



## Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

### A. General Information

Authorization Number: TXR040546

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

Annual Reporting Year Option Selected by MS4: Permit Year:

Reporting period beginning date: 12/13/2017

Reporting period end date: 12/12/2018

MS4 Operator Level: 2 Name of MS4: Angelo State University

Contact Name: Samuel Spooner Telephone Number: (325) 942-2180

Mailing Address: ASU Station 10912, San Angelo, TX 76909-0912

E-mail Address: sspooner@angelo.edu

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

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

Angelo State University (ASU) is partially through its third implementation year and is operating consistent with its approved Storm Water Management Plan. Unlike a typical municipality, ASU's regulatory authority is over its own campus, employees, students, and special events occurring within the Campus boundaries through Operating Policies and adopted plans, programs, and processes. The Storm Water Management program is managed and monitored by the Office of Environmental Health, Safety, and Risk Management (EHSRM) and is planned and maintained by EHSRM, Facilities Management, and Facilities Planning and Construction departments. Campus Police provide additional monitoring and enforcement.

ASU's campus is open and perimeter roads are public, as are two major collectors that pass through the University. All internal roads have been abandoned to ASU and are private university driveways. The

design discourages illicit discharges. Student activity that is likely to result in contamination is prohibited on campus, including the parking lots. No public sewer lines pass through ASU other than those in the public streets. All public sewers on ASU property originate within ASU; there are no upstream connections.

ASU discharges storm water into the City of San Angelo's (COSA) MS4 system at public streets. In large rainfall events, there are places where storm water from COSA's streets enters ASU's campus and is then conveyed back to COSA's MS4.

Storm water on the western portion of the campus and most athletic fields drains directly to perimeter roadways. Along with drainage to perimeter roadways, the eastern portion includes two detention basins to help slow the flow and permit settling of particulates. The design permits almost constant observation.

Public education is primarily focused upon our student population, using our website and brochures to provide awareness and education and by engaging service organizations and student workers in awareness and recycling. Construction tends to occur in phases, with periods of little construction and then capital projects that will bridge permit years.

ASU does not regulate outside construction activities. The old Field House location has been leased to a local health care provider and is in the process of demolition and construction of a new sports medicine clinic in approximately the same footprint. ASU will monitor this project as it is within its MS4 boundaries. All other construction, other than in utility easements and rights of way, is contracted or performed by ASU.

1. Provide information on the status of complying with permit conditions: (TXR040000 Part IV Section B.2.): ASU is currently in its third implementation year.

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	X		Permittee completed its second implementation year and is ahead of schedule in third implementation year.
Permittee is currently in compliance with recordkeeping and reporting requirements.	X		Permittee is continuing to expand its program consistent with the Plan.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	X		Permittee is a small- to mid-size state university.

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

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1: Public Education, Outreach, Involvement	1.1: Storm Water Education Materials	Yes. Our target audience is students, faculty, and staff. They want to make a difference and we work to keep their interest and focus throughout the year.

MCM(s)	BMP	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)</b>
1: Public Education, Outreach, Involvement	1.2: Pet Waste Management	Yes. Pets are not permitted in student housing (ADA exception). Community members enjoy walking their pets along the campus mall. The dispensers help encourage picking up after their pets.
1: Public Education, Outreach, Involvement	1.3: Storm Drain Markings	Yes. While our student population is not likely to discharge into drains, marking helps to remind them, "only rain down the drain."
1: Public Education, Outreach, Involvement	1.5: Public Participation & Involvement	Yes. We see increased participation and more students have an interest in conservation that we help instill a culture of recycling and water quality protection.
2: Illicit Discharge Detection & Elimination	2.1: Storm Sewer System Mapping	Yes. The campus is small and, while our system is well known, maps help with planning, inspections, & maintenance.
2: Illicit Discharge Detection & Elimination	2.2: Detection & Elimination Program	Yes. The BMP focuses inspections on higher risk areas and activities.
2: Illicit Discharge Detection & Elimination	2.3: Illicit Discharge & Spill Reporting	Yes. While reporting may occur after the act, we may be able to mitigate the impact and reduce the likelihood of future events.
2: Illicit Discharge Detection & Elimination	2.4: Sanitary Sewer Discharge Prevention	Yes. ASU determined that a non-substantive change was consistent with the original intent of the BMP. Higher risk sewer lines are cleaned and jetted on a quarterly basis. No campus SSOs have occurred.
2: Illicit Discharge Detection & Elimination	2.5: Grease Management Program	Yes. The BMP has proven effective and essentially documents standard practice.
2: Illicit Discharge Detection & Elimination	2.6: Field Staff Training	Yes. Training ensures employees are aware of the permit, our responsibilities, what to look for, and how to report it.
3: Construction Site Control	3.1: Construction Site Inspection Program	Yes. This BMP has become more important with increased construction projects.
3: Construction Site Control	3.2: Construction Site Inventory	Yes. The size of the university campus, internal planning processes, construction contracts process, and lack of regulation over outside owners makes this BMP redundant.
3: Construction Site Control	3.3: Construction Site Runoff Control	Yes. Other than utility work, all construction on university property is controlled through contractual requirements or internal policies.

<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: Construction Site Control	3.4: Construction Site Waste Control	Yes. Other than utility work, all construction on university property is controlled through contractual requirements or internal policies.
4: Post-Construction Site Control	4.1: Post-Const Stormwater Mgmt Structures Training	Yes. However, this BMP is redundant as permanent storm water management structures become part of the inventory. Training and inspections are included in other BMPs.
4: Post-Construction Site Control	4.2: Post-Const Development Procedures	Yes. This BMP helps ensure that storm water management will remain a planning element.
4: Post-Construction Site Control	4.3: BMP Long-Term O&M	Yes. BMPs are inspected regularly and maintained as needed.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.1: O&M Street Sweeping	Yes. All private driveways, parking lots, and sidewalks are swept regularly and a significant amount of debris is collected.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.2: O&M Storm Sewer System	Yes. The university maintains an effective recycling program, including hazardous chemicals, and monitors the system almost continuously. Campus police maintain a constant presence. The system is small, monitored, and maintained.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.3: Mapping of Facilities and Control Inventory	Yes. The map assists in system evaluation and design and ensures that institutional knowledge is passed to new employees.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.4: Facility Inspection Program	Yes. The EHS Specialist surveys the condition of storm water controls. Campus police also monitor the facilities and activity.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.5: Good Housekeeping: Landscaping	Yes. The BMP helps maintain focus upon reducing the need for landscaping chemicals and use of environmentally friendly pesticides and herbicides. The university has converted most athletic fields to artificial turf, reducing use of landscaping chemicals.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.6: Good Housekeeping: Fleet & Vehicle Maintenance	Yes. Vehicle maintenance occurs offsite using commercial service providers and vendors. Motorized equipment and carts are maintained onsite. Random visual inspections confirm practices.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.7: Structural Control Maintenance	Yes. ASU employs two detention basins. One retains a certain amount of sediment by design.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.8: Spill Prevention & Response	Yes. This BMP has the potential for reducing the impact of spills. ASU prohibits vehicle maintenance in parking lots. Spills that do occur are contained and remediated.
5: Pollution Prevention & Good Housekeeping for Municipal Operators	5.9: Employee Training	Yes. However, this general BMP is redundant as training is required throughout the Plan.
6: Industrial Stormwater Sources (N/A)	N/A	N/A
7: Optional MCM (N/A)	N/A	N/A

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 (**See Example 2 in instructions**): Reported on Permit Year Basis:

A. Structural Controls

Angelo State University conducts a maintenance program on all structural controls on University property. Driveways (including private streets) and parking lots are maintained and swept regularly and facilitate conveyance of storm water off of the University. Due to the topography and limited availability of storm drain inlets on the University, local public streets are also used as conveyances for storm water from the University. The University maintains two (2) drainage basins on the property that allow temporary storage of storm water, maintained by the Grounds Maintenance Department. The basins are located in front of the Junell Center and the other is on the East border of the campus property.

B. Areas of New Development and Significant Development

Angelo State University has developed landscaped and paved parking lots and agricultural areas within the campus. Completed construction in 2018 includes five new buildings (i.e., Mayer Pressbox, Norris Clubhouse, Biology Greenhouse, Shannon Sports Medicine, and Centennial Village Phase 2). Upcoming projects (start in next 12 months) include an art building, a chapel, and a

museum. While expected growth trends continually change, the University will monitor any changes that may impact any storm water quality.

Over the years, new development has upgraded and rerouted several storm water conveyances throughout the campus. With the upgrading of systems, the University has realized more capacity for storm flows and better drainage in areas that have been problematic in the past. Xeriscape landscaping reduces water use. This provides a tool to determine what areas will have significant impacts with the current growth rate. Artificial turf on the intramural, baseball field, and softball fields has eliminated the use of fertilizers for grass in those areas and improved drainage/runoff.

The Master Plan for the University is continually updated to allow more efficient use of land and space and to maintain green space on the University. We are currently, undergoing an effort to update the entire campus drainage map and have partnered with Carter-Fentress/SKG to complete this study.

C. Roadways

The University maintains all private roadways (driveways) and parking lots in good condition and has reconstructed a formerly leased parking lot that was in disrepair and reverted to the University. The Grounds Maintenance Department conducts a program that contracts pavement repairs and maintains all roads and parking lots on an annual basis. Concrete is used in some high stress areas to provide a longer lasting surface.

D. Flood Control Projects

Angelo State University has not engaged in any Flood Control projects since the issuance of its MS4 Program. The University does not foresee any projects for flood control during the next TCEQ TPDES permit period.

E. Pesticide, Herbicide and Fertilizer Applications

The University uses several types of fertilizers for maintenance of lawns, athletic fields and flowerbeds on University properties. Fertilizer usage on campus has been reduced due to the drought conditions that have existed and the conversion to artificial turf sporting fields.

The University Grounds Maintenance Department applies several types of herbicides and pesticides that are applied by licensed personnel in the management of weeds and pests and mosquitoes.

<b>Fertilizer Application PY 18-19</b>			
<b>Location</b>	<b>Setting</b>	<b>Type of Fertilizer</b>	<b>Amount (lbs.) 50# Ea.</b>
Soccer Field	2 Circle/#18 Spreader	21-7-14 (Bandini)	14 Bags (700 lbs.)
	2 Circle/#18 Spreader	21-7-14 (Bandini)	14 Bags (700 lbs.)
Campus	2 Circle/#18 Spreader	16-8-8 (Bandini)	160 Bags (8000 lbs.)*
President House	#16 Walk Spreader	18-24-12 (Bandini)	3 Bags (150 lbs.)
	#16 Walk Spreader	16-8-8 (Bandini)	2.5 Bags (125 lbs.)
International Studies	#16 Walk Spreader	16-8-8 (Bandini)	.5 Bags (25 lbs.)
*High rainfall this year allowed for campus fertilization; Large grass areas fertilized;		SWPPP Training briefing on 1 May 18 to Facilities Mx Team	

Fertilizer Application PY 18-19			
Location	Setting	Type of Fertilizer	Amount (lbs.) 50# Ea.
		Approximate Total = 194 Bags (9,700 lbs.)	

Deicing:

The University only experienced a few minor wintry mixes during the past permit year and only a very small amount of sand was used for friction control on stairways and steps.

Amount Used: Approximately 50\_lbs.

F. Illicit Discharges and Improper Disposal

The University maintains a strict operational policy that has provided a means to control and eliminate many of the discharges that may contribute to the degradation of storm water quality from the University to the MS4 of the City of San Angelo and Texas DOT.

(1) Non Storm Water Discharges

The University has eliminated known sources of non-storm water discharges from potential pollutant sources on the University property. Any unforeseen pollution sources are addressed through the Operation Policy 34.28 of the University Operational Policy Manual. Recent changes to the OP have allowed the University to better control violation of this policy.

ASU has marked all storm sewer manholes and drains that are accessible or visible to students with 4" diameter "Only Rain Down the Drain" markers. EHSRM's stormwater management webpage was updated to include information on the program.

Drains marked in PY: 17

One construction spill discharged to the city street. It was contained and cleaned up before reaching storm drains.

Grease management is focused upon the food service centers. ASU's contractor cleans out grease traps and jets sewer lines on a quarterly basis. ASU's food service contractor contracts with a recycling contractor for its used hot oil fryer oil.

(2) Overflows and Infiltration

The Plumbing Shop inspects and maintains all drainage and storm sewer systems. The shop has engaged a contractor to pump and clean out sand traps. Maintenance on the system is conducted on an as-needed basis and no SSOs occurred. The system consists of:

- 1 Sand Traps
- 6 Grit Traps
- 12 Curb Drains
- 21 Manholes
- 6 Sewer Lift Stations (5 basement sump pumps, one building force line)
- 2 Area Drains

The Plumbing Shop provides preventive maintenance of all conveyance systems and sanitary sewer systems and has determined that the systems are in good condition. With the addition of new retention and detention basins, the University enhanced its ability to control storm water runoff.

Over the past several years, new additions and upgrades of sewer lines have addressed problems within the system. New dorms and buildings have expanded the system to alleviate the issues.

The private campus sanitary sewer system is monitored regularly and cleaned as necessary. Two lines have been identified as needing a more frequent maintenance schedule. No lines have been identified as needing repair or replacement.

### (3) Floatables

#### Streets and Parking Lot Sweeping and Groundskeeping

One employee routinely mechanically sweeps driveways (including private streets), sidewalks, and parking lots each workday morning.

Waste Material Collected in 959 loads: Approximately 1,275 cubic yards, or 854 tons

This total does not account for the amount of trash and debris that is picked up on a daily basis by the Grounds Maintenance Crew. The Grounds Maintenance Department utilizes their resources daily to maintain the campus litter free. Game day operations for football and basketball are not reflected in this total.

The Campus Mall is a favorite place for the community to walk their pets. Many people carry their own plastic bags and pick up their pet's waste and deposit into waste containers. Grounds maintenance crews check and clean the campus as necessary every morning.

Pet Waste Bags Taken From Dispenser 3,000

### (4) Household Hazardous Waste and Used Motor Vehicle Fluids

EHSRM facilitates and monitors all hazardous waste disposal and collection. Over the most recent Permit Year, collection and disposal included:

Hazardous Waste Disposed	570 lbs.
Latex Paint/Water	0 lbs.
Used Oil Recycled	1,125 lbs. (55 gallons)
Scheduled Hazardous Waste Pickups	1
Spills	0
Fluorescent Lamps Recycled	3,447 lbs.
Light Ballasts Recycled	3,130 lbs.
Toner Cartridges Recycled	119 lbs.
Battery Units Recycled	135 lbs.

This represents any materials collected and disposed of through the Hazardous Waste program for the University. Vehicles owned by Angelo State are serviced off campus using commercial vendors. Motorized equipment and machines on campus are serviced by the garage. Activities conducted by students are regulated by the University Student Code of Conduct.

### (5) MS4 Screening and Illicit Discharges.

In the initial application for the MS4 Permit, the University submitted comments as to why University does not conduct Wet/Dry Weather Screenings on University property. The TCEQ did not respond to those comments.

### (6) Elimination of Illicit Discharges

The University's policies and practices has effectively eliminated illicit discharges on University property and appears to be effective for the future. However, the campus has areas that are



accessible to the public through public roads. Employees and University Police continue to monitor and report suspicious activities.

All campus events are reviewed for impact upon the storm water program and facilities.

#### G. Spill Prevention and Response

EHSRM responds to all Hazardous materials spills and responds to any complaints of illicit discharges on any university property. EHSRM has placed spill kits in key areas across campus in order to contain possible spills. The City of San Angelo provides assistance with spills on University property. The Spill Plan is available at:

<https://www.angelo.edu/content/files/21596-hazardous-chemical-storage-and-spill-contingency>

#### H. Industrial & High Risk Runoff

Not Applicable

#### I. Construction Site Runoff

Angelo State University did not include the optional 7<sup>th</sup> MCM in its SWMP and contractors submit SWP3s. ASU's construction program includes pre-construction consultation with contractors and follows up with inspections during and after construction. Current contractors are very aware of TCEQ permit requirements. FP&C (ASU or TTUS) conducts monthly inspections of construction sites. EHSRM audits FP&C quarterly. Copies of ASU's MS4 are provided to contractors and requirements and plans are discussed with contractors during preconstruction meetings.

Angelo State University has built a retention basin in areas of new development and implemented the use of water catch system on the Pavilion. The combination retention pond and Campus Green was LEED Certified.

#### J. Public Education

EHSRM has participated in community recycling events such as Texas Recycles Day and Earth day over the past 6 years. EHSRM has distributed water conservation flyers to students and staff around campus and has conducted a small training on energy conservation to residential assistants for the dorms (~30 attendees). Angelo State University has also cosponsored events publicized in the local newspaper and posted BMPs on our University's website. EHSRM distributes awareness materials through its residential housing units and the campus library.

As a member of the Texas Tech University System, TTU is assisting and mentoring the implementation of the MS4 Phase II program for the University. Texas Tech University will continue to mentor the Phase II program for Angelo State University.

Number of educational activities: 2 (i.e., Joint Admissions Medical Program (JAMP) Health Fair and Earth Day Celebration)

Number of attendees: 325+

Number of public participation events: 2

Joint Admissions Medical Program Health Fair: Manned table/booth in University Center focused on storm water protection and emergency response. Distributed 50 "If it's on the ground, it's in the water" brochures/bookmarks as well as 50 Emergency Response Guidebooks. In addition, approximately 100 students participated in the actual event along with 35 agencies from across west Texas to discuss health and safety concerns.

Earth Day Activities: Partnered with the Center for Student Involvement to deliver the largest Earth Day Event in ASU history. Activities included succulent planting, painting of plant pots, event focused food from ASU food service contractor (e.g., gummy worm pudding served on frisbees instead of plates), and the promotion of recycling through available containers and fact sheets.

EHSRM manned table/booth between Library and University Center focused on Storm Water protection and distributed 40 "If it's on the ground, it's in the water" brochures/bookmarks. In addition, approximately 225 students participated in the actual event along with six student organizations.

Texas Recycles Activities: Safe Recycles closed their operation in April 2018 and therefore a Texas Recycles Day was not held in 2018 as in previous years. However, EHSRM partnered with Rick Abbott's recycling for ballast and battery recycling, ASU Information Technology to identify a free toner recycling service, and the City of San Angelo for electronics recycling. Coordination with employees and students: 3 EHSRM student employees participated in the recycling activities by gathering recycling items and getting them ready for shipment.

As part of the development of this annual report, changes to the storm sewer system map are reviewed and the map is updated.



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**): ASU is still in Implementation Year Three:

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
1 Stormwater Education Materials	Publish stormwater fact sheet and brochure. R&R quantity distributed R&R education and awareness activities. Display current recycling, waste disposal and water quality info on website.	Met goal. Distributed "If it's on the ground, it's in the water" brochures and bookmarks at residence halls, multi-cultural center, Center of Student Activities, and library. Stormwater brochures/bookmarks distributed: 290 Emergency Response Guides (includes spill responses): 50 Information is current and displayed on EHSRM website.
1 Pet Waste Management	R&R number of pet waste bags distributed annually.	Met goal. While many pet owners bring and use their own plastic bags for pet waste, <u>3,000</u> ASU pet waste bags were distributed.
1 Storm Drain Marking	R&R storm inlet drains marked. R&R number of SS manholes marked. Current SS and inlet marking info on website.	Met goal: Storm drain information is on the EHSRM website. Number of storm drain inlets marked: 17 Number of storm sewer manholes marked: 0
1 Public Notice for SWMP	Publish SWMP notice in San Angelo Standard-Times.	Met goal. Public notices were published during NOI and SWMP development process.
1 Public Participation and Involvement Programs	R&R number of participants in education events (ex. Earth Day, annual events (ex. Texas Recycles Day), other events. R&R number of employees and student participants in recycling program.	Met goal. Education event participants: 3 student workers, 100 attendees. Annual event participants: 3 student workers, 225 attendees. Recycling program participants: 5 employees and 23 students
2 Storm Sewer System Map	Update storm sewer system map annually. Maintain an annual log of map changes.	Met goal. The storm sewer system map was updated. An annual log of map changes was maintained.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
2 Detection and Elimination Program	Implement screening and detection program: site selection, detection, elimination procedures. Assess program, R&R number of illicit discharges and F/U results	Met goal. ASU does not conduct routine screening. The detection program includes daily campus monitoring by UPD and grounds keepers and routine inspections by EHSRM. The program was assessed as part of this report and has been found to be very effective. No illicit discharges occurred from construction sites.
2 Illicit Discharge and Spill Reporting	Post reporting method on website. Track number of illicit discharges and spills reported. Track number of public reports received and resolution/closure.	Met goal. EHSRM website provides information for reporting. No discharges reported internally. Neither EHSRM nor Campus Police received any public reports. The Campus Police Daily Briefing log, available online, includes information on any spills or dumping.
2 Sanitary Sewer Discharge Prevention	R&R number of feet of sanitary sewer lines inspected and cleaned pursuant to schedule. R&R number of line breaks and blockage related discharges. Track number of lines repaired or replaced annually.	Met goal. ASU identified the two food service center sewer lines as requiring regular maintenance, normally conducted on a quarterly basis. Number of feet of sanitary sewer line inspected & cleaned: 1,200 Number of line break or blockage related discharges: 0 Number of lines repaired or replaced annually: 0
2 Grease Management Program	Implement grease trap inspection and service program. R&R number of grease traps inspected/maintained annually. R&R amount of grease recycled.	Met goal. Grease traps and grit traps are maintained and inspected on a quarterly basis. Our food service contractor recycles hot oil fryer grease. Number of grease traps maintained/inspected annually: 3 Amount of grease recycled annually: 1500
2 Field Staff Training	Develop list of job positions that encounter/respond to discharges. Initial and annual refresher training on illicit discharge detection and elimination. R&R number of employees trained annually.	Met goal. The list of job descriptions was developed. Initial and refresher training was conducted. Number of employees trained annually: 53

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
3 Construction Site Inspection Program	Document active construction site inventory. Implement annual inspection schedule. Document active construction site inspections. Document inspection training to include sign-in sheets, training materials, number of training sessions, number of employees and construction contractors trained. Provide procedures for receipt and input from the public on University website.	Met goal. FP&C maintains the active construction site inventory. Annual inspection schedules were developed for FP&C and EHSRM. The construction site inspection form was developed and is used by FP&C. An inspection/audit form was developed for EHSRM. EHSRM provides training and maintains materials. The EHSRM website includes a reporting form for the public. Number of employees and contractors trained: 53
3 Construction Site Inventory	Document the site inventory annually. Compile, document, and record construction permits, NOIs, and final resolution annually.	Met goal. FP&C maintains an up to date site inventory. ASU does not issue construction permits. Small site notices received: 4 (Mayer Pressbox, Norris Clubhouse, Biology Greenhouse, Shannon Sports Medicine Clinic) Large site notices received: 1 (Centennial Village) Completed construction projects: 5 with actual site disturbance
3 Construction Site Runoff Controls	Incorporate Construction Site Runoff Controls procedure into existing stormwater policy. Post revised policy on University website. Implement policy.	Met goal. OP 34.28 was enforced to require construction site runoff controls, monitored by FP&C. The updated version was posted on the university website. The policy was implemented.
3 Construction Site Waste Control	Incorporate Construction Site Waste Control procedures into existing stormwater policy. Post revised policy on University website. Implement policy.	Met goal. OP 34.28 was enforced to require construction site waste controls, monitored by FP&C. The updated version was posted on the university website. The policy was implemented.
4 Post- Construction Stormwater Management Structures Training	R&R number of employees trained annually R&R inspections and results annually	Met goal. Employees trained in post-construction management structures: 53 Post-construction management structures inspections: 30

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
4 Post-Construction Development Procedures	Implement pollution prevention review procedures. Implement a water quality checklist. Implement and maintain a Storm Water Master Plan. Implement campus drainage guidelines and controls.	Met goal. Post construction Long Term Operations and Maintenance Procedure was adopted. Water quality is monitored during storm events by Facilities Management and EHSRM. A Storm Water Master Plan was developed and implemented. The concepts will eventually be incorporated into the next Campus Master Plan update.
4 BMP Long-Term O&M	Develop BMPs inspection and review process. Annual inspection of all BMPs and structural controls.	Met goal. Post construction Long Term Operations and Maintenance Procedure was adopted. Facilities Management inspected all BMPs and structural controls at least twice during the year. EHSRM inspected all BMPs and structural controls at least once during the year.
5 O&M: Street Sweeping	Periodically evaluate sweeping schedules and areas. Increase sweeping in areas with water quality concerns. R&R number of roadway/parking areas swept annually. R&R amount of material removed annually.	Met goal. The sweeping program and schedule was reviewed as part of the annual reporting process and is still effective. No adjustments were necessary. No areas were identified as having increased water quality concerns. Number of roadway/parking areas swept annually: 42 Amount of material removed annually in 959 loads: Approximately 1,275 cubic yards, or 854 tons
5 O&M: Storm Sewer System	R&R amount of trash and recyclables collected annually. R&R amount of sediment and debris removed annually. R&R number of surface drainage structures and campus areas inspected annually. Increase inspection in areas with concerns or dumping R&R amount of sediment, debris, or illegally dumped material annually.	Met goal. No areas were identified as requiring increased inspections. Amount of total waste collected: 196,455 pounds Amount of total compost collected: 144,340 pounds Amount of total recycle collected: 151,183 pounds Amount of sediment and debris removed: Approximately <u>1,275</u> cubic yards, or 854 tons Number of surface draining structures and campus areas inspected: <u>25</u> Amount of sediment, debris, or illegally dumped material: <u>0</u>
5 Mapping of Facilities and Control Inventory	Create a map identifying all university-owned facilities and stormwater controls.	Met goal. EHSRM maintains a map of all university-owned facilities and stormwater controls.

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
5 Facility Inspection Program	Record "high priority" areas. Implement facility inspection program. R&R number of facility inspections performed annually. R&R number of deficiencies corrected annually.	Met goal. High priority areas include grease traps and the facilities maintenance yard. Number of facility inspections performed: 12 Number of deficiencies corrected: 0
5 Good Housekeeping: Landscaping	List areas on campus considered high priority for stormwater quality. Develop SOPs for landscaping BMPs. R&R landscape chemical usage and application rates.	Met goal. The highest priority areas are maintaining stormwater controls and the campus mall. A seasonal maintenance schedule is adjusted as required and includes mowing, leaf removal, limited use of chemicals and training. See the landscape chemical use and application rate table above.
5 Good Housekeeping: Fleet and Equipment Maintenance	R&R inspections annually. R&R the assessment of spill prevention and protection measures.	Met goal. EHSRM inspects the fleet and maintenance area quarterly. The spill prevention and protection measures remain effective. Number of inspections: 12
5 Structural Control Maintenance	Complete an inventory of University structural controls. Implement inspection/maintenance program for controls.	Met goal. EHSRM maintains an inventory of structural controls. Facilities Management and EHSRM conducts semi-annual inspections of structural controls.
5 Spill Prevention and Response	Implement spill responses. R&R number of employees trained annually. R&R number of spill response kits deployed and inspected annually.	Met goal. Spill notification procedures have been implemented and spill kits are available. Number of employees trained in spill response: 53 Number of spill kits deployed and inspected annually: 5
5 Employee Training	Implement stormwater pollution prevention training program. R&R number of session conducted and employees trained annually.	Met goal. EHSRM has implemented stormwater pollution prevention training. Number of training sessions conducted: 2 (May & Dec 2018) Number of employees trained: 53

## 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))

ASU conducts regular visual inspections and maintenance of the MS4 and the entire campus area that drains into the ASU MS4 or COSA MS4. Maintenance, Groundskeeping, EHSRM, and Campus Police staff are constantly traveling the campus and any irregularities are reported and investigated. Inlets and structures are cleaned and maintained. No sampling was conducted during this Permit Year.

## 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)) Not Applicable
2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)): Not Applicable
3. Report the benchmark identified by the MS4 and assessment activities (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(6)): Not Applicable
4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(4)): Not Applicable
5. If applicable, report on focused BMPs to address impairment for bacteria (Refer to the MS4 General Permit TXR040000; Part II Section D.4.(a)(5)): Not Applicable
6. Assess the progress to determine BMP's effectiveness in achieving the benchmark (Refer to the MS4 General Permit TXR040000; Part II.D.4.(a)(6)): Not Applicable

## 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)):



A division of roles has helped with coordination for construction projects. Facilities Planning and Construction fills the role as Owner and project management and regularly monitors contractor construction permit activities. EHSRM fills the role as MS4 operator, reviewing permits and notices, and unscheduled monitoring of controls and activities.

Storm water coordination between ASU departments continues to improve. EHSRM has had several coordination discussions with COSA's storm water staff to better coordinate information and planning. In fact, COSA provided street sweeping at the request of ASU immediately after some minor road construction.

## F. SWMP Modifications

- 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

If 'Yes', report on changes made to measurable goals and BMPs (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(e)):

MCM(s)	Measurable Goal(s) or BMP(s)	Implemented or Proposed Changes (Submit NOC as needed)
MCM 1: Public Education, Outreach, and Involvement	BMP 1.05: Public Participation and Involvement Programs	Amended Implementation Activities and Measurable Goals to list Earth Day and Texas Recycles Day as examples of recycling, water quality, and conservation events, consistent with the original intent of the BMP.
MCM 2: Illicit Discharge Detection and Elimination	BMP 2.04 Sanitary Sewer Discharge Prevention	Amended Implementation Activities, Measurable Goals, and Implementation Schedule to prioritize sewer lines for inspection and cleaning, inspect and clean sewer lines in a manner to prevent SSOs, and quantify the amount of lines inspected and cleaned in a manner relevant to a campus environment (feet instead of miles), consistent with the original intent of the BMP.
MCM 3: Construction Site Stormwater Runoff Control	BMP 3.02 Construction Site Inventory	Amended Implementation Activities, Measurable Goals, and Implementation Schedule to record active construction sites as construction permits are not required on ASU property, consistent with the original intent of the BMP.
MCM 4: Post-Construction Stormwater Management in New Development and Redevelopment	BMP 4.02 Post-Construction Development Procedures	Amended discussion, Implementation Plan, Measurable Goals, and Implementation Schedule to replace "Land Use Master Plan" with "Stormwater Master Plan" as ASU does not have zoning authority or a Comprehensive or General Plan, consistent with the original intent of the BMP.

**Note:** If changes include additions or substitutions of BMPs, include a written analysis explaining why the original BMP is ineffective or not feasible and why the replacement BMP is expected to achieve the goals of the original BMP. N/A

2. Explain additional changes or proposed changes not previously mentioned (i.e. dates, contacts, procedures, annexation of land etc.):

### G. Additional BMPs for TMDLs and I-Plans

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans (Refer to the MS4 General permit TXR040000 Part IV Section B.2.(f)).

BMP	Description	Implementation Schedule (Start Date etc.)	Status / Completion Date (completed, in progress, not started)
N/a			

### H. Additional Information

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

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

- 2.a. Is the permittee part of a group 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 authorization numbers, permittee names, and SWMP responsibilities of each member. (add additional spaces or pages if needed):

Authorization Number: \_\_\_\_\_ Permittee: \_\_\_\_\_

## I. 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))   x  

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

   Yes  No

2b. If 'yes,' then provide the following information for this permit year (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(i)):

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

**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): Angie Wright

Title: Vice President for Administration and Finance

Signature: 

Date: 1/3/2019