

Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040010 Annual Reporting Year: 1 (10/01/2018 – 09/30/2019):

MS4 Operator Level: IV Name of MS4/Permittee: City of Killeen

Contact Name: MD Hossain Telephone Number: 254-501-7629

Mailing Address: PW-Environmental, 200 E. Avenue D, 2nd Floor, Killeen, TX 76541

E-mail Address: mhossain@killeentexas.gov

B. Narrative Provisions (Part IV Section B.2.(a))

Provide information on the status of complying with permit conditions: (Part V - Standard Permit Conditions):

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	X		City is currently working under the previous MS4 permit while awaiting approval to the City's new SWMP
Permittee is currently in compliance with recordkeeping and reporting requirements.	X		A copy of items supporting each BMP is included on the attached DVD.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	X		The City is not under a TMDL, nor in the Edwards Aquifer, nor been cited for a violation of the storm water regulations.

2. Provide a general assessment of the appropriateness of the selected BMPs. Use table below or attach a summary, as appropriate (See Example 1 in instructions):

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.
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See Attached BMP Sheets for each MCM and BMP in the City's permit.

- Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as monitoring data) to evaluate reductions in the discharge of pollutants. Use a table or attach a narrative description as appropriate:

MCM	BMP	Parameter	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (Yes / No / Explain)
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See Attached BMP Sheets for each MCM and BMP in the City's permit.

- Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (See Example 2 in instructions):

MCM(s)	Measurable Goal(s)	Success
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See Attached BMP Sheets for each MCM and BMP in the City's permit.

C. Stormwater Monitoring Data (Part IV Section B.2.(b))

- The MS4 has conducted monitoring of stormwater quality and submitted in the annual report (i.e. analytical and visual observations).

 X Yes No

a. Explain below or attach a summary to submit along with any monitoring data used to evaluate the success of the SWMP at reducing pollutants to the maximum extent practicable. Be sure to include a discussion of results:

The City began tracking water quality testing data in Year 2 of its original MS4 permit. The City incrementally added testing sites along main water bodies during the remaining original permit period. Beginning in Year 2 of the City's authorized 2013 permit, City staff continued to add dry weather screening points along tributaries into the main water bodies. The tributaries were chosen based on results from previous wet weather and dry weather testing results that are not in compliance with the adopted surface water standards. The City has also utilized testing information gathered in 319 grant projects to develop priority areas. The delineation of priority areas in those grant projects allows the City to concentrate on impacted areas and to develop an implementation plan for dry weather screening.

The City found that the original parameters being tested did not represent all of the pollutants that the City wanted to track. Towards the end of the original permit the City added additional dry weather testing parameters. The industry standard is to have multiple data points for each location vetted prior to comparing the results and analyzing reductions. The standard is typically 24 data points and for wet weather testing those results should be consecutive monthly points over a two year period. Beginning in Year 2 of the City's 2013 permit, City staff began the comparison of the 5 data points taken per year. In addition the City has collected data on Long Branch Ditch, adding 8 testing sites. The City has also added the tributaries of the main branches of creeks starting with South Nolan Creek and testing at 7 locations along these tributaries. The City then added all the tributaries connecting to South Nolan Creek, Little Nolan Creek and Long Branch Ditch. This added another 54 testing locations within the City. In permit Year 5 of original permit the City added the tributaries of Rock Creek, Reese Creek and Trimmier Creek for an additional 28 testing sites. The addition of these testing sites throughout our two previous permits brings the total of dry weather testing sites to 144. The City will continue to test these sites twice a year to detect and eliminate any pollutants found to maximum extent practicable. See BMP report page for ID-6 and Attachments for MCM2-ID6.

D. Impaired Waterbodies (Part IV Section B.2.(c))

1. If applicable, explain below or attach a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern:

Currently, some of the City's watercourses are listed as impaired for bacteria. A reduction in bacteria levels does not immediately occur once a change has been made. The City adopted its illicit discharge ordinance (2009), fats oil and grease ordinance (2009), erosion and sediment control ordinance (2011) and post construction ordinance (2012) all within the City's original

MS4 permit. However, active enforcement of those ordinances did not begin to occur until 2012. In addition to the above mentioned ordinances, the City adopted a revised comprehensive drainage design manual (2011) and an infrastructure design and development standards manual (2012 & 2014). These manuals assist the City in proactively addressing water quality concerns that occur during development. The City also continues to use drainage map books in emergency response situations.

See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria: PE-1, PE-7, PE-8, ID-2, ID-3, ID-5, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-4, & GH-6.

In addition, a copy of the 2008 final report for Section 319(h) Nonpoint Source Grant: Assessment and Targeting of Bacterial Sources in the South Nolan Creek Watershed is included as Attachment 2. A copy of the 2009 final report for Section 319(h) Nonpoint Source Grant: Assessment and Targeting of bacterial sources in the Lampasas River Watershed is included as Attachment 2. Both monitoring projects were completed to establish a baseline for storm water quality within the City. This testing was not completed as part of the City's BMPs since it was funded thru the section 319(h) Grant and is included for reference only. We are currently in the final stages of our current 319 Grant that began in 2013. The final report has been submitted to the TCEQ & EPA for comment. A copy is included for reference only. The City does use the data collected from these grants to the new data we collect annually to identify areas for pollution reduction. The City has continued periodic water quality testing along the south and north reaches of South Nolan Creek, Little Nolan Creek, Trimmier Creek, Reece Creek and Rock Creek, Long Branch Creek, tributaries of the southern and northern portion of South Nolan Creek Little Nolan Creek, and added tributaries of Rock Creek, Reese Creek and Trimmier Creek this permit year. Per the City's permit, this water quality testing will be expanded by adding one sub basin per year to the dry weather screening and illicit discharge monitoring. The testing results have stayed relatively consistent throughout the duration of the previous two 5 year permits. Overall, the City has experienced a reduction in visible trash in the public sections of the waterways. City staff continues to see an increase in illicit discharge reports by citizens, thereby indicating an increase in public awareness. The City has also seen a decrease in sanitary sewer overflows due to the City's proactive approach to preventive maintenance. The City's recent enforcement of the Water Quality Ordinances has noted visible reductions of sediment, illegal dumping, trash and illicit discharges within the watercourses during annual maintenance inspections.

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (*Part II Section D.4.(a)*): **N/A**

3. Report the benchmark identified by the MS4 and assessment activities (*Part II Section D.4.(a)(6)*):

Benchmark Parameter <i>(Ex: Total Suspended Solids)</i>	Benchmark Value	Description of additional sampling or other assessment activities	Year(s) conducted
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See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria: PE-1, PE-7, PE-8, ID-2, ID-3, ID-5, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-4, & GH-6.

4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (*Part II Section D.4.(a)(4)*):

Benchmark Parameter	Selected BMP	Contribution to achieving Benchmark
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See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria: PE-1, PE-7, PE-8, ID-2, ID-3, ID-5, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-4, & GH-6.

5. If applicable, report on focused BMPs to address impairment (*Part II Section D.4.(a)(5)*):

Pollutant to Address <i>(Ex: Bacteria)</i>	Description of Focused BMP	Comments/Discussion
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See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria: PE-1, PE-7, PE-8, ID-2, ID-3, ID-5, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-4, & GH-6.

6. Describe progress in achieving the benchmark (*Part II.D.4.(a)(6)*):

For example, the MS4 may use the following indicators:

- number of sources identified or eliminated;
- decrease in number of illegal dumping;
- increase in illegal dumping reporting;
- number of educational opportunities conducted;
- reductions in sanitary sewer flows (SSOs)
- increase in illegal discharge detection through dry screening

Benchmark Indicator	Description/Comments
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See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria: PE-1, PE-7, PE-8, ID-2, ID-3, ID-5, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-4, & GH-6.

E. Stormwater Activities (Part IV Section B.2.(d))

Describe any stormwater activities the MS4 operator has planned for the next reporting year. Use the table or attach a summary, as appropriate:

MCM(s)	BMP	Stormwater Activity	Description/Comments
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See Attached BMP Sheets for each MCM and BMP in the City’s permit.

F. SWMP Modifications (Part IV Section B.2.(e))

1. Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ’s review.

X Yes ___ No

If ‘Yes’, report on changes made to measurable goals and BMPs:

New SWMP is currently under review by TCEQ.

BMP	Description	Implementation Schedule (Start Date etc.)	Status / Completion Date (completed, in progress, not started)
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See the following BMP report pages and corresponding attachments for BMPs that are used by the City to address bacteria and other potential pollutants: PE-1, PE-7, PE-8, ID-2, ID-3, ID-4, ID-5, ID-6, ID-7, ID-8, C-1, C-3, PC-1, PC-3, GH-1, GH-2, GH-3, GH-4, GH-5, GH-6, GH-8, GH-9, GH-10, GH-11, GH-12, IS-1, IS-2, & IS-3.

H. Additional Information (Part IV Section B.2.(g))

1. Is the permittee relying on another entity/ies to satisfy some of its permit obligations?

Yes No

If "Yes," provide the name(s) of other entity/ies and an explanation of their responsibilities (add more spaces or pages if needed):

Name and Explanation: **Central Texas Council of Governments (CTCOG) – Responsibility to fund and hold the Household Hazardous Waste collection events. The City advertises the event on behalf of CTCOG to our residents. A Household Hazardous Waste collection event was also hosted in the City.**

Name and Explanation: **Keep Killeen Beautiful (KKB)– Responsibility to perform outreach measures to residents in the City. The City supplies handouts, educational materials, staffing at events, participation in the committee, and help with stream clean up and recycling events.**

Name and Explanation: **Lampasas River Watershed Partnership (LRWP) – Responsibility to perform outreach measures to residents in the City and those in the watershed. The City supplies staff to be on the steering committee and work groups, a meeting location, and provide input on the formation of the Lampasas River Watershed Protection Plan. Keep Temple Beautiful – advertise education out-reach & advertise HHHW & select recycling events that are open to the region.**

Name and Explanation: **Nolan Creek Watershed – Responsibility to perform outreach measures to residents in the City and those in the watershed. The City supplies staff to be on the steering committee and work groups, a meeting location, and provide input on the formation of the Nolan Creek Watershed Protection Plan.**

Name and Explanation: **Centex Sustainable Community Partnership – Responsible for conducting community outreach programs and projects to support sustainability. The City also supplies handouts, educational materials, staffing at events and participation in the committee.**

2.a. Is the named permittee sharing a SWMP with other entities?
 Yes No

2.b. If 'yes,' is this a system-wide annual report including information for all permittees?

Yes No

If 'Yes,' list all associated permit numbers and permittee names (add additional spaces or pages if needed):

Authorization Number: _____	Permittee: _____

I. Construction Activities (Part IV Section B.2.(h-i))

1. The number of construction projects in the jurisdiction of the MS4 where the permittee was not the construction site operator (as provided in submittals to the MS4 operator via notices of intent or site notices) 9,804

2. a. Does the permittee utilize the optional seventh MCM related to construction?
 Yes No

2. b. If 'yes,' then provide the following information for this permit year:

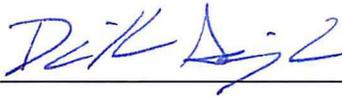
The number of municipal construction activities authorized under this general permit	
The total number of acres disturbed for municipal construction projects	

Note: Though the seventh MCM is optional, implementation must be requested on the NOI or on a NOC and approved by the TCEQ.

J. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Danielle Singh Title: Executive Director of Public Works

Signature:  Date: 12/23/19

Name (printed): MD Hossain Title: City Engineer

Signature:  Date: 12/23/19

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Name (printed): _____ Title: _____

Signature: _____ Date: _____

Note: If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).