



The City Of

# San Angelo, Texas

Engineering Services Department  
301 W Beauregard, San Angelo, TX 76903

02/18/2019

Texas Commission on Environmental Quality  
Stormwater & Pretreatment Team Leader (MC- 148)  
P.O. Box 13087  
Austin, TX 78711-3087

Re: Phase II MS4 Annual Report Transmittal for the City of San Angelo  
TPDES Authorization: TXR040277

Dear Team Leader:

This letter serves to transmit the required annual report for the Texas Pollutant Discharge Elimination System Small Municipal Separate Storm Sewer System General Permit, Authorization Number TXR040277 for the City of San Angelo.

The annual report is for Year 5. The reporting periods beginning December 13, 2017 and ending December 12, 2018.

A separate Notice of Change has not been submitted as next year is a permit renewal and all changes will be submitted with our Notice of Intent.

As required by the general permit, a copy of the report has been mailed to the TCEQ's Region 8 office in San Angelo, Texas. A copy has also been sent to TxDOT – San Angelo District, Tom Green County, Angelo State University, and Goodfellow Air Force Base

Sincerely,

A handwritten signature in blue ink that reads "Shannon McMillan".

Shannon McMillan  
Stormwater Program Manager

Attachment: Permit Year 5 MS4 Annual Report

Cc: Winona Henry, P.E., Regional Director – TCEQ Region 8  
Mark Jones, P.E., District Engineer – San Angelo TxDOT District  
Judge Stephen Floyd, Tom Green County Judge – Tom Green County  
Erika Alanis Unger, Stormwater Manager – Goodfellow Airforce Base



# Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

## A. General Information

Authorization Number: TXR040277

Reporting Year (year will be either 1, 2, 3, 4, or 5): 5

Annual Reporting Year Option Selected by MS4:

Permit Year 5

Reporting period beginning date: 12/13/2017

Reporting period end date: 12/12/2018

MS4 Operator Level: 3 Name of MS4: City of San Angelo

Contact Name: Shannon McMillan Telephone Number: 325-657-4434

Mailing Address: 301 W. Beauregard - San Angelo, TX 76903

E-mail Address: shannon.mcmillan@cosatx.us

A copy of the annual report was submitted to the TCEQ Region YES X NO       
Region the annual report was submitted. TCEQ Region 8

## B. Status of Compliance with the MS4 GP and SWMP

1. Provide information on the status of complying with permit conditions:  
(TXR040000 Part IV Section B.2.):

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	X		Approved SWMP
Permittee is currently in compliance with recordkeeping and reporting requirements.	X		All records kept to show compliance
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	X		All eligibility requirements are met.

2. Provide a general assessment of the appropriateness of the selected BMPs. You may use the table below (**See Example 1 in instructions**):

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
1	1 – Utility Bill Inserts	Yes – Utility bill inserts educate the public on pollution prevention, thus leading to a reduction in discharge of pollutants.
1	2 Stormwater Information Website	Yes – The COSA Stormwater Information website offers a variety of useful stormwater information including seasonal videos for pollution prevention, links to useful resources, pdf of the city’s stormwater management plan, stormwater hotline and email for questions or complaints, as well as other useful information to inform the citizens of the importance of stormwater pollution prevention and the city’s responsibility to enforce that regulation.
1	3 – Public Reference	Yes – Developed reference materials are distributed throughout the city’s public areas such as the library, museum, visitor’s center, and the local nature center. Publications offer valuable information to the general public on efforts they can implement to improve stormwater quality.
1	4 – Stormwater Videos	Yes – Stormwater videos educate the public who may not be connected to email or other various medias. Stormwater videos are broadcast on the City’s free public access channel, Facebook, website, and the City’s YouTube Channel.
1	5 – Storm Drain Markings	Yes - Storm drains in high visibility areas are marked to denote that the drain discharges directly into the Concho River. This educates the public walking along the river about the storm drains and pollution prevention.
1	6 – Classroom Education	Yes – Classroom educational events are catered to make an impact on young minds and increase awareness among school aged children.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
1	7 – General Education of City Employees	Yes – General educational publications and trainings for city employees that are involved in activities that could impact stormwater are conducted. Trainings inform and educate employees about stormwater quality as well as application in the field. Pollution prevention and erosion control are areas of focus, as well as good housekeeping practices for chemical/potential contaminate storage and spill response.
1	8 – Education of Elected Officials	Yes – By educating elected officials on stormwater pollution prevention, they are able to educate our citizens on the importance of Stormwater pollution prevention and water quality. Education of elected officials also strengthens the relationship between the Stormwater program and City Council/Mayor.
1	9 – Business, Commercial, and Industrial Education	Yes – Through educational outreach materials, businesses, commercial industry and industrial facilities are educated regarding the importance of stormwater management. TV spots, billboards and other outreach methods are used to expand effectiveness of outreach. One-on-one education is also conducted during certain circumstances. This BMP is effective based on an informative aspect and has the ability to reach a wide variety and span of customers.
1, 2, 3, 4	10 – Developer, Builder, Engineer Education and Training	Yes – Educational materials are utilized to reach a larger number of potential customers. TV spots and other outreach methods are used. Educational events with certain associations affiliated with development industry are utilized as well. This BMP also addresses MCM 2, 3 and 4. Building contractors are also educated on a one-on-one basis during inspections. These methods have proven to be very effective within the development community and helps build a good working relationship with the development community. COSA Development Review Commission and Consultation meetings are also utilized to educate developers, engineers and other applicable professionals regarding the importance of stormwater regulation. A reduction in sediment complaints have been noticed.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
1, 2, 3, 4, 5	11 – City Inspector Training	Yes – Trainings allow staff to identify potential stormwater issues in the field and assist in finding potential sources of discharges.
1 & 2	12 – Stormwater Hotline/Email Violation Reporting (Complaints)	Yes – The hotline allows the general public a clear avenue for reporting stormwater violations and questionable discharges. City crews are better able to respond to stormwater violations in a timely fashion.
1 & 2	13 – San Angelo Trash Cleanups	Yes – Trash cleanups are appropriate for reducing the discharge of pollutants by the removal of floatables and other degrading waste from entering our rivers and lakes.
1 & 2	14 – Adopt-A-Spot	Yes – Adopt-a-spot programs directly reduce pollutants by the removal of floatables and other degrading material from entering our rivers and lakes.
2	15 – Illicit Discharge Detection and Elimination Enforcement	Yes – Enforcement of illicit discharges directly reduces pollutant discharge by stopping the discharge and enforcing to protect against future discharges.
2	16 – Storm Sewer System Mapping	Yes – The city’s storm sewer mapping system allows operations to determine where to check for repairs or cleaning of drains.
2	17 – Illicit Discharge Inspections	Yes – The City responds to all illicit discharge complaints and reports. If needed, City crews will utilize BMPs to prevent further discharge which directly reduces the discharge of pollutants.
2	18 – Sanitary Sewer Line Maintenance and Inspection	Yes – Proper maintenance and inspection of sewer lines prevents discharges of sewage.
2 & 3	19 - Erosion Control Ordinance and Requirements for Construction Site Contractors	Yes – Ordinance enforces TCEQ regulation as well as requires sites not permitted by the state to ensure erosion control is used.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
3	20 – Site Plan Review	Yes - Site plan reviews are conducted to ensure that all construction activities that will disturb soil are aware that proper pollution prevention devices will need to be installed to prevent a discharge of sediment or other pollution.
3	21 – Construction Site Inspections	Yes – Construction site inspections ensure that proper erosion control methods are being utilized to prevent sediment from leaving a construction site.
3	22 – Receipt and Consideration of Information from Public	Yes - Although this does not result in a direct reduction of pollutants, it does offer assistance in locating potential Stormwater violations as well as finding those who need authorization.
4	23 – Post Construction Ordinance	Yes – Ensure 70% vegetation is achieved to prevent sediment from leaving site, as well as requires all permanent structures to be maintained by owner/operator.
4	24 – Engineering Design Review	Yes - This offers a direct reduction of pollutants because long-term pollution prevention is required before new or redevelopment begins. Our City ordinance requires that sites one acre and larger require an Engineered drainage study.
4	25 – Land Use Planning	No - Although zoning changes do not have a direct impact on reducing pollutants, zoning changes do have the potential to impact water quality.
5	26 – Chemical Applications and Materials Management	Yes – This BMP ensures that proper application and storage is utilized for chemicals and materials. This directly reduces pollutants by removing the likelihood of a discharge.
5	27 – Storm Sewer System Maintenance	Yes – Maintenance and inspection of storm sewer system ensures drainage flows as intended as well as removes potential pollutants from entering our lakes and rivers.
5	28 – Street Sweeping	Yes – Program removes sediment and yard debris from the curb and gutter, preventing it from entering our rivers and lakes.

<b>MCM(s)</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
5	29 – Structural Control Maintenance	Yes – Debris and build up are removed from structural controls, which results in a reduction of pollutants.
5	30 – Spill Maintenance	Yes – City facility spill protocols and response directly reduce the discharge of pollutants.
5	31 – Employee Training	Yes – Many City departments that work in the field are trained to identify stormwater violations. This results in a direct reduction of pollutants because we have staff working all over the city who are trained to see stormwater violations and issues.
5	32 – Disposal of Collected Storm Sewer System Waste	Yes – Proper disposal of sweeper spoils causes a direct reduction of pollutants in stormwater by removing spoils and properly disposing.
5	33 - Operations and Maintenance Program to Reduce/Prevent Pollution from Municipal Operations	Yes – The Operations and Maintenance Manual assists in ensuring that all spills, construction projects, and materials are handled correctly to prevent discharges.
4	34 - Impaired Water Body - North Concho River, POC: Depressed Dissolved Oxygen	Yes – Stormwater samples are analyzed to ensure that the MS4 is not directly discharging this pollutant of concern. (No TMDL)
4	35 - Impaired Water Body – North Concho River, POC: Bacteria	Yes - The City is not likely to directly discharge this POC above critical levels, but will continue to monitor levels via sampling and analysis. (No TMDL)

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as visual observation, amount of materials removed or prevented from entering the MS4, or if required monitoring data, etc.) to evaluate reductions in the discharge of pollutants. You may use the table:



<b>MCM</b>	<b>BMP</b>	<b>Information Used</b>	<b>Quantity</b>	<b>Units</b>	<b>Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)</b>
1	1	Utility Bill Insert	36,252	Stormwater info flier	No. Although, education of the general public will lead to a reduction in pollutants through awareness via informational fliers.
1, 2	12	Stormwater Hotline/Email	40	Phone/email	Yes. This BMP allows the public to alert staff of potential pollutant discharges so we may quickly respond.
1, 2	13	San Angelo Trash Clean-ups	58.5	Trash bags collected	Yes. This BMP demonstrates a direct reduction in pollutants by removing trash and potential floatables from entering the city's MS4 and water bodies.
1, 2	14	Adopt-A-Spot Parks	64	Volunteers	Yes. This BMP does contribute to a direct reduction in pollutants by removing trash from park areas along the river.
2	17	Illicit Discharge Inspections	7	Inspections	Yes. Detection and elimination of the source of the discharge results in a direct reduction of pollutants.
2	18	Sanitary Sewer Line Maintenance and Inspection	89,000	Feet of line inspections	Yes. Reducing potential sanitary sewer leaks and overflows positively impacts water quality by reducing the potential for bacteria leaking into the river from leaking sewer pipes.
3	19	Stormwater Ordinance for Construction Activities	43	Violations	Yes. This caused a direct reduction in sediment/pollutants leaving

<b>MCM</b>	<b>BMP</b>	<b>Information Used</b>	<b>Quantity</b>	<b>Units</b>	<b>Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)</b>
					construction sites and entering the MS4.
3	22	Post-Construction Stormwater Ordinance	8	NOT/Final Site Inspections	Yes. The ordinance directly reduces pollutants via ensuring final stabilization has occurred before inspections cease.
5	26	Chemical Applications and Materials Management	14	Applicator License	Yes. By having licensed applicators, we ensure that chemical applications are applied according to state and federal regulations, thus resulting in a direct pollutant reduction.
5	27	Storm Sewer System Maintenance	244	Line maintenance & Repair	Yes. Inspections and periodic cleaning directly reduce pollutants from entering our rivers and lake.
5	28	Street Sweeping	3088.05	Miles	Yes. Street sweeping removes fine sediment, leaves, and seal coat aggregate from the curb and gutter, eliminating potential pollutants.
5	30	Spill Response	8	City responded	Yes. Spill response protocols do contribute to a reduction in pollutants by responding to, and mitigating, the spill. Cleanup prevents the discharge from entering the City's MS4.
5	32	Storm Sewer System Waste Disposal	2,439.93	Tons	Yes. Removal of debris and sediment from the City's conveyance system results in a direct reduction in pollutants.

<b>MCM</b>	<b>BMP</b>	<b>Information Used</b>	<b>Quantity</b>	<b>Units</b>	<b>Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)</b>
5	32	Street Sweeping Spoils Disposal	2,144.38	Tons	Yes. Proper disposal of sweeper spoils at the San Angelo Landfill prevents reintroduction of these contaminants into the MS4.
5	33	O&M to reduce/prevent pollution from municipal operations	7	Violations	Yes. It is important for the city to enforce stormwater regulations upon its own facilities and projects. By doing inspections and citing violations a direct reduction in pollutants has occurred.
4	34, 35	Impaired Body of Water	5	Rain events sampled	Yes. Stormwater analysis helps us monitor certain indicators of reduced or improved water quality. Sampling allows the opportunity to eliminate the source of pollution by point source tracking.

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (**See Example 3 in instructions**):

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
1	Distribute educational information as a utility bill insert 1 time a year.	Met Goal: This city distributed 36,252 utility bill inserts regarding stormwater pollution prevention.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
1	Revise and update the stormwater website as needed. Solicit public input as needed.	Met Goal: The City's Stormwater Information website is updated seasonally with relevant stormwater information and videos. The use of social media, local access channel, and city website allows the public the opportunity to participate in the stormwater management program.
1	Acquire, develop, and provide copies of educational materials at the public library and other public access places.	Met Goal: Publications are distributed throughout the community's public places such as the Nature Center, Library, and Visitor's Center.
1	Air stormwater educational videos on the city's public access channel. Make video available to public on demand.	Exceeded Goal: 6 interviews/informational videos were aired during the permit term which exceeded last year's total of 4. Videos are available on demand via Youtube and Public Access channel.
1	Track the location of placed storm drain markers and use of volunteer efforts	Met Goal: Storm drain markings are still visible on drains along the Concho River, and in good condition. In the future, we will utilize volunteer groups for maintenance.
1	Provide stormwater education materials as determined by the coordination meetings with various types of children's organizations	Exceeded Goal: Six hands-on, presentations were provided to children ranging from ages 5 to 18. Presentations exceeded last year's total of 4 presentations.
1	Provide educational information to public employees at least once a year.	Exceeded Goal: Seven internal trainings were provided to City staff.
1	Provide overview of Phase II MS4	Exceeded Goal: Two City Council presentations were made during the permit term. Staff also had 3 separate meetings

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	<p>permit requirements and annual updates of implementation progress.</p> <p>Conduct a minimum of 1 public meeting per year.</p>	<p>with 3 separate elected officials. This exceeds last year's goal of 2 public meetings.</p>
1	<p>Distribute educational information to local businesses a minimum of one time per permit year and solicit feedback.</p> <p>Evaluate and revise program if needed.</p>	<p>Exceeded Goal: Educational information was provided to certain businesses via Development Task Force Meetings and Stormwater sub-committee meetings. The City responded to over 50 comments regarding the revision of our Stormwater Ordinances. Over 10 public meetings were held for stakeholders, business owners, and the general public.</p>
1, 2, 3, 4	<p>Provide construction site erosion control educational material and/or training opportunity at least once per year for builders, developers, and engineers that are active in San Angelo.</p> <p>Encourage area COG or equivalent training for on-site construction personnel with</p>	<p>Exceeded Goal: Nine meetings were held during the permit term for developers, builders, and engineers in San Angelo. Combined attendance for all meetings is 109 attendees. This exceeds last year's total of 1 training/meeting.</p>

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	erosion control responsibilities.	
1, 2, 3, 4, 5	<p>Provide appropriate construction site erosion control training to inspection personnel at least once every three years.</p> <p>Provide appropriate training for new City inspectors prior to them conducting unassisted construction site erosion control inspections.</p> <p>Require area COG or equivalent training for site inspectors.</p>	<p>Exceeded Goal: Five engineering inspectors obtained their certified stormwater inspector certification. This makes 10 employees who are certified to conduct stormwater inspections (last year we only had 5). Two internal trainings were held for the engineering department and stormwater operations regarding erosion control for construction sites.</p>
1, 2	<p>Continue to educate the public about the existence of the storm water reporting line through various Public Education BMPs.</p> <p>Continue documenting each call, dispatching to appropriate</p>	<p>Met Goal: Thirty-two complaints were received via the Stormwater Hotline and Stormwater Email. All complaints were documented and reviewed to identify any reoccurring issues. City crews responded as appropriate. This number has been significantly reduced due to the efforts of the Stormwater Management Program; last year 55 complaints were submitted. Contact information for the Hotline and email are advertised on Facebook, local channels, and educational publications throughout the city.</p>

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	<p>department for proper response.</p> <p>Conduct annual review of calls to identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting line improvement, and areas requiring additional educational or enforcement effort to protect storm water quality.</p>	
1, 2	Continue existing trash cleanup activities. Evaluate additional potential activities identified in previous permit year, if any.	Exceeded Goal: 112.46 tons of trash was hauled to the landfill during the permit term. Parks and Stormwater both conduct daily, weekly, and monthly trash cleanup services in parks and in drainage areas.
1, 2	Conduct Park cleanup events once per year for selected parks.	Exceeded Goal: Twenty-one events were held throughout the year via the Adopt-A-Spot volunteers.
2	<p>Continue penalty-based enforcement of IDDE provisions of existing ordinance.</p> <p>Implement the COSA IDDE Procedural Manual</p>	<p>Exceeded Goal: Existing ordinances were revised and the COSA IDDE procedural manual and new ordinance were passed through City Council with the terms of the new ordinance immediately implemented. This allowed the Stormwater Department, rather than Code Compliance, to respond, enforce, and offer penalties.</p> <p>Tom Green County is the permitting authority for all OSSFs installed within the county and city limits. Tom Green County is responsible for implementing the program for leaking OSSFs.</p>

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	Implement written procedures to prevent and correct leaking OSSFs	
2	Maintain MS4 Outfall Map. Revise or expand as needed.	Met Goal: MS4 maps are revised as new outfalls are found and old ones removed.
2	Continue to implement MS4 field staff training using the COSA IDDE Training Manual.  Conduct scheduled illicit discharge inspections at MS4 outfalls.	Met Goal: Seven IDDE violations were cited and remedied upon re-inspection. During permit year 4, eight IDDE violations were identified.
2	Conduct sanitary sewer inspections. Perform maintenance or line replacement when needed.	Exceeded Goal: 89,000 feet of sewer lines inspected (an increase from last year's 84,000). 224 sewer mains were cleaned and 20 sewer mains were repaired. The City also installed newer lines in the Sulfur Draw area as well as Bell Street area where lines were in disrepair.
2, 3	Continue penalty-based enforcement of erosion control provisions of stormwater control ordinance.	Exceeded Goal: Forty-three violations were assessed and no stop work orders issued. The violations have decreased since last year (68). As shown, contractor education and knowledge of best management practices has increased throughout the development community.
3	Continue to conduct plan reviews.  Implement written procedures for consideration of water quality	Met Goal: During the permit term, engineering reviewed 65 site plans and 25 plats. Drainage studies are required for those sites that are over an acre. 17 drainage studies were reviewed to ensure adequate storage for stormwater runoff is developed. All studies must comply with the City's drainage ordinances and the City's drainage manual. All construction, regardless of size, is required to implement erosion control and best management practices.



<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	<p>impacts during site plan review.</p> <p>Continue to require that all small and large construction site activities adhere to the TPDES CGP TXR150000 requirements, including the minimization of discharges from spills, and leaks, and illicit discharges such as wash out wastewater, fuels, oils, soaps, solvents, and dewatering activities.</p>	
3	<p>Conduct penalty-based enforcement construction site inspections in accordance with the COSA Construction Site Inspection and Enforcement Manual</p> <p>Implement MS4 staff training in accordance with the COSA Construction Stormwater</p>	<p>Exceeded Goal: 111 construction sites were inspected throughout the city (an increase from 63 sites last year). 43 violations were assessed (decrease from 68 last year), none leading to a stop work order/fine. All violations were resolved prior to that level of enforcement. Logs are kept of all active construction sites as well as inspections conducted. A total of 1,563 (increase from last year's inspections of 1,402) inspections were conducted throughout the year and on average, each site was inspected 14 times. Staff attended 5 trainings for stormwater.</p>

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	<p>Program Training Manual.</p> <p>Develop and maintain inventory of permitted active public and private construction sites.</p> <p>Obtain goal of inspecting every construction site within the city limits at least 3 times per year.</p>	
4	Continue the existing process of assessing proposed zoning changes in relation to the City's existing land use plan.	Met Goal: Thirty-two re-zoning reviews were conducted during the permit term. Of the 32, only six were granted a heavier zoning classification. Of those six, none had the propensity to impact water quality in a negative manner.
5	<p>Continue implementation of San Angelo's existing chemical and materials management program, and implement any changes based on prior year's evaluation.</p> <p>Continue to provide and document refresher training for chemical applicators in</p>	Met Goal: All staff that hold a TDA applicator license are required to attend trainings to earn applicable CEU's for continuing education. Staff participates in tailgate trainings to ensure staff without an applicator license apply fertilizer, pesticides, and herbicides that do not require a license, properly. 14 applicator trainings were held for all staff that apply herbicides.

<b>MCM(s)</b>	<b>Measurable Goal(s)</b>	<b>Explain progress toward goal or how goal was achieved If goal was not accomplished please explain</b>
	accordance with industry guidelines.	
5	<p>Implement the inspection schedule.</p> <p>Perform maintenance as necessary.</p> <p>Clean system as needed in response to complaints or reported problems.</p>	<p>Met Goal: 105.68 tons of debris were removed from storm drains. City crews worked on drains in response to complaints and inspection schedule/priority. Drain repairs were made if funding was available. Larger projects that require more funds are requested via CIP project requests.</p>
5	Continue street sweeping program and implement any changes identified in the street sweeping program evaluation.	<p>Exceeded Goal: Street sweepers swept 3088.05 lane miles. A reduction in waste was noted from last year. 2,144.38 tons of debris was removed via street sweeping, last year's total was 3,260.07 tons.</p>
5	<p>Monitor private industry structural control maintenance (documentation records) and monitor public maintenance of structural controls through documented inspection.</p> <p>Inspect and maintain City-maintained structural controls.</p>	<p>Met Goal: Private sector construction projects may require drainage studies if they exceed 1 acre in size or are located in an area with known drainage problems. The drainage studies are reviewed by the City's Engineering Department and determined whether or not structural controls such as detention/retention, or other controls are necessary. A structural control must be designed by a licensed engineer and are reviewed by the city's Engineering Department. Owners of structural controls are required to perpetually maintain controls to ensure they are operating correctly and are effective.</p> <p>The city's Stormwater Operations department inspected all city-owned structural controls for compromises in their effectiveness. During inspection of these controls, work orders are built to determine budgetary requirements for repair. Structural controls are then graded in priority and urgency. As funds are available, controls are repaired or maintained. If</p>

MCM(s)	Measurable Goal(s)	<p align="center"><b>Explain progress toward goal or how goal was achieved</b></p> <p align="center"><b>If goal was not accomplished please explain</b></p>
		<p>repairs are beyond budget, the department lists them on the capital improvement projects list to be funded and repaired in the future.</p>
5	Continue implementation of existing spill response procedures and training through the San Angelo Fire Department.	Exceeded Goal: The City Stormwater Department and the San Angelo Fire Department have developed a coordinated effort to responding to spills. During the permit term, a revised illicit discharge and spills ordinance was passed. Passing the ordinance allowed the City to have more enforceability for spills that could potentially cause water quality issues. During the permit term, the City responded to 2 spills. Records are kept to show how the departments responded to and remediated the spills.
5	Conduct BMP training for the municipal employees responsible for activities that may impact storm water quality.	Met Goal: Seven internal trainings were held for various departments. Trainings included information over illicit discharges and the renewed construction general permit.
5	Perform proper disposal of waste materials according to the developed procedures.	Met Goal: All storm sewer waste collected is properly disposed of in an approved landfill. The operations department documents the amounts of waste and reports those numbers to the stormwater program manager on a monthly basis. 2,451.34 tons of waste were disposed of in an approved manner.
5	Implement the comprehensive O&M Stormwater Plan	Met Goal: Stormwater operations and maintenance continues to follow and update as appropriate the operations and maintenance procedural manual. Reporting and documentation have been organized to show waste disposal, drain inspections and projects, as well as the street sweeping program.
4	Continue Stormwater Analysis and monitor levels as necessary.	Met Goal: Five rain events were analyzed during the permit term. Sample results are documented and monitored to see if issues are consistent with a potential source of pollution. If indicators show a potential concern, point source pollution investigations are conducted to find a potential discharge point. TMDLs have not been established, so no benchmark requirements are listed.

### C. Stormwater Data Summary

Provide a summary of all information used including any lab results (if sampling was conducted) to assess the success of the SWMP at reducing the discharge of pollutants to the MEP. For example, did the MS4 conduct visual inspections, clean the inlets, look for illicit discharge, clean streets, look for flow during dry weather, etc.? (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(b))

2018 Knickerbocker								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
3/27/2018	29	208	1.09	0.0048	7.98	1.69	82	0.29
6/4/2018	13	120	0.601	0.061	7.86	2.75	235	1.07
8/9/2018	23	112	1.29	0.054	7.98	1.83	257	0.95
<b>Yearly Average</b>	21.66667	146.6667	0.9936667	0.0399333	7.94	2.09	191.3333	0.77

2018 McDonalds								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
3/27/2018	28	124	1.1	0.05	7.94	0.93	237	0.49
6/4/2018	9	76	0.835	0.028	8.03	0.59	457	0.91
8/9/2018	19	40	0.862	0.053	7.97	1.56	359	0.95
11/1/2018	6	156	1.84	0.025	7.84	0.094	40	0.43
<b>Yearly Average</b>	15.5	99	1.15925	0.039	7.945	0.7935	273.25	0.695

2018 Police Department								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
3/27/2018	14	8	0.993	0.056	8.09	0.46	69	0.49
6/4/2018	12	20	1.19	0.2	8.04	0.69	173	1.08
7/10/2018	7	20	0.863	0.04	8.04	1.48	269	0.66
8/9/2018	25	20	1.6	0.029	8	0.78	170	1.14
11/1/2018	8	16	1.39	0.035	7.43	0.044	106	0.69
<b>Yearly Average</b>	13.2	16.8	1.2072	0.072	7.92	0.6908	157.4	0.812

2018 Preusser								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
3/27/2018	20	4	1.36	0.06	7.83	1.49	281	0.55
6/4/2018	14	16	1.43	0.039	7.86	1.46	162	1.1
7/10/2018	11	20	1.07	0.035	8.14	0.75	256	0.85
8/9/2018	34	20	1.28	0.028	8.5	1.24	463	0.98
<b>Yearly Average</b>	19.75	15	1.285	0.0405	8.0825	1.235	290.5	0.87

2018 Sherwood								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
3/27/2018	18	284	1.47	0.05	8.13	1.75	108	0.42
7/10/2018	15	148	1.29	0.364	7.67	1.17	196	
8/9/2018	24	804	1.46	0.062	7.93	4.02	183	1.21
11/1/2018	13	252	1.85	0.033	7.83	0.308	198	0.56
<b>Yearly Average</b>	17.5	372	1.5175	0.12725	7.89	1.812	171.25	0.73

2018 WTP								
Date	BOD mg/L	Cl mg/L	NO3- mg/L	NO2- mg/L	pH	s-TKN mg/L	TSS mg/L	P mg/L
6/4/2018	11	84	1.32	0.015	7.98	1.3	49	0.75
11/1/2018	22	248	1.27	0.021	7.23	0.172	74	0.6
<b>Yearly Average</b>	16. 5	166	1.295	0.018	7.605	0.736	61.5	0.675

## D. Impaired Waterbodies

1. If applicable, explain below 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: (Refer to MS4 General Permit TXR040000 Part IV Section B.2.(c))

The City of San Angelo currently discharges to one segment of the Concho River listed on the 2014 Texas 303(d) list for two pollutants of concern: Bacteria and depressed dissolved oxygen. The city is dedicated to continual monitoring of stormwater runoff to ensure the pollutants of concern are not being directly discharged by the city.

The City addresses bacteria by implementing an inspection program for sewer lines as well as continuing to update sewer lines that have the potential to cause water quality issues. The City also participates in the SSO program and reports all instances

when a SSO occurs. During permit term 4 the City went through a transition with transients living along the river, since then the City has passed ordinances and enforced them among the transient community that congregate along the river.

The City addresses depressed dissolved oxygen by implementing several BMPs such as the street sweeping program, chemicals and materials program, park and river cleanups, construction stormwater ordinance, and our newly revised illicit discharge ordinance. All activities contribute to a reduction of water quality-reducing nutrients entering the river.

Flow is essential to improving water quality, but budgetary and engineering restrictions have made addressing the above-mentioned POC extremely challenging. The city has made great strides in addressing pollution prevention to improve stormwater quality before it reaches the river. Our future goals include finding a way to create flow to reduce the effects of the two impairments, use of green infrastructure for bio filtration, and further public education and outreach. As the Stormwater program continues to advance, the department can begin taking a more proactive approach to improving the water quality of the Concho River.

The City of San Angelo feels that the implementation and revision of the Illicit Discharge ordinances will also improve water quality. The revised ordinances allow the City to respond and potentially remediate at the discharger’s expense. Enforceability plays a key role in the success of an illicit discharge program and offers accountability for those who violate the City’s Illicit Discharge ordinance.

### **E. Stormwater Activities**

Describe stormwater activities the MS4 operator plans to undertake during the next reporting year. You may use the table below (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(d)):

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
1, 2, 4	New	Pet Waste Program	Action: Implement pet waste receptacles around parks, especially those near the river. Implement outreach materials that promote the proper disposal of pet waste.  Documented Activities: Document the number of parks that have pet waste



MCM(s)	BMP	Stormwater Activity	Description/Comments
			receptacles. Document the number of materials or activities distributed to the public to educate pet owners on the proper ways to dispose of pet waste.
4	New	Site Performance Standards for Stormwater	<p>Action: Require drainage studies to be performed on sites that exceed one acre in size or that are in areas with known drainage problems. Implement water quality aspects that not only assist with quantity, but also assist with quality, if feasible.</p> <p>Documented Activities: Document the number of drainage studies reviewed by Engineering Services. Document the number of water quality features implemented by developers.</p>
5	New	Pollution Prevention Program for Municipal Facilities	<p>Action: Develop pollution prevention plans for municipal facilities that have the potential to impact water quality. Work with Parks, Fleet, Street and Bridge, Water Utilities, and Stormwater to develop good housekeeping plans.</p> <p>Documented Activities: Keep copy of each plan and keep records of any spills that may have occurred onsite.</p>
2, 3, 4	New	Fats, Oils, and Grease (FOG) Program	<p>Action: Develop ordinances for FOG program that require stronger criteria on food service establishments. Develop review process for grease traps in new food establishments. Develop enforcement and inspection procedures for grease traps.</p> <p>Documented Activities: Document stakeholder/public meetings. Document internal meetings held to develop written procedures.</p>

<b>MCM(s)</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/Comments</b>
4	New	Post Rain River and Pond Cleanups	<p>Action: After qualifying rain events, conduct river cleanups to remove any floatables that have reached the river. Conduct a minimum of two river cleanups per year.</p> <p>Documented Activities: Document post-rain river cleanups. Document amounts of trash removed from river.</p>
4, 5	New	Municipal Green Infrastructure Program	<p>Action: Develop a small-scale plan to implement green infrastructure ideas for stormwater conveyance and filtration.</p> <p>Identify budgetary needs for future use of green infrastructure.</p> <p>Documented Activities: Document meetings held to develop plan for green infrastructure program.</p> <p>Document any projects that will use green infrastructure.</p>
1, 2	New	Keep San Angelo Beautiful (KSAB)	<p>Action: Attend meetings and play role in KSAB program. Implement programs and outreach for stormwater pollution prevention.</p> <p>Documented Activities: Document meetings held and attendance.</p> <p>Document any events/programs/education materials used throughout the permit term.</p>

## F. SWMP Modifications

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.

Yes  No

The current SWMP is under revision for the permit renewal. Although some changes may be made to the SWMP, we are still in the beginning process of making modifications to the SWMP. The above listed stormwater activities will be added to our SWMP and some existing BMPs may be removed during the renewal/revision process.

No changes were made to the SWMP during permit year five. Therefore, a 'no' is recorded for this section.

1. Is the permittee relying on another entity to satisfy some of its permit obligations? (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(g))

Yes  No

- 2.a. Is the permittee part of a group sharing a SWMP with other entities?

Yes  No

## G. Construction Activities

1. The number of construction activities that occurred in the jurisdictional area of the MS4 (Notices of intent and site notices received; Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(h)) \_\_\_\_\_111\_\_\_\_\_

- 2a. Does the permittee utilize the optional 7<sup>th</sup> MCM related to construction?

Yes  No

## H. 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): Russell Pehl Title: City Engineer  
Signature: Russell Pehl Date: 2/25/19

Name of MS4 \_\_\_\_\_ City of San Angelo \_\_\_\_\_