FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For proposed Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR150000 to authorize the discharge of storm water runoff and certain non-storm water discharges from construction sites into surface water in the state.

Issuing Office:	Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087
Prepared by:	Wastewater Permitting Section Water Quality Division (512) 239-4671
Date:	February 14, 2008
Permit Action:	Reissuance of a General Storm Water Permit for Construction Activities

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing a renewal of TPDES Construction General Permit (CGP), Permit No. TXR150000, issued March 5, 2003, which authorizes discharges from construction sites into surface water in the state. The general permit specifies which construction activities must obtain permit coverage, which are eligible for waivers, and which may be required to obtain individual permit coverage. The general permit specifies that where discharges will reach Waters of the United States, a storm water pollution prevention plan (SWP3) must be developed and implemented unless certain conditions are met. The general permit provides authorization for discharges from small construction sites, according to federal Phase II storm water regulations finalized in the *Federal Register* of December 8, 1999.

The principal changes to the existing CGP include:

- A. Revision of the application fee and annual fee.
- B. Revision of the definition of "operator" and clarification of who must submit a notice of intent (NOI).
- C. Clarification of requirements related to sites regulated by the TCEQ's Edwards Aquifer rules.
- D. Clarification that on-site disposal of concrete truck wash out water from off-site production facilities may be authorized by this general permit provided that certain requirements are met.
- E. Replacement of effluent limits for storm water discharges associated with concrete batch plants supporting construction sites with benchmark monitoring requirements, best management practices, and SWP3 requirements, consistent with other TPDES General Permits for similar discharges.

F. Revision of the effective date for provisional authorization when submitting a paper NOI to seven (7) days.

II. <u>Executive Director's Recommendation</u>

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. It is proposed that the permit be issued to expire five years from the effective date, following the requirements of 30 TAC § 205.5(a).

III. <u>Permit Applicability and Coverage</u>

- A. This general permit would authorize the discharge of storm water runoff associated with small and large construction sites to surface water in the state. This general permit would specify which sites may be authorized under this general permit, which are eligible for waivers, and which must be authorized by individual permit.
- B. This general permit would authorize the discharge of storm water associated with other industrial activities at construction sites as follows: Discharges of storm water runoff from supporting activities, including concrete batch plants, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas that are located at, adjacent to, or in close proximity to the permitted construction site and directly support the construction activity; and do not operate beyond the completion date of the construction activity.
- C. The general permit would not authorize the discharge of process wastewater. In addition, the general permit would not authorize other non-storm water discharges, except for the following:
 - 1. 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);
 - 2. 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);
 - 3. water from the routine 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), where pressure washing is not conducted, and where the purpose is to remove mud, dirt, or dust;
 - 4. water used to control dust;
 - 5. 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);
 - 6. uncontaminated air conditioning condensate;
 - 7. uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and
 - 8. lawn watering and similar irrigation drainage.

The purpose of providing this list in the general permit is to clarify that certain non-storm water discharges that may occur during normal activities at a construction site do not require additional permit coverage. Inclusion of this list in the draft general permit is not meant to prohibit the above discharges in

an activity, such as a non-regulated construction activity, which would otherwise be allowed without a TPDES permit.

- D. The on-site disposal of water resulting from the wash out of concrete trucks associated with off-site production facilities may be conducted at regulated construction sites, provided that certain requirements of the general permit are met. Operators may also find recommendations for addressing concrete wash out from the U.S. EPA at the following web site: <u>http://cfpub.epa.gov/npdes/stormwater/swppp.cfm</u>. This web page also includes general guidance on developing a construction site SWP3.
- E. The following discharges are not eligible for coverage under the proposed general permit, and must be authorized under an individual permit or an alternative general permit, if one is available:
 - 1. Discharges that would cause or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses of receiving waters;
 - 2. New sources or new discharges of the constituents of concern to impaired waters, unless otherwise allowable under commission rules, applicable state law, and any total maximum daily load (TMDL) that exist for the applicable receiving water;
 - 3. Discharges otherwise prohibited under existing state rules.
- F. The following storm water discharges are not eligible for coverage under the proposed permit and may require individual or alternative general permit coverage:

Discharges that occur after construction activities have been completed and after the construction site and any supporting activity site have undergone final stabilization.

- G. Construction activities that would disturb less than one acre, including any greater common plan of development for the site, are not required to obtain permit coverage under the general permit nor an individual permit unless required by the Executive Director.
- H. The following storm water discharges are not under the authority of the commission, are not eligible for coverage under the general permit, and may require authorization from the U.S. EPA under a separate NPDES permit:
 - 1. Storm water runoff from construction activities occurring on Indian Country lands. (Information on the location and contact information for Indian Country Lands in Texas may be accessed at the following EPA web site: <u>http://www.epa.gov/region6/6dra/oejta/tribalaffairs/index.html</u>. Additionally, information on the contact information for federally recognized tribes may be found at <u>http://www.indians.org/Resource/FedTribes99/fedtribes99.html</u>.)
 - 2. Storm water runoff from construction activities associated with the exploration, development, or production of oil, gas, or geothermal resources, including transportation of crude oil or natural gas by pipeline.

IV. <u>Permit Conditions</u>

A. Notice of Intent and Site Notice

Primary operators of large construction sites must submit a notice of intent (NOI) that indicates the operator will comply with the conditions of the general permit, including development of a storm water pollution prevention plan (SWP3). An NOI is not required for secondary operators.

For primary operators of large construction sites, a copy of the NOI must be posted in plain view at the construction site entrance prior to the commencement of construction activities and maintained until either final stabilization occurs or control of the site is turned over to a separate operator. A copy of the NOI must also be supplied to the operator of any municipal separate storm sewer system (MS4) to which the operator discharges, so that the MS4 operator can conduct its own inspection and enforcement activities according to its NPDES or TPDES permit or local ordinances. Operators must post a site notice that is included as an attachment to the general permit.

The general permit includes notification to secondary operators of large construction activities that they are regulated under the general permit and are not required to submit an NOI. This statement is consistent with federal rules at 40 CFR § 122.28(b)(2)(vi) and as adopted by reference in 30 TAC Chapter 281, which states that the director may notify a discharger that it is covered by a general permit, even if the discharger has not submitted an NOI for coverage.

An NOI is not required for the authorization of certain discharges, as allowed by 40 CFR §122.28(b)(2)(v) and as adopted by reference in 30 TAC Chapter 281, where the Executive Director determines that an NOI is inappropriate. The proposed draft general permit incorporates this alternative as an option and automatically authorizes certain small construction activities if specific conditions are met. In making the determination that an NOI is inappropriate for small construction activities, the executive director considered the short-term nature of small construction activities, the number of construction sites that will be authorized, and the administrative burden on both the commission and the regulated community. The executive director also considered the nature and type of proposed discharges authorized under the general permit, the expected potential for toxic and conventional pollutants, and the discharges from small construction sites authorized under the general permit are appropriate to control the discharges from small construction sites authorized under the general permit and to protect water quality. The administrative burden on the permittee to submit an NOI and on the commission to respond to the NOI would be excessive and not directly necessary to control these discharges.

Operators of small construction sites are not required to submit an NOI, but must develop a SWP3 (with the exception of those sites described in Part IV.C., below) and to post a site notice containing information regarding the operator's authorization under the general permit. Operators of small construction sites may alternatively apply for a waiver from permit requirements if activities are shown to occur in certain regions and during certain seasons where the potential for erosion are below an established threshold or erosivity factor. Operators applying for these waivers are also required to provide a copy of the waiver form to the operator of any MS4 that will receive the discharges from the construction site.

B. Storm Water Pollution Prevention Plan (SWP3)

1. All large construction site activities as well as all small construction site activities not specifically described in Part IV.C. below, with discharges that reach Waters of the United States, must develop

a storm water pollution prevention plan (SWP3) according to the provisions of the proposed general permit prior to requesting authorization. Operators must implement that plan prior to commencing construction activities.

Waters of the United States are defined in the general permit. Waters of the United States do not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds, as defined in 40 CFR §423.11(m), that also meet the criteria of this definition). This exclusion applies only to manmade bodies of water that 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 previously converted cropland.

- 2. The required contents of the SWP3 are based on federal Phase II rules (December 8, 1999 *Federal Register*) related to storm water permitting, as well as the current TPDES general permit for large construction sites. The purpose of the SWP3 is to identify and address potential sources of pollution that are reasonably expected to affect the quality of storm water discharges from the construction site, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas. Separate SWP3s may be developed for each construction site operator where multiple operators exist. However, the proposed permit would also allow a shared SWP3 to promote a more efficient and coordinated effort between multiple operators at a single site. Under this alternative, each individual operator would be required to submit an NOI for coverage, and each would be individually responsible for compliance with the terms of the permit in the areas of the site where the person is the responsible operator.
- 3. The specific requirements of the SWP3 include the following minimum provisions:
 - a. A detailed project description, including a site map that indicates the site location, the construction site details, and information on receiving waters.
 - b. A description of the structural and the non-structural controls (best management practices, or BMPs) that will be used to minimize pollution in runoff during construction, as well as stabilization practices during and at the completion of the activity.
 - c. Demonstration of compliance with other state and local plans, such as the Edwards Aquifer Protection Program.
 - d. A description of how BMPs will be maintained and how controls may be revised upon a finding that the control measures are either not working properly or adequately.
 - e. A description of how inspections of BMPs will be conducted. Inspections are required at a minimum frequency of at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater during active construction activities. Where sites have been temporarily stabilized, inspections must be conducted at least once every month. Special provisions allowing for representative inspections are provided for long, linear projects where access along the site is limited and travel along the site may damage stabilized areas or cause potential for erosion.
 - f. Identification and description of the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge.

C. Terminating Coverage

The general permit includes information on when and how an operator may terminate coverage under the general permit. Primary operators of large construction sites must submit a notice of termination (NOT) form. Operators of small construction sites and secondary operators of large construction sites must remove the applicable site notice. The specific requirements are included in the draft permit.

An operator may terminate coverage when certain conditions are met. In establishing vegetation to achieve final stabilization, an operator is not required to utilize the same vegetation that was previously utilized at the site, provided that the stabilized area contains at least 70% coverage of the original percentage of coverage of land for the disturbed area, and provided that the operator utilizes vegetation appropriate for the area that provides acceptable coverage.

D. Alternative Permit Requirements for Small Construction Activities Occurring During Conditions of Low Potential Erosion

Storm water runoff from certain small construction activities may be authorized under the general permit without being required to develop a SWP3 if construction occurs when there is a low potential for erosion. This option is consistent with the existing general permit, and is not available for large construction sites, including smaller construction sites that are part of a larger common development that will disturb five (5) or more acres. This option is available for storm water discharges, and would not include authorization for non-storm water discharges that are otherwise required to be permitted. These mechanisms for alternative authorization are included to encourage construction to occur during times when the potential for erosion is limited. The alternative requirements apply to small construction sites where the rainfall erosivity factor, or R-factor, is less than five (5) for the duration of the activity. The R-factor is defined as the total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE). An R-factor is calculated based on information available from the U.S. Department of Agriculture (USDA) and EPA. Annual R-factors are provided in the U.S. Department of Agriculture's (USDA) Handbook No. 703. The following authorization options require determination of an R-factor for a portion of the year.

1. <u>Automatic Authorization Option</u>: A mechanism for automatic authorization is provided to include a very efficient authorization process for certain activities occurring during periods of low erosion potential. Appendix A of the proposed permit includes a list of time periods within certain counties when the potential for erosion is very low and where small construction activities may be automatically authorized. Not all counties in Texas are included in Appendix A, and those that are included only demonstrate an R-factor less than five (5) for the specific time period(s) shown.

Small site construction activities that commence on or after the start date for one of the listed time periods and conclude by the end date of the same listed time period are not required to submit an NOI nor to develop a SWP3. Instead, the general permit requires the operator of such a site to complete and post a specific site notice for the duration of the activity and to provide a copy of the site notice to the operator of any MS4 that would receive a discharge from the site.

This automatic authorization permit option is based on construction site conditions that might otherwise qualify for a permit waiver using an R-factor calculation. Instead of requiring the construction site operator to calculate the R-factor for every possible discharge, the executive director calculated time periods within the year where the R-factor is known to be less than five

(5). An application for a waiver requires the operator to calculate the R-factor, complete a waiver form, and submit the waiver request, which is described in the next section of this fact sheet.

In developing Appendix A, the executive director used the most conservative assumptions for each county in the state. The annual R-factor values included in the USDA handbooks are annual factors, and the lowest annual R-factor in Texas is ten (10), which occurs only in El Paso County. While no county in Texas would automatically qualify for this automatic authorization option for the entire year, R factors for specific time periods within the year can be identified by multiplying the annual R-factor by the percentage of the total annual isoerodent factor that occurs during the period in question. In Texas, there are ten isoerodent zones that cross state lines, and those are listed in the table below. The map of zones can is located in Chapter 2 of USDA Handbook 703: "Predicting Soil Erosion by Water," http://www.epa.gov/npdes/pubs/ruslech2.pdf, referenced in EPA Fact Sheet 3.1: "Storm Water Phase II Final Rule – Construction Rainfall Erosivity Waiver" (http://www.epa.gov/npdes/pubs/fact3-1.pdf), and is included as Appendix B of the draft permit

To identify partial year R-factors less than five (5), the executive director first identified the potential start dates and end dates of construction projects, and then added the correlating total percentages for the time period. In the Erosivity Index Table developed by in the USDA Handbook 703, the first period is always listed as zero (0), and with each period, a portion of the annual percentage is added until the final number for the last period equals or approaches 100 for each isoerodent zone. For the purposes of establishing Appendix A, the TCEQ did not add each period so that the values were larger for each time period; but rather included only the portion of the annual percentage that was attributable to the periods were added. Where the results were less than 100, the TCEQ included the difference for the first period beginning January 1. This resulted in an increase for several of the erosivity index (EI) zones in the first period from zero (0), which results in a more conservative calculation.

Each county is located within one or more EI zones and contains within it a range of annual isoerodent values. For the automatic R factor permitting option, the executive director determined isoerodent zones by identifying the highest isoerodent line that crosses through the county and assigning a value of the next highest isoerodent line, since some value greater than the highest line crossing through the county would be present within the county. Generally, the value of the line located outside of and east of the county was assigned as the value for the county, as the isoerodent values generally increase to the east. The EI zones may be found in the EPA Fact Sheet 3.1 (Figure 2) or in USDA Handbook 703 (Figure 2-1), and are also provided in Appendix B of the draft permit

The Isoerodent Map is provided at Appendix C of the draft permit, and is also included in the USDa Handbook 703 and referenced in the EPA Fact Sheet 3.1.

The R factor for each time period was determined by calculating the percentage of the isoerodent value that is necessary to achieve an R factor of less than five (5). For a small construction activity to be authorized under this provision, construction must commence no earlier than the start date for a specific date range and county listed in Appendix A of the general permit, and final stabilization must occur no later than the end date of that same date range. If a construction project begins during one date range and ends past that same date range (even if it is within another date range for the same county), then the resulting R factor will be over 5, and the automatic authorization is not available. If construction activities last longer than expected so that final stabilization will occur outside of an approved date range, then the operator must either apply for and obtain a waiver, if

appropriate, obtain authorization under Section II.E.2. of the general permit, related to all other small construction activities, be developing and implementing a SWP3 and posting the required site notice.

Two example calculations are shown below:

Example No. 1: In El Paso County, the highest annual isoerodent value is ten (10), and El Paso County is located in El Zone No. 92.

In order to determine the portion of the isoerodent value (referred to below as "x") that would result in an R factor less than 5, the executive director divided the maximum allowable R-factor, five (5), by the annual isoerodent value. Then the result was multiplied by 100 to correct for percentage.

To achieve an R factor less than five (5) in El Paso County, the additive isoerodent values from Zone 92 (see table below) must be less than 50 when all periods of construction from beginning to end are added together. This is possible for several ranges of dates in the county, and those date ranges are listed in Appendix A.

Example No. 2: In Dallas County, the highest annual isoerodent value for the county is 350, and Dallas County is located in zone 97.

To achieve an R factor less than five (5) in Dallas County, the additive isoerodent values from Zone 97 (see table above) must be less than 1.43 when all periods of construction from beginning to end are added together. There are no ranges of dates in the county that meet these criteria, and therefore construction sites in Dallas County would not qualify for this automatic authorization.

EI #:	01/01	01/15	02/01	02/15	03/01	03/15	04/01	04/15	05/01	05/15	06/01	06/15	07/01	07/15	08/01	08/15	09/01	09/15	10/01	10/15	11/01	11/15	12/01	12/15	
89	0	0	1	0	1	1	1	3	5	6	9	11	10	7	7	7	7	7	7	4	3	1	1	1	100
90	2	0	1	1	1	2	2	5	8	8	8	9	8	6	5	4	5	7	6	5	3	2	1	1	100
91	0	0	0	0	1	0	0	1	4	10	13	10	7	7	7	7	7	7	7	7	4	0	1	0	100
92	0	0	0	0	1	0	0	1	4	10	13	10	7	7	7	7	7	7	7	7	4	0	1	0	100
<i>93</i>	1	1	0	1	1	1	2	2	5	12	15	9	7	6	5	5	4	4	5	6	6	1	1	0	100
94	2	1	1	2	2	2	2	5	6	8	9	9	6	4	4	4	5	6	7	5	3	3	2	2	100
95	2	1	2	2	2	2	2	3	4	9	8	6	5	5	6	5	6	5	6	5	5	4	3	2	100
96	3	2	2	2	3	3	5	6	7	7	6	6	5	4	4	4	4	4	4	4	4	4	4	3	100
97	1	1	2	2	2	3	4	6	8	9	11	8	5	3	4	4	5	4	5	3	3	3	3	1	100
106	2	3	3	3	4	4	4	6	7	5	6	5	6	6	6	4	4	3	3	3	2	4	4	3	100

Table of Erosivity Indices (EI) for Each Two-Week Period:

If an operator can not meet the automatic authorization option, then a waiver calculation may be performed to determine if the site-specific R-factor is less than five (5) for a small construction site. The waiver option is described below.

2. <u>Waiver Option</u>: A small construction site operator may calculate a site-specific R-factor and apply to the TCEQ for a permit waiver. The R-factor would be calculated using site-specific location information to determine the specific isoerodent line to be used in the calculation. The operator may utilize the table in the previous section of this fact sheet to calculate the isoerodent values for the specific zone where the site is located. Alternatively, the operator may reference EPA Fact Sheet 3.1 or USDA Handbook 703. The map of Isoerodent lines is also provided as Appendix C of the general permit. An operator can identify the specific isoerodent line that relates to the site's location, rather than utilizing the most conservative line that was used to develop Appendix A of the general permit.

This waiver may be an important option for shorter duration projects in counties that are located in high isoerodent areas, and may also be important for longer duration projects located in portions of counties that have a lower isoerodent value than the conservative protocol that was utilized to develop Appendix A of the general permit.

The operator may calculate a site-specific R-factor using the steps outlined in EPA Fact Sheet 3.1: "Storm Water Phase II Final Rule – Construction Rainfall Erosivity Waiver" (<u>http://www.epa.gov/npdes/pubs/fact3-1.pdf</u>), by using the online calculator developed by Texas A&M University: <u>http://ei.tamu.edu/index.html</u>, using an alternative mechanism that follows appropriate methodology, or by using the following steps:.

- 1) Estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.
- 2) Find the Erosivity Index (EI) zone from Appendix B of the general permit.
- 3) Find the EI percentage for the project period by adding the results for each period of the project using the table above. Alternatively, use the table provided in Appendix D of the general permit, EPA Fact Sheet 2.1 or USDA Handbook 703, by subtracting the start value from the end value on the table.
- 4) Refer to the Isoerodent Map (Appendix C of the general permit) and interprolate the annual isoerodent value for the construction site location.

5) Multiply the percent value obtained in Step 3 by the annual isoerodent value obtained in Step 4. This is the R factor for the project. If the value is less than 5, then a waiver may be obtained.

Under the waiver option, the operator must submit to the executive director a waiver form approved by the executive director, and must provide a copy of the waiver form to the operator of any MS4 that receives the discharge. The operator is not required to develop an SWP3 nor to post the waiver certification form at the entrance to the small construction site. This waiver does not authorize discharges of non-storm water that would otherwise be required to be permitted.

E. Qualifying Local Programs

This general permit does not include by reference any qualifying local programs (see federal rules at 40 CFR Section 122.44(s)); however, the permit may be amended in the future to include appropriate programs that are currently being implemented or that will be implemented in the future by regulated municipal separate storm sewer systems (MS4s).

V. Changes from Existing General Permit:

- A. Combined the NOI application fee with a fee to cover the Water Quality Annual Fee for the term of the permit for those facilities required to submit an NOI. The combined fee for a paper NOI is \$325.00, and will be due when the NOI is submitted. In order to encourage electronic submittal, and to account for the cost savings when applying electronically, a fee of \$225.00 is being assessed for those facilities electing to utilize electronic NOI submittal.
- B. TCEQ revised the definition of "operator" to be consistent with the definition in EPA's current Construction General Permit. The definition for "operator" includes a definition for "primary operator" and "secondary operator," and the draft permit contains specific requirements for secondary operators of large construction activities. Secondary operators of large construction activities. Secondary operators of large construction activities would be regulated under the general permit but would not be required to submit an NOI. Also, a requirement was added that all operators and secondary operators must post a TCEQ site notice for large construction activities.
- C. In Part II.A.3. of the draft permit, revised the list of non-storm water discharges to include external washing of structures, added drainage from lawn irrigation that may occur while attempting to establish vegetation, clarified that discharges of hyperchlorinated water from fire hydrant flushings and potable water sources are not allowed unless the water is dechlorinated, and clarified that air conditioning condensate and dust suppression water must be uncontaminated. These changes are consistent with the TCEQ's recently-renewed Multi Sector General Permit for storm water discharges from industrial activities (TXR050000).
- D. For clarification purposes, added definitions for the following terms: "Arid Areas," "Discharge,"
 "Edwards Aquifer," "Edwards Aquifer Recharge Zone," "Edwards Aquifer Contributing Zone,"
 "Hyperchlorination of Waterlines," "Indian County Land," "Indian Tribe," "Notice of Change,"
 "Outfall," "Rainfall Erosivity Factor," and "Semiarid Areas."
- E. Revised the following definitions for clarification purposes: "Commencement of Construction," "Common Plan of Development," "Discharge," "Facility or Activity," "Final Stabilization," "Large Construction Activity," "Municipal Separate Storm Sewer System," "Notice of Intent," "Notice of Termination," "Operator," "Pollutant," "Small Construction Activity," "Storm Water," and "Temporary

Stabilization."

- F. Added language to Part II.C.10., related to discharges from the construction of agricultural activities, to clarify that the construction of facilities regulated under the NPDES or TPDES program may be regulated under this general permit, including construction of confined animal feeding operations.
- G. Added Part II.C.11. related to a permittee's ability to assert the "force majeure" defenses found in 30 TAC Section 70.7.
- H. Added language to Part II.E.6., related to Notice of Change (NOC), to provide examples of the types of information that may be included in an NOC.
- I. Added a new Part II.F.3. related to termination requirements for small construction site operators automatically authorized under the general permit.; and added a new Part II.F.4., related to transfer of operational control.
- J. In Part II.G.1., related to Waivers from Coverage, clarified that operators requesting a waiver from coverage are not required to post the waiver certification form at the construction site.
- K. Revised language regarding discharges from construction supporting activities to clarify that the types of activities that may be authorized under the general permit are not limited to the list in the permit. Examples of less common support activities may include on-site mulchers or wood chippers.
- L. Reworded portions of Part III.F, related to Contents of the SWP3, to better organize and clarify the required information.
- M. Revised language in Part III.F.3.a. to require documentation when sedimentation basins are not utilized for common drainage locations that serve an area with ten (10) or more acres disturbed at one time.
- N. In Part III.F.7.(a), added "discharge locations" to the list of areas that must be periodically inspected.
- O. In Part III.F.7.(d), added a sentence stating that the list of qualifications of personnel making the required inspections must be documented in the SWP3 but do not have to be included in each inspection report.
- P. Clarified in Parts II and IV.A. that on-site disposal of washout water from concrete trucks that are associated with off site production facilities may be authorized under this permit, provided that certain requirements are met and the wastewater is properly contained on site. Also added a new Part V which includes the specific requirements. This change is consistent with an existing TPDES General Permit related to Concrete Production Facilities, TXG110000.
- Q. Revised Part III.F. to better clarify the requirements of the SWP3.
- R. Revised Part IV to remove effluent limits for storm water discharges associated with concrete batch plants, and added benchmark sampling and specific best management practices for such activities. This change is consistent with the TPDES General Permit No. TXG110000, related to concrete production facilities, as well as TPDES General Permit No. TXR050000, related to discharges of storm water associated with industrial activities
- S. Added two new site notices as attachments to the draft permit, which will be required for large

construction sites: Attachment 4 is not required to be signed and must be posted by primary operators of large construction sites, and Attachment 3 must be signed and posted by secondary operators of large construction sites. Operators of small construction sites must post either Attachment 1 or 2, whichever is appropriate.

- T. Added instructions for calculating an R-factor waiver, and included three appendices with supporting information for those calculations.
- U. The current CGP provides provisional authorization 48 hours after postmark when a paper NOI is submitted, and the draft permit was revised to provide for provisional coverage seven (7) following the postmark on a paper NOI. The purpose of this change is to allow sufficient time to insure that all paper NOIs are received by the TCEQ and available to personnel processing the NOI forms, to aid in providing information to concerned persons requested information on particular NOIs, and to help encourage electronic submittal of storm water applications.

VI. <u>Addresses</u>

Questions concerning this general permit may be sent to:

TCEQ, Water Quality Division Storm Water & Pretreatment Team (MC 148) P.O. Box 13087 Austin, TX 78711-3087 (512) 239-4671

Supplementary information on this Fact Sheet is organized as follows:

- VII. Legal Basis
- VIII. Regulatory Background
- IX. Permit Coverage
- X. Technology-Based Requirements
- XI. Water Quality-Based Requirements
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VII. <u>Legal Basis</u>

Texas Water Code (TWC) §26.121 makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order. TWC § 26.027 authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. TWC §26.040 provides the commission with authority to amend rules adopted under TWC §26.040 prior to amendment of the statute by House Bill (H.B.) 1542 in the 75th Legislature, 1997, and to authorize waste discharges by general permit. On September 14, 1998, the TCEQ received authority from the U.S. Environmental Protection Agency (EPA) to administer the Texas Pollutant Discharge Elimination System (TPDES) program. The commission and the EPA have signed a Memorandum of Agreement (MOA) that authorizes the administration of the TPDES program by the commission as it applies to the State of Texas.

Clean Water Act (CWA), §§ 301, 304, and 401 and 33 United States Code (USC), §§1331, 1314, and 1341

include provisions that state that NPDES permits must include effluent limitations requiring authorized discharges to: meet standards reflecting levels of technological capability; comply with EPA-approved state water quality standards; and comply with other state requirements adopted under authority retained by states under CWA § 510, and 33 USC §1370.

VIII. <u>Regulatory Background</u>

The 1972 amendments to the Federal Water Pollution Control Act, later referred to as the Clean Water Act (CWA), prohibit the discharge of any pollutant to navigable waters of the United States (US) from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Efforts to improve water quality under the NPDES program traditionally have focused on reducing pollutants in industrial process wastewater and municipal sewage treatment plant discharges. Over time, it has become evident that more diffuse sources of water pollution, such as storm water runoff from construction sites, are also significant contributors to water quality problems.

According to the EPA, sediment runoff rates from construction sites are typically 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction activity can contribute more sediment to streams than would be deposited naturally over several decades, causing physical and biological harm to surface waters.

In 1990, EPA promulgated rules establishing Phase I of the NPDES storm water program. Among other discharges, Phase I addresses discharges from large construction activities disturbing five acres or more of land. The Phase I NPDES storm water rule identifies eleven (11) categories of industrial activity in the definition of "storm water discharges associated with industrial activity" that must obtain an NPDES permit. Category (x) of this definition is construction activity, commonly referred to as "large" construction activity. Under category (x), the Phase I rule requires all operators of construction activities disturbing five acres or greater of land to apply for an NPDES storm water permit before beginning construction. Operators of sites disturbing less than five acres are also required to obtain a permit if their activity is part of a "larger common plan of development or sale" with a planned disturbance of five acres or greater. "Disturbance" refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of residential houses, office buildings, industrial sites, or demolition.

In 1992, the US Court of Appeals for the Ninth Circuit remanded portions of the existing Phase I storm water regulation to the EPA. The remanded portions related to the category (x) of storm water discharges associated with industrial activity, specifically, discharges from large construction activity (NRDC v. EPA, 966 F.2d at 1292). EPA responded to the Court's decision by designating storm water discharges from construction activity disturbing less than five acres as sources that should be regulated to protect water quality. The Phase II Rule designated those sources as "storm water discharges associated with *small construction* activity," rather than as another category under "storm water associated with *industrial* activity." Phase II of the NPDES storm water program requires authorization for small site construction activities disturbing between one and five acres. Phase II rules were final on December 8, 1999 and required authorizations be issued by March 10, 2003.

The Storm Water Phase II Rule automatically designated, as small construction activity under the NPDES storm water permitting program, all operators of construction site activities that result in a land disturbance of equal to or greater than one and less than five acres. Site activities disturbing less than one acre are also regulated as small construction activity if they are part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and less than five acres, or if they are designated by the NPDES permitting authority.

On September 14, 1998, the TCEQ received authority to administer the NPDES permit program in Texas (the TPDES program), for those discharges under the regulatory authority of the commission. Under the MOA between the two agencies, EPA agreed to continue to administer the construction storm water general permit until the July 7, 2003 expiration date. The original TPDES Construction General Permit (CGP) was issued on March 5, 2003 and expires on March 5, 2008, and this renewed general permit would continue authorization for regulated construction activities in Texas for five years from the effective date of the renewed permit. The commission expects to reissue this general permit prior to the expiration date of the current permit, in which case the renewed permit would supersede and replace the existing permit.

IX. <u>Permit Coverage</u>

A. The proposed general permit would apply to discharges of storm water runoff associated with construction activities, storm water runoff associated with certain other supporting industrial activities, and certain non-storm water discharges, into Waters of the United States. The general permit specifies which facilities are eligible for authorization by the general permit, which must be authorized by an alternative individual or general permit, and the specific conditions that must be met in order to be excluded from the requirement to develop a SWP3 and from the requirement to submit a notice of intent. The guidelines for small site construction activities were published in the *Federal Register* on December 8, 1999 (64 FR 68722).

The general permit defines large and small construction activities, and includes requirements for both. The general permit specifies that a smaller project is regulated if it is part of a larger common plan of development or sale that will disturb one or more acres. A common plan of development or sale is defined in the permit as a construction activity that is completed in separate stages, separate phases, or in combination with other construction activities, that is identified by the documentation for the construction project that identifies the scope of the project. 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 ¹/₄ 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.

An example of a smaller construction project that is regulated under the general permit would include the building of single houses on lots of a quarter-acre each within a larger residential development of 5 or more acres. Any primary operator constructing single homes within that development would be regulated as an operator of a large construction activity, and required to develop and SWP3 and submit an NOI. If the development was generally completed, then a builder may be able to look at the size of the remaining area to be disturbed in determining the size of the larger common plan of development or sale by answering a two part question. First, was the original plan, including modifications, ever substantially completed with less than one acre of the original "common plan of development or sale" remaining (e.g., <1 acre of the "common plan" was not built out at the time)? If so, then was there a clearly identifiable period of time with no on-going construction, including meeting the criteria for final stabilization? If the answer to both of the questions is "yes," then it would be appropriate to consider the new project of less than one acre as a new common plan of development. Another example of a "new" common plan of development or sale would be the addition of a swimming pool, fence, or similar addition to a lot by a homeowner after having purchased the lot. Even if the rest of the homes have not been built, the additional construction by the homeowner would be its own common plan unless it was specifically delineated in the plans for the overall development.

B. A primary operator seeking authorization to discharge storm water runoff from a large construction site under this general permit must submit a completed Notice of Intent (NOI) on a form approved by the executive director, and must complete the required site notice that is included as an attachment to the general permit. The NOI shall include, at a minimum, the legal name and address of the construction site operator, the facility name and address, a specific description of the site location, (including the street address, if applicable, and county), the type of construction occurring, the name of the receiving water, and any other information requested by the executive director. A secondary operator of a large construction site and an operator of a small construction site seeking authorization under this permit must complete the applicable site notice that is included as an attachment to the general permit.

Applicants can locate information regarding the classified segment(s) receiving the discharges from the construction site in the "Atlas of Texas Surface Waters" or the TCEQ's Surface Water Quality Viewer, at the following TCEQ web addresses. These documents include identification numbers, descriptions, and maps:

Atlas of Texas Surface Waters: http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-316/index.html

Surface Water Quality Viewer: http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/viewer/viewer.html

Applicants can find the latest EPA-approved list of impaired water bodies (the Texas 303(d) List) at the following TCEQ web address:

http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/305_303.html

C. Submission of an NOI or signing of the required site notice is an acknowledgment that the conditions of the general permit are applicable to the proposed discharges and that the applicant agrees to comply with the conditions of the general permit. Provisional authorization to discharge under the terms and conditions of the general permit begins seven (7) days after a completed NOI is postmarked for delivery to the TCEQ, or immediately upon receipt of confirmation by TCEQ of an administratively complete NOI submitted electronically, unless otherwise specified in the general permit. If submitting a paper copy of

the NOI, the NOI must be mailed to the address indicated on the NOI form. Following review of the NOI, the executive director will either confirm coverage by providing a notification and an authorization number to the applicant or notify the applicant that coverage under this general permit is denied. Operators of existing sites that are required to submit an NOI for coverage must do so within the timeframe specified in the general permit in order to maintain authorization for the construction activity. Small construction sites must post the required site notice as required in the general permit.

- D. Coverage under the general permit is not transferable. If the primary operator of a large construction activity changes, then the original operator must submit a Notice of Termination (NOT) within 10 days prior to the date that responsibility for operations terminates and the new operator must submit a NOI at least ten (10) days before assuming operational control. A change in operator includes changes to the structure of a company, such as changing from a partnership to a corporation, or changing corporation types that changes the filing (or charter) number with the Texas Secretary of State. Operators of small construction activities and secondary operators of large construction activities must remove the original site notice for the original operator, and the new operator must post the required site notice prior to assuming operational control for the site.
- E. A primary operator of a large construction activity must submit current information to the executive director by submitting a Notice of Change (NOC) not later than 14 days before a change in information previously provided to the executive director in a NOI occurs (examples of changes may include changes to the operator's mailing address, a change to the project name, or an increase in the size of the project). If an NOC form is available, the operator must use the TCEQ-approved form. However, if an NOC form is not available, the operator may submit a letter requesting the change. NOC forms and letters must be signed by a person authorized to sign permit applications. An operator of a small construction activity and a secondary operator of a large construction activity may revise the information in the required site notice.
- F. A primary operator of a large construction activity may terminate coverage under the general permit when all construction activity has ceased by providing a Notice of Termination (NOT) on a form approved by the executive director. Authorization to discharge terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ. If TCEQ provides for electronic submission of NOTs during the term of this permit, authorization to discharge terminates immediately following confirmation of receipt of the electronic NOT form by the TCEQ, unless otherwise specified in the general permit. An operator of a small construction activity and a secondary operator of a large construction activity may terminate coverage under the general permit by removing the required site notice after final stabilization has been met.

X. <u>Technology-Based Requirements</u>

A. Storm Water Pollution Prevention Plan (SWP3)

The draft general permit continues the requirement to develop and implement a SWP3 to control discharges of storm water associated with construction activities, in accordance with the NPDES program. Conditions of the proposed general permit have been developed to comply with the technology-based standards of the Clean Water Act.

The draft permit is based on a series of Best Management Practices (BMPs), in the form of a required SWP3, rather than numeric limitations, to prevent or minimize pollutants in storm water discharges. BMPs may include erosion controls, sediment controls, stabilization practices, and nonstructural controls.

Erosion controls provide the first line of defense in preventing off-site sedimentation and are designed to prevent erosion through protection and preservation of soil. Sediment controls are designed to remove sediment from runoff before the runoff is discharged from the site. Sediment and erosion controls can be further divided into two major classes of controls: stabilization practices and structural practices. Part IV.B. of this fact sheet describes the elements of the required SWP3.

Small construction sites that obtain automatic authorization based on the precalculated R factor, or that receive a waiver from coverage based on a calculated R factor, are not required to prepare a SWP3.

B. Benchmark Monitoring Requirements

The 1998 NPDES Construction General Permit for EPA Region 6 for large construction activities included numeric effluent limitations for storm water discharges from concrete batch plants in Texas. The original TPDES construction general permit continued these limits and applied them to all regulated construction activities. The TCEQ's original recommendation on the NPDES CGP was based on the requirements for wastewater and contact storm water found in TCEQ's authorization by rule for concrete production facilities, 30 TAC §321.155. The proposed general permit removes these effluent limits and replaces them with benchmark sampling requirements, BMPs, and SWP3 requirements for the stormwater only discharges from concrete batch plants. This change is consistent with TCEQ's Multi Sector General Permit (MSGP) for discharges of storm water runoff associated with industrial activity and with TCEQ's Wastewater General Permit for Concrete Production Facilities, TXG110000. The following proposed benchmark monitoring requirements are applicable to all discharges from concrete batch plants, and are not applicable to other discharges described in the general permit:

Benchmark Parameter	Benchmark Value
Oil and Grease	15 mg/L
Total Suspended Solids	100 mg/L
pH	6.0 - 9.0 Standard Units
Total Iron	1.3 mg/L

Sampling for the above parameters is required to be conducted at each outfall that includes storm water runoff from a concrete batch plant. Sampling is required at each regulated construction site that utilizes a concrete batch plant authorized under this permit. A concrete batch plant may alternatively be authorized under another TPDES individual or applicable general permit.

Sampling is required at a frequency of once per quarter when discharge occurs. Sampling shall be conducted during the following periods: First quarter - January through March; second quarter - April through June; third quarter - July through September; and fourth quarter - October through December. Applicants shall begin sampling in the first full quarter following submission of the NOI. For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a discharge occurred at least once following submission of the NOI or automatic authorization.

XI. <u>Water Quality-Based Requirements</u>

Texas Surface Water Quality Standards (30 TAC §307.4(d)), states that "surface waters will not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with skin, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" is

designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that results in instream aquatic toxicity, causes a violation of an applicable narrative or numerical state water quality standard, results in the endangerment of a drinking water supply, or results in aquatic bioaccumulation that threatens human health.

TPDES permits contain technology-based effluent limits reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses of the receiving stream, additional conditions are included in the TPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other toxicity databases to determine the adequacy of technology-based permit limits and the need for additional water-quality based controls.

TPDES storm water permits generally do not contain water-quality-based effluent limits (WQBELs). As stated in 30 TAC §307.8(e), controls on the quality of permitted storm water discharges are largely based on implementing BMPs or technology-based limits in combination with instream monitoring to assess standards attainment and to determine whether additional controls on storm water are needed. Typically, a combination of stabilization practices, structural practices, and non structural BMPs are necessary throughout a construction site to provide adequate water quality protection. It has been preliminarily determined that if permit requirements are properly implemented, no significant degradation is expected and existing uses will be maintained and protected.

XII. Monitoring

No discharge monitoring is proposed for this general permit beyond those described in Part X.B. of this fact sheet, related to benchmark sampling applicable to storm water runoff associated with concrete batch plants. This approach is continued from the existing general permit.

XIII. Procedures for Final Decision

The memorandum of agreement (MOA) between the EPA and TCEQ provides that EPA has up to 90 days to comment, object, or make recommendations to the draft general permit before it is published in the *Texas Register*. 30 TAC Chapter 205 requires that when the draft general permit is proposed, the executive director must publish notice, in at least one newspaper of statewide or regional circulation. The TCEQ may also publish notice in additional newspapers of statewide or regional circulation. Mailed notice must also be provided to the following:

- A. The county judge of the county or counties in which the discharges under the general permit could be located;
- B. if applicable, state and federal agencies for which notice is required in 40 CFR §124.10(c);
- C. persons on a relevant mailing list kept under 30 TAC §39.407, relating to Mailing Lists; and
- D. any other person the executive director or chief clerk may elect to include.

After notice of the initial draft permit (IDP) is published in the *Texas Register* and the newspaper, the public will have at least 30 days to provide public comment on the IDP. A public meeting will be held at the end of the public comment period. A public comment hearing is intended for the taking of public comment, and is not a contested case proceeding under the Administrative Procedure Act. The public will be given notice of the date, time, and place of the meeting, as required by commission rules. The executive director will respond to all

significant public comments raised during the public comment period and make the response available to the public. The proposed general permit will then be filed with the commission to consider final approval of the permit. The executive director's response to public comment will be made available to the public at least ten days before the commission acts on the proposed general permit.

XIV. Administrative Record

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

A. Code of Federal Regulations (CFR) and Federal Register (FR) Citations

40 CFR Parts 122 and 124

Federal Register dated February 17, 1998 (Volume 63, No. 31, Pages 7858-2906)

Federal Register dated July 6, 1998 (Volume 63, No. 128, Page 36498-36519), *Resissuance of NPDES General Permits for Storm Water Discharges From Construction Activities in Region 6; Notice.*

Federal Register dated December 8, 1999 (64 FR 68722)

B. Letters/Memoranda/Records of Communication

Interoffice Memorandum from the TCEQ Water Quality Standards Team.

Public comments received during the public notice period for the draft permit.

C. Miscellaneous

TPDES Construction General Permit (CGP) TXR150000, issued on March 5, 2003.

U.S. Environmental Protection Agency's Fact Sheet No. 3.1, *Storm Water Phase II Final Rule - Construction Rainfall Erosivity Waiver*, January 2001 (EPA 833-F-00-014).

Agriculture Handbook No. 282, *Predicting Rainfall-Erosion Losses from Cropland East of the Rocky Mountains, Guide for Selection of Practices for Soil and Water Conservation*, U.S. Department of Agriculture, Agricultural Research Service, in Cooperation with Purdue Agricultural Experiment Station.

Agriculture Handbook No. 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.

Quality Criteria for Water (1986), EPA 440/5-86-001, 5/1/86.

The State of Texas Water Quality Inventory, 13th Edition, Publication No. SFR-50, Texas Natural Resource Conservation Commission, December 1996.

Texas Surface Water Quality Standards, 30 TAC §§307.1 - 307.10, effective August 17, 2000.

Procedures to Implement the Texas Surface Water Quality Standards, Texas Commission on Environmental Quality, Publication RG-194, January 2003.

TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, TNRCC Document No. 98-001.000-OWR-WQ, May 1998.

TCEQ Rules, including: 30 TAC Chapters 39, 205, 213, 281, 305, 307, 309, 311, 313, 319, 321, and 331.

TPDES General Permit No. TXR050000, the Multi Sector General Permit (MSGP), issued August 14, 2006.

TPDES General Permit No. TXG110000, issued November 7, 2006.