calculate a site-specific R factor utilizing the following online calculator: <http://ei.tamu.edu/index.html>, or using another available resource.

The waiver certification form is not required to be posted at the small construction site.

## 3. Effective Date of Waiver

Operators of small construction activities are provisionally waived from the otherwise applicable requirements of this general permit two (2) days from the date that a completed waiver certification form is postmarked for delivery to TCEQ.

## 4. Activities Extending Beyond the Waiver Period

If a construction activity extends beyond the approved waiver period due to circumstances beyond the control of the operator, the operator must either:

- (a) recalculate the rainfall erosivity (R) factor using the original start date and a new projected ending date, and if the R factor is still under five (5), submit a new waiver certification form at least two (2) days before the end of the original waiver period;

or

- (b) obtain authorization under this general permit according to the requirements delineated in either Part II.E.2. or Part II.E.3. at least two (2) days before the end of the approved waiver period.

## **Section H. Alternative TPDES Permit Coverage**

### 1. Individual Permit Alternative

Any discharge eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). Applications for individual permit coverage should be submitted at least three hundred and thirty (330) days prior to commencement of construction activities to ensure timely issuance.

### 2. Individual Permit Required

The executive director may suspend an authorization or deny an NOI in accordance with the

procedures set forth in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), including the requirement that the executive director provide written notice to the permittee. The executive director may require an operator of a construction site, otherwise eligible for authorization under this general permit, to apply for an individual TPDES permit in the following circumstances:

(a) the conditions of an approved total maximum daily load (TMDL) limitation or TMDL implementation plan on the receiving stream;

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(b) the activity being determined to cause a violation of water quality standards or being found to cause, or contribute to, the loss of a designated use of surface water in the state; and

(c) any other consideration defined in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges) including 30 TAC '205.4(c)(3)(D), which allows the commission to deny authorization under the general permit and require an individual permit if a discharger Ahas been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including nonpayment of fees assessed by the executive director. @

Additionally, the executive director may cancel, revoke, or suspend authorization to discharge under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit, relating to 30 TAC §60.3 (Use of Compliance History). Denial of authorization to discharge under this general permit or suspension of a permittee's authorization under this general permit shall be done according to commission rules in 30 TAC, Chapter 205 (relating to General Permits for Waste Discharges).

3. Any discharge eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), if applicable.

### **Section I. Permit Expiration**

1. This general permit is issued for a term not to exceed five (5) years. All active discharge authorizations expire on the date provided on page one (1) of this permit. Following public notice and comment, as provided by 30 TAC '205.3 (relating to Public Notice, Public Meetings, and Public Comment), the commission may amend, revoke, cancel, or renew this general permit.

2. If the executive director publishes a notice of the intent to renew or amend this general permit before the expiration date, the permit will remain in effect for existing, authorized discharges until the commission takes final action on the permit. Upon issuance of a renewed or amended permit, permittees may be required to submit an NOI within 90 days following the effective date of the renewed or amended permit, unless that permit provides for an alternative method for obtaining authorization.

3. If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees shall apply for authorization under an individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit. No new NOIs will be accepted nor new

authorizations honored under the general permit after the expiration date.

### **Part III. Storm Water Pollution Prevention Plans (SWP3)**

Storm water pollution prevention plans must be prepared to address discharges authorized under Parts II.E.2.

and II.E.3. that will reach Waters of the United States, including discharges to MS4s and privately owned

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separate storm sewer systems that drain to Waters of the United States, to identify and address potential

sources of pollution that are reasonably expected to affect the quality of discharges from the construction

site, including off-site material storage areas, overburden and stockpiles of dirt, borrow areas, equipment

staging areas, vehicle repair areas, fueling areas, etc., used solely by the permitted project. The SWP3 must

describe the implementation of practices that will be used to minimize to the extent practicable the discharge

of pollutants in storm water associated with construction activity and non-storm water discharges described

in Part II.A.3., in compliance with the terms and conditions of this permit.

Individual operators at a site may develop separate SWP3s that cover only their portion of the project,

provided reference is made to the other operators at the site. Where there is more than one SWP3 for a site,

permittees must coordinate to ensure that BMPs and controls are consistent and do not negate or impair the

effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed or separate

SWP3s are developed for each operator, it is the responsibility of each operator to ensure compliance with

the terms and conditions of this general permit in the areas of the construction site where that operator has

control over construction plans and specifications or day-to-day operations.

#### **Section A. Shared SWP3 Development**

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by

the different operators at a site is encouraged. Operators must independently obtain authorization,

but may work together to prepare and implement a single, comprehensive SWP3 for the entire construction site.

1. The SWP3 must clearly list the name and, for large construction activities, the general permit authorization numbers, for each operator that participates in the shared SWP3. Until the TCEQ responds to receipt of the NOI with a general permit authorization number, the SWP3 must specify the date that the NOI was submitted to TCEQ by each operator. Each operator

participating in the shared plan must also sign the SWP3.

2. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. If the responsibility for satisfying a requirement is not described in the plan, then each permittee is entirely responsible for meeting the requirement within the boundaries of the construction site where they perform construction activities. The SWP3 must clearly describe responsibilities for meeting each requirement in shared or common areas.

### **Section B. Responsibilities of Operators**

#### **1. Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications**

All secondary operators and primary operators with control over construction plans and specifications must:

(a) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of Part III of this general permit;

(b) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications;

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(c) ensure all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their best management practices as necessary to remain compliant with the conditions of this general permit; and

(d) ensure that the SWP3 for portions of the project where they are operators indicates the name and site-specific TPDES authorization numbers for permittees with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If the party with day-to-day operational control has not been authorized or has abandoned the site, the person with control over project specifications is considered to be the responsible party until the authority is transferred to another party and the SWP3 is updated.

#### **2. Primary Operators with Day-to-Day Operational Control**

Primary Operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with an SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

(a) meets the requirements of this general permit for those portions of the project where they are operators;

(b) identifies the parties responsible for implementation of best management practices (BMPs) described in the SWP3;

(c) indicates areas of the project where they have operational control over day-to-day activities; and

(d) includes, for areas where they have operational control over day-to-day activities, the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications.

### **Section C. Deadlines for SWP3 Preparation, Implementation, and Compliance**

The SWP3 must be prepared prior to obtaining authorization under this general permit, and

implemented prior to commencing construction activities that result in soil disturbance. The SWP3 must be prepared so that it provides for compliance with the terms and conditions of this general permit.

#### **Section D. Plan Review and Making Plans Available**

1. The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site.

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2. In addition to the requirement to post the NOI, a primary operator of a large construction activity must post the site notice provided in Attachment 4 of this permit near the main entrance of the construction site. An operator of a small construction activity seeking authorization under this general permit and a secondary operator of a large construction activity must post the site notice required in Part II.E.1., 2., or 3. of this permit in order to obtain authorization (see Attachments 1, 2, and 3). If the construction project is a linear construction project (e.g. pipeline or highway), the notices must be placed in a publicly accessible location near where construction is actively underway. Notices for these linear sites may be relocated, as necessary, along the length of the project. The notices must be readily available for viewing by the general public; local, state, and federal authorities; and contain the following information:

- (a) the site-specific TPDES authorization number for the project if assigned;
- (b) the operator name, contact name, and contact phone number;
- (c) a brief description of the project; and
- (d) the location of the SWP3.

3. This permit does not provide the general public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittees allow members of the general public access to a construction site.

#### **Section E. Revisions and Updates to SWP3s**

The permittee must revise or update the SWP3 whenever the following occurs:

1. a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
2. changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
3. results of inspections or investigations by site operators, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

#### **Section F. Contents of SWP3**

The SWP3 must include, at a minimum, the information described in this section.

1. A site or project description, which includes the following information:

(a) a description of the nature of the construction activity;

(b) a list of potential pollutants and their sources;

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(c) a description of the intended schedule or sequence of activities that will disturb soils for major portions of the site;

(d) the total number of acres of the entire property and the total number of acres where construction activities will occur, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas that are authorized under the permittee's NOI;

(e) data describing the soil or the quality of any discharge from the site;

(f) a map showing the general location of the site (e.g. a portion of a city or county map);

(g) a detailed site map (or maps) indicating the following:

(i) drainage patterns and approximate slopes anticipated after major grading activities;

(ii) areas where soil disturbance will occur;

(iii) locations of all major structural controls either planned or in place;

(iv) locations where temporary or permanent stabilization practices are expected to be used;

(v) locations of construction support activities, including off-site activities, that are authorized under the permittee's NOI, including material, waste, borrow, fill, or equipment storage areas;

(vi) surface waters (including wetlands) either at, adjacent, or in close proximity to the site;

(vii) locations where storm water discharges from the site directly to a surface water body or a municipal separate storm sewer system; and

(viii) vehicle wash areas.

Where the amount of information required to be included on the map would result in a single map being difficult to read and interpret, the operator shall develop a series of maps that collectively include the required information.

(h) the location and description of support activities authorized under the permittee's NOI, including asphalt plants, concrete plants, and other activities providing support to the construction site that is authorized under this general permit;

(i) the name of receiving waters at or near the site that may be disturbed or that may receive discharges from disturbed areas of the project;

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(j) a copy of this TPDES general permit, and

(k) the notice of intent (NOI) and acknowledgement certificate for primary operators of large construction sites, and the site notice for small construction sites and for secondary operators of large construction sites.

2. A description of the best management practices (BMPs) that will be used to minimize pollution in runoff.

The description must identify the general timing or sequence for implementation. At a

minimum, the description must include the following components:

(a) General Requirements

(i) Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall.

(ii) Control measures must be properly selected, installed, and maintained according to the manufacturer=s or designer=s specifications.

(iii) Controls must be developed to minimize the offsite transport of litter, construction debris, and construction materials.

(b) Erosion Control and Stabilization Practices

The SWP3 must include a description of temporary and permanent erosion control and stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where it is possible.

(i) Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures.

(ii) The following records must be maintained and either attached to or referenced in the SWP3, and made readily available upon request to the parties listed in Part III.D.1 of this general permit:

(A) the dates when major grading activities occur;

(B) the dates when construction activities temporarily or permanently cease on a portion of the site; and

(C) the dates when stabilization measures are initiated.

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(iii) Erosion control and stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased. Stabilization measures that provide a protective cover must be initiated as soon as practicable in portions of the site where construction activities have permanently ceased. Except as provided in (A) through (D) below, these measures must be initiated no more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased:

(A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(B) Where construction activity on a portion of the site has temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary erosion control and stabilization measures are not required on that portion of site.

(C) In arid areas, semiarid areas, and areas experiencing droughts where

the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased or is precluded by arid conditions, erosion control and stabilization measures must be initiated as soon as practicable. Where vegetative controls are not feasible due to arid conditions, the operator shall install non-vegetative erosion controls. If non-vegetative controls are not feasible, the operator shall install temporary sediment controls as required in Paragraph (D) below.

(D) In areas where temporary stabilization measures are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible, and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequency established in Section III.F.7.(a) for unstabilized sites.

(iv) Final stabilization must be achieved prior to termination of permit coverage.

(c) Sediment Control Practices

The SWP3 must include a description of any sediment control practices used to remove eroded soils from storm water runoff, including the general timing or sequence for implementation of controls.

(i) Sites With Drainage Areas of Ten or More Acres

(A) Sedimentation Basin(s)

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(1) A sedimentation basin is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations shall be included in the SWP3.

(2) Where rainfall data is not available or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

(3) If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin is feasible, the permittee may consider factors

such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

(B) Perimeter Controls: At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(ii) Controls for Sites With Drainage Areas Less than Ten Acres:

(A) Sediment traps and sediment basins may be used to control solids in storm water runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(B) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed Construction General Permit TPDES General Permit TXR150000  
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acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

### 3. A Description of Permanent Storm Water Controls

A description of any measures that will be installed during the construction process to control pollutants in storm water discharges that may occur after construction operations have been completed must be included in the SWP3. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site or prior to submission of an NOT.

### 4. Other Required Controls and BMPs

(a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and the generation of dust. The SWP3 shall include a description of controls utilized to accomplish this requirement.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to minimize pollutants from these materials.

(c) The SWP3 must include a description of potential pollutant sources from areas other than construction (such as storm water discharges from dedicated asphalt plants and dedicated concrete batch plants), and a description of controls and measures that will

be implemented at those sites to minimize pollutant discharges.

(d) Permittees shall place velocity dissipation devices at discharge locations and along the length of any outfall channel (i.e., runoff conveyance) to provide a 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.

(e) Permittees shall design and utilize appropriate controls to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

#### 5. Documentation of Compliance with Approved State and Local Plans

(a) Permittees must ensure that the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by federal, state, or local officials.

(b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or storm water management site plans or site permits approved by state or local official for which the permittee receives written notice.

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(c) If the permittee is required to prepare a separate management plan, including but not limited to a Water Pollution Abatement Plan or Contributing Zone Plan in accordance with 30 TAC Chapter 213 (related to the Edwards Aquifer), then a copy of that plan must be either included in the SWP3 or made readily available upon request to authorized personnel of the TCEQ. The permittee shall maintain a copy of the approval letter for the plan in its SWP3.

#### 6. Maintenance Requirements

(a) All protective measures identified in the SWP3 must be maintained in effective operating condition. If, through inspections or other means, the permittee determines that BMPs are not operating effectively, then the permittee shall perform maintenance as necessary to maintain the continued effectiveness of storm water controls, and prior to the next rain event if feasible. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the SWP3 and maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

(b) If periodic inspections or other information indicates a control has been used incorrectly, is performing inadequately, or is damaged, then the operator must replace or modify the control as soon as practicable after making the discovery.

(c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.

(d) If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee must to

work with the owner or operator of the property to remove the sediment.

#### 7. Inspections of Controls

(a) Personnel provided by the permittee must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site. Sediment and erosion control measures identified in the SWP3 must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

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Where sites have been finally or temporarily stabilized or where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), inspections must be conducted at least once every month. In arid or semi-arid areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater.

As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection. The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of “dry” season and beginning of “wet” season).

(b) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part III.F.8.(a) above. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part III.F.8.(a) above. The conditions of the controls along each inspected 0.25 mile portion may be considered as representative of the condition of controls along that

reach extending from the end of the 0.25 mile portion to either the end of the next 0.25 mile inspected portion, or to the end of the project, whichever occurs first. As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection. The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of “dry” season and beginning of “wet” season).

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(c) In the event of flooding or other uncontrollable situations which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

(d) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

(e) A report summarizing the scope of the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: The locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be signed by the person and in the manner required by 30 TAC ' 305.128 (relating to Signatories to Reports).

The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

8. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge, as listed in Part II.A.3. of this permit.

9. The SWP3 must include the information required in Part III.B. of this general permit.

#### **Part IV. Storm Water Runoff from Concrete Batch Plants**

Discharges of storm water runoff from concrete batch plants at regulated construction sites may be authorized under the provisions of this general permit provided that the following requirements are met for concrete batch plant(s) authorized under this permit. If discharges of storm water runoff from concrete batch plants are not covered under this general permit, then discharges must be authorized under an alternative general permit or individual permit. This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites.

Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

### **Section A. Benchmark Sampling Requirements**

1. Operators of concrete batch plants authorized under this general permit must sample the storm water runoff from the concrete batch plants according to the requirements of this Construction General Permit TPDES General Permit TXR150000

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section of this general permit, and must conduct evaluations on the effectiveness of the SWP3 based on the following benchmark monitoring values:

#### **Benchmark**

#### **Parameter**

#### **Benchmark**

#### **Value**

#### **Sampling**

#### **Frequency**

#### **Sample Type**

Oil and Grease 15 mg/L 1/quarter (\*1)(\*2) Grab (\*3)

Total Suspended

Solids

100 mg/L 1/quarter (\*1)(\*2) Grab (\*3)

pH 6.0 - 9.0

Standard Units

1/quarter (\*1)(\*2) Grab (\*3)

Total Iron 1.3 mg/L 1/quarter(\*1)(\*2) Grab (\*3)

(\*1) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(\*2) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a storm water discharge occurs from a concrete batch plant authorized under this general permit.  
January through March

April through June

July through September

October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a storm water discharge occurred at least once following submission of the NOI or following the date that automatic authorization was obtained under Section II.E.2., and prior to terminating coverage.

(\*3) A grab sample shall be collected from the storm water discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

2. The permittee must compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

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The operator's investigation must identify the following:

- (a) any additional potential sources of pollution, such as spills that might have occurred,
- (b) necessary revisions to good housekeeping measures that are part of the SWP3,
- (c) additional BMPs, including a schedule to install or implement the BMPs, and
- (d) other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of storm water runoff to the permitted facility, by laboratory analyses of samples of storm water runoff from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

### **Section B. Best Management Practices (BMPs) and SWP3 Requirements**

Minimum Storm Water Pollution Prevention Plan (SWP3) Requirements – The following are required in addition to other SWP3 requirements listed in this general permit (including, but not limited to Part III.F.7. of this permit):

1. Description of Potential Pollutant Sources - The SWP3 must provide a description of potential sources (activities and materials) that may reasonably be expected to affect the quality of storm water discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe practices that that will be used to reduce the pollutants in these discharges to assure compliance with this general permit, including the protection of

water quality, and must ensure the implementation of these practices.

The following must be developed, at a minimum, in support of developing this description:

(a) Drainage – The site map must include the following information:

- (1) the location of all outfalls for storm water discharges associated with concrete batch plants that are authorized under this permit;
- (2) a depiction of the drainage area and the direction of flow to the outfall(s);
- (3) structural controls used within the drainage area(s);
- (4) the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal

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of wastes; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

(5) the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(b) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to storm water and that have a potential to affect the quality of storm water discharges associated with concrete batch plants that are authorized under this general permit.

(c) Spills and Leaks - A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to storm water and that drain to storm water outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated.

(d) Sampling Data - A summary of existing storm water discharge sampling data must be maintained, if available.

2. Measures and Controls - The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part IV.B.1.(a) of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(a) Good Housekeeping - Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

(1) Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to storm water. Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

(2) Operators must prevent the exposure of fine granular solids, such as cement, to storm water. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Spill Prevention and Response Procedures - Areas where potential spills that can contribute pollutants to storm water runoff, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment.

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Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(c) Inspections - Qualified facility personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. The inspection frequency must be specified in the SWP3 based upon a consideration of the level of concrete production at the facility, but must be a minimum of once per month while the facility is in operation. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to storm water at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas.

Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(d) Employee Training - An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for storm water pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a minimum, must consist of one training prior to the initiation of operation of the concrete batch plant.

(e) Record Keeping and Internal Reporting Procedures - A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of storm water discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(f) Management of Runoff - The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

3. Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following.

(a) Visual examination of all areas draining storm water associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the

drainage system. These include but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit Construction General Permit TPDES General Permit TXR150000

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and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(b) Based on the results of the evaluation, the following must be revised as appropriate within two weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part IV.B.1., "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part IV.B.2., "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(c) The permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any incidence(s), and the report must be signed according to 30 TAC Section 305.128, relating to Signatories to Reports.

(d) The Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part IV.B.2.(c) of this general permit.

### **Section C. Prohibition of Wastewater Discharges**

Wastewater discharges associated with concrete production including wastewater disposal by land

application are not authorized under this general permit. These wastewater discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized

manner. Discharges of concrete truck washout at construction sites may be authorized if conducted

in accordance with the requirements of Part V of this general permit.

### **Part V. Concrete Truck Wash Out Requirements**

This general permit authorizes the wash out of concrete trucks at construction sites regulated under Sections

II.E.1., 2., and 3. of this general permit, provided the following requirements are met.

Authorization is

limited to the land disposal of wash out water from concrete trucks that are associated with off-site

production facilities. Wash out water associated with on-site concrete production facilities must be

authorized under a separate TCEQ general permit or individual permit.

1. Direct discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.
2. Concrete truck wash out water shall be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.
3. Wash out of concrete trucks during rainfall events shall be minimized. The direct discharge Construction General Permit TPDES General Permit TXR150000  
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of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck washout as the result of rain.
4. The discharge of wash out water shall not cause or contribute to groundwater contamination.
5. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated map.

#### **Part VI. Retention of Records**

The permittee must retain the following records for a minimum period of three (3) years from the date that a

NOT is submitted as required by Part II.E.3. For activities in which an NOT is not required, records shall be

retained for a minimum period of three (3) years from the date that the operator terminates coverage under

Section II.F.3. of this permit. Records include:

1. A copy of the SWP3;
2. All reports and actions required by this permit, including a copy of the construction site notice;
3. All data used to complete the NOI, if an NOI is required for coverage under this general permit; and
4. All records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

#### **Part VII. Standard Permit Conditions**

1. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued, and is grounds for enforcement action, for terminating coverage under this general permit, or for requiring a discharger

to apply for and obtain an individual TPDES permit.

2. Authorization under this general permit may be suspended or revoked for cause. Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition.

The permittee must furnish to the executive director, upon request and within a reasonable time, any

information necessary for the executive director to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. Additionally, the permittee must provide

to the executive director, upon request, copies of all records that the permittee is required to maintain

as a condition of this general permit.

3. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt

or reduce the permitted activity to maintain compliance with the permit conditions.

4. Inspection and entry shall be allowed under Texas Water Code Chapters 26-28, Texas Health and

Safety Code "361.032-361.033 and 361.037, and 40 Code of Federal Regulations (CFR)

'122.41(i). The statement in Texas Water Code '26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and

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fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but

merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

5. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under Texas

Water Code "26.136, 26.212, and 26.213 for violations including but not limited to the following:

a. negligently or knowingly violating the federal Clean Water Act (CWA), "301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA, '402, or any requirement imposed in a pretreatment program approved under CWA, "402(a)(3) or 402(b)(8);

b. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.

6. All reports and other information requested by the executive director must be signed by the person

and in the manner required by 30 TAC '305.128 (relating to Signatories to Reports).

7. Authorization under this general permit does not convey property or water rights of any sort and

does not grant any exclusive privilege.

### **Part VIII. Fees**

1. A fee of must be submitted along with the NOI:

a. \$325 if submitting a paper NOI, or

b. \$225 if submitting a NOI electronically.

2. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete

unless the associated fee has been paid in full.

3. No separate annual fees will be assessed. The Water Quality Annual fee has been incorporated into

the NOI fees as described above.

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**Appendix A: Automatic Authorization**

Periods of Low Erosion Potential by County – Eligible Date Ranges

Andrews: Nov. 15 - Apr. 30  
Archer: Dec. 15 - Feb. 14  
Armstrong: Nov. 15 - Apr. 30  
Bailey: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Baylor: Dec. 15 - Feb. 14  
Borden: Nov. 15 - Apr. 30  
Brewster: Nov. 15 - Apr. 30  
Briscoe: Nov. 15 - Apr. 30  
Brown: Dec. 15 - Feb. 14  
Callahan: Dec. 15 - Feb. 14  
Carson: Nov. 15 - Apr. 30  
Castro: Nov. 15 - Apr. 30  
Childress: Dec. 15 - Feb. 14  
Cochran: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Coke: Dec. 15 - Feb. 14  
Coleman: Dec. 15 - Feb. 14  
Collingsworth: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28  
Concho: Dec. 15 - Feb. 14  
Cottle: Dec. 15 - Feb. 14  
Crane: Nov. 15 - Apr. 30  
Crockett: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30  
Crosby: Nov. 15 - Apr. 30  
Culberson: Nov. 1 - May 14  
Dallam: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30  
Dawson: Nov. 15 - Apr. 30  
Deaf Smith: Nov. 15 - Apr. 30  
Dickens: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30  
Dimmit: Dec. 15 - Feb. 14  
Donley: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28  
Eastland: Dec. 15 - Feb. 14  
Ector: Nov. 15 - Apr. 30  
Edwards: Dec. 15 - Feb. 14  
El Paso: Jan. 1 - Jul. 14, or May 15 - Jul. 31, or Jun. 1 - Aug. 14,  
or Jun. 15 - Sept. 14, or Jul. 1 - Oct. 14, or Jul. 15 - Oct. 31, or  
Aug. 1 - Apr. 30, or Aug. 15 - May 14, or Sept. 1 - May 30, or  
Oct. 1 - Jun. 14, or Nov. 1 - Jun. 30, or Nov. 15 - Jul. 14  
Fisher: Dec. 15 - Feb. 14  
Floyd: Nov. 15 - Apr. 30  
Foard: Dec. 15 - Feb. 14  
Gaines: Nov. 15 - Apr. 30  
Garza: Nov. 15 - Apr. 30  
Glasscock: Nov. 15 - Apr. 30  
Hale: Nov. 15 - Apr. 30  
Hall: Feb. 1 - Mar. 30  
Hansford: Nov. 15 - Apr. 30  
Hardeman: Dec. 15 - Feb. 14

Hartley: Nov. 15 - Apr. 30  
Haskell: Dec. 15 - Feb. 14  
Hockley: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30  
Howard: Nov. 15 - Apr. 30  
Hudspeth: Nov. 1 - May 14  
Hutchinson: Nov. 15 - Apr. 30  
Irion: Dec. 15 - Feb. 14  
Jeff Davis: Nov. 1 - Apr. 30 or Nov. 15 - May 14  
Jones: Dec. 15 - Feb. 14  
Kent: Nov. 15 - Jan. 14 or Feb. 1 - Mar. 30  
Kerr: Dec. 15 - Feb. 14  
Kimble: Dec. 15 - Feb. 14  
King: Dec. 15 - Feb. 14  
Kinney: Dec. 15 - Feb. 14  
Knox: Dec. 15 - Feb. 14  
Lamb: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30  
Loving: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Lubbock: Nov. 15 - Apr. 30  
Lynn: Nov. 15 - Apr. 30  
Martin: Nov. 15 - Apr. 30  
Mason: Dec. 15 - Feb. 14  
Maverick: Dec. 15 - Feb. 14  
McCulloch: Dec. 15 - Feb. 14  
Menard: Dec. 15 - Feb. 14  
Midland: Nov. 15 - Apr. 30  
Mitchell: Nov. 15 - Apr. 30  
Moore: Nov. 15 - Apr. 30  
Motley: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30  
Nolan: Dec. 15 - Feb. 14  
Oldham: Nov. 15 - Apr. 30  
Parmer: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30  
Pecos: Nov. 15 - Apr. 30  
Potter: Nov. 15 - Apr. 30  
Presidio: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Randall: Nov. 15 - Apr. 30  
Reagan: Nov. 15 - Apr. 30  
Real: Dec. 15 - Feb. 14  
Reeves: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Runnels: Dec. 15 - Feb. 14  
Schleicher: Dec. 15 - Feb. 14  
Scurry: Nov. 15 - Apr. 30  
Shackelford: Dec. 15 - Feb. 14  
Sherman: Nov. 15 - Apr. 30  
Stephens: Dec. 15 - Feb. 14  
Sterling: Nov. 15 - Apr. 30  
Stonewall: Dec. 15 - Feb. 14  
Sutton: Dec. 15 - Feb. 14  
Swisher: Nov. 15 - Apr. 30  
Taylor: Dec. 15 - Feb. 14  
Terrell: Nov. 15 - Apr. 30  
Terry: Nov. 15 - Apr. 30  
Throckmorton: Dec. 15 - Feb. 14  
Tom Green: Dec. 15 - Feb. 14  
Upton: Nov. 15 - Apr. 30  
Uvalde: Dec. 15 - Feb. 14

Val Verde: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30  
Ward: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30  
Wichita: Dec. 15 - Feb. 14  
Wilbarger: Dec. 15 - Feb. 14  
Winkler: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Yoakum: Nov. 1 - Apr. 30, or Nov. 15 - May 14  
Young: Dec. 15 - Feb. 14  
Wheeler: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28  
Zavala: Dec. 15 - Feb. 14

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**Appendix B:**

**Erosivity Index (EI) Zones in Texas**

*Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service*

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**Appendix C: Isoerodent Map**

*Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service*

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**Appendix D: Erosivity Indices for EI Zones in Texas**

**Periods:**

1/1	1/15	2/1	2/15	3/1	3/15	4/1	4/15	5/1	5/15	6/1	6/15	7/1	7/15	8/1	8/15	9/1	9/15	10/1	10/15	11/1	11/15	12/1	12/15	
89	0	0	1	1	2	3	4	7	12	18	27	38	48	55	62	69	76	83	90	94	97	98	99	100
90	0	1	2	3	4	6	8	13	21	29	37	46	54	60	65	69	74	81	87	92	95	97	98	99
91	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100
92	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100
93	0	1	1	2	3	4	6	8	13	25	40	49	56	62	67	72	76	80	85	91	97	98	99	99
94	0	1	2	4	6	8	10	15	21	29	38	47	53	57	61	65	70	76	83	88	91	94	96	98
95	0	1	3	5	7	9	11	14	18	27	35	41	46	51	57	62	68	73	79	84	89	93	96	98
96	0	2	4	6	9	12	17	23	30	37	43	49	54	58	62	66	70	74	78	82	86	90	94	97
97	0	1	3	5	7	10	14	20	28	37	48	56	61	64	68	72	77	81	86	89	92	95	98	99
106	0	3	6	9	13	17	21	27	33	38	44	49	55	61	67	71	75	78	81	84	86	90	94	97

\* Each period begins on the date listed in the table above and lasts until the day before the following period.

The final period begins on December 15 and ends on December 31.

*Table adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service*

**EI#:**

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Attachment 1

**SMALL CONSTRUCTION SITE NOTICE:  
LOW POTENTIAL FOR EROSION  
FOR THE**

**Texas Commission on Environmental Quality (TCEQ)  
Storm Water Program**

**TPDES GENERAL PERMIT TXR150000**

The following information is posted in compliance with **Part II.E.1.** of the TCEQ General Permit

Number TXR150000 for discharges of storm water runoff from small construction sites automatically

authorized based on low rainfall erosivity. Additional information regarding the TCEQ storm water

permit program may be found on the internet at:

[http://www.tceq.state.tx.us/nav/permits/wq\\_construction.html](http://www.tceq.state.tx.us/nav/permits/wq_construction.html)

Operator Name:

Contact Name and Phone Number:

Project Description:

(Physical address or description of the site=s location, estimated start date and projected end date, or date that disturbed soils will be stabilized)

For Small Construction Sites Authorized Under Part II.E.1., the following certification must be completed:

I (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an automatic authorization based on low rainfall erosivity under Part II.E.1. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit.

Construction activities at this site shall occur within a time period listed in Appendix A of the TPDES general permit for this

county, that period beginning on and ending on . I understand that if construction activities continue past this period, all storm water runoff must be authorized under a separate provision of the general permit. A copy of this signed

notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing

false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title Date \_\_\_\_\_

\_\_\_\_\_ *Date Notice Removed*

*MS4 operator notified per Part II.F.3.*

Attachment 2

Construction General Permit TPDES General Permit TXR150000

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**SMALL CONSTRUCTION  
SITE NOTICE**

**FOR THE**

**Texas Commission on Environmental Quality (TCEQ)  
Storm Water Program**

## **TPDES GENERAL PERMIT TXR150000**

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number

TXR150000 for discharges of storm water runoff from small construction sites. Additional information

regarding the TCEQ storm water permit program may be found on the internet at:

[http://www.tceq.state.tx.us/nav/permits/wq\\_construction.html](http://www.tceq.state.tx.us/nav/permits/wq_construction.html)

Operator Name:

Contact Name and Phone Number:

Project Description: *Physical address or description of the site=s location, estimated start date and projected end date, or date that disturbed soils will be stabilized*

Location of Storm Water Pollution Prevention Plan:

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the

following certification must be completed:

I (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.D.2. of

TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan

has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice

is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false

information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title Date \_\_\_\_\_

*Date Notice Removed*

*MS4 operator notified per Part II.F.3.*

Construction General Permit TPDES General Permit TXR150000

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Attachment 3

# **LARGE CONSTRUCTION SITE NOTICE**

**FOR THE**

**Texas Commission on Environmental Quality (TCEQ)**

**Storm Water Program**

## **TPDES GENERAL PERMIT TXR150000**

### ***“SECONDARY OPERATOR” NOTICE***

This notice applies to secondary operators of construction sites operating under Part II.E.3. of the TPDES

General Permit Number TXR150000 for discharges of storm water runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.E.2. of the general permit. Additional information regarding the TCEQ storm water permit program may be found on the internet at:

[http://www.tceq.state.tx.us/nav/permits/sw\\_permits.html](http://www.tceq.state.tx.us/nav/permits/sw_permits.html)

Site-Specific TPDES Authorization Number:

Operator Name:

Contact Name and Phone Number:

Project Description: *Physical address or description of the site=s location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*

Location of Storm Water Pollution Prevention Plan (SWP3):

For Large Construction Activities Authorized Under Part II.E.3. (Obtaining Authorization to Discharge) the

following certification must be completed:

I (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of

TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan

has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice

is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false

information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title Date \_\_\_\_\_

*Date Notice Removed*

*MS4 operator notified per Part II.F.3.*

Construction General Permit TPDES General Permit TXR150000

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Attachment 4

# LARGE CONSTRUCTION SITE NOTICE

**FOR THE**

**Texas Commission on Environmental Quality (TCEQ)**

**Storm Water Program**

**TPDES GENERAL PERMIT TXR150000**

***“PRIMARY OPERATOR” NOTICE***

This notice applies to construction sites operating under Part II.E.3. of the TPDES General Permit Number

TXR150000 for discharges of storm water runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.E.2. of the general permit. This notice shall be posted along with a copy of the signed Notice of Intent (NOI), as applicable. Additional information regarding the TCEQ storm water permit program may be found on the internet at: [http://www.tceq.state.tx.us/nav/permits/sw\\_permits.html](http://www.tceq.state.tx.us/nav/permits/sw_permits.html)  
Site-Specific TPDES Authorization Number:  
Operator Name:  
Contact Name and Phone Number:  
Project Description: *Physical address or description of the site=s location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*  
Location of Storm Water Pollution Prevention Plan:

## **APPENDIX F**

# **Public Coordination**

Signed Notice of Availability (NOA)  
Signed Agency Coordination Letters  
Agency and Public Comments

**APPENDIX G**  
**PIR Review Checklist**

**PIR Review Checklist for FCW Rehabilitation Projects**

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	
1.	___	___	___	The project is active in the RIP.
2.	___	___	___	The project was damaged by flood(s) or coastal storm(s).
3.	___	___	___	The Public Sponsor has requested Rehabilitation Assistance in writing.
4.	___	___	___	The Public Sponsor has agreed to sign the Cooperation Agreement, which will occur before USACE begins rehabilitation work.
5.	___	___	___	The estimated construction cost of the rehabilitation is greater than \$15,000, and is not considered sponsor maintenance.
6.	___	___	___	The repair option selected is the option that is the least cost to the Federal government, or, the sponsor's preferred alternative is selected with all increases in cost paid by the public sponsor. PIR includes justification for non-select of the least cost alternative.
7.	___	___	___	The public sponsor is aware of the opportunity to seek a nonstructural alternative project, and has decided to proceed with a structural rehabilitation.
8.	___	___	___	The cost estimate in the PIR itemized the work to identify the Public Sponsor's cost share.
9.	___	___	___	The rehabilitation project has a favorable benefit cost ratio of greater than 1.0:1.
10.	___	___	___	The proposed work will not modify the FCW to increase the degree of protection or capacity, or to provide protection to a larger area.
11.	___	___	___	Betterments are paid 100 percent by the Public Sponsor.
12.	___	___	___	The CA contains a provision for 80% Federal and 20% local cost share for non-Federal projects.
13.	___	___	___	Cost for any betterment is identified separately in the cost estimate.

**PIR Review Checklist for FCW Rehabilitation Projects (Continued)**

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	
14.	___	___	___	Repair of deliberate levee cuts is the responsibility of the public sponsor, except as provided for in ER 500-1-1, paragraphs 5-2.j. and 4-3.h.
15.	___	___	___	All deficient and deferred maintenance will be paid for or accomplished by the Public Sponsor, without receiving credit toward any sponsor's cost share.
16.	___	___	___	Any relocation of levees is adequately justified.
17.	___	___	___	USACE assistance does not correct design or construction deficiencies.
18.	___	___	___	An assessment of environmental requirements was completed.
19.	___	___	___	The project complies with NEPA, and required documentation was completed and placed in Appendix H of the PIR.
20.	___	___	___	The Endangered Species Act was appropriately considered. Section 13 of the PIR.
21.	___	___	___	EO 11988 requirements were considered in the process of evaluating the proposed project for rehabilitation. Section 13 of the PIR.
22.	___	___	___	The completed PIR has been reviewed and the PIR Checklist has been reviewed and signed by the Emergency Management Office.
23.	___	___	___	The completed PIR meets all policy, procedural, content, and formatting requirements of ER 500-1-1 and EP 500-1-1.

EM REVIEWING OFFICIAL'S SIGNATURE

\_\_\_\_\_  
ANTHONY SEMENTO  
Chief, Emergency Branch  
871-886-1445