City of Melissa, Texas

Stormwater Management Plan

Permit Date: 2019-2024

Introduction:

This plan has been prepared to comply with the Texas Pollution Discharge Elimination System Permit [Permit No. TXR040000, Effective January 24, 2019] (general permit or permit) for Phase II MS4 Permitting, for the new 5-year period of 2019 to 2024.

The City of Melissa became subject to the Texas Commission on Environmental Quality General Permit to Discharge under the Texas Pollution Discharge Elimination System Permit (Permit No. TXR040000) on December 13, 2013 (General Permit). The city is considered a Level 1 Operator under the 2013 initial permit and remains a Level 1 Operator under the reissued permit based on the 2010 US Census that reflects a population estimate of 4,695 for 2010. Current population estimates indicate that the City of Melissa is growing and has exceeded a 10,000 population estimate although the Level 1 Operator remains for the current permit period based on the 2000 US Census.

2010 US Census Data

Population	Data
Population, Census 2010	4,695
Population estimates base, July 1, 2010 (v2018)	10,199
Population Percent Change – April 1, 2010 (estimates base) to July 1, 2018	113.7 %

Source: https://www.census.gov/quickfacts/melissacitytexas

The Level 1 Operator designation and the permit requirements apply to entities that own or operate stormwater discharge systems that serve a population of less than 10,000 within an urbanized area. Since the City of Melissa is the owner and operator of the municipal stormwater system within an urbanized area, and the storm water system discharges to water of the United States, the city is subject to the requirements of the permit. Technically, the city operates a Small Municipal Separate Storm Sewer System (MS4) which, is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that discharges to a water of the United States. The permit was issued and reissued in January 2019 by the State of Texas using a process called a 'general permit". This process allows the Texas Commission on Environmental Quality (TCEQ) to issue and enforce broad requirements to an entire class of water discharges; in this case stormwater discharges.

As a result of this permit coverage, the city is required to comply with certain permit conditions including preparation and submission of a Notice of Intent (NOI) to be continue coverage by the

permit and submission of this Stormwater Management Plan (SWMP or Plan). The NOI and the SWMP are the vehicles used by the TCEQ to verify that Melissa is authorized by and compliant with the permit and that the city is taking appropriate actions to meet the permit conditions. The specific permit requirements addressed in this SWMP are contained in the section entitled, "Storm Water Management Program Best Management Practices for the City of Melissa". This section of the Plan is a list of each Best Management Practice (BMP) that the city has implemented or will implement to meet the statutory requirements of the Minimum Control Measures (MCM) established in the General Permit. In general, the approach is to show how the City of Melissa intendeds to meet the objectives of the permit for each of the areas required by the permit.

While state and federal laws mandate that the city implement these activities, there is no state or federal funding associated with implementing the requirements of the permit. Instead, it is left to the city to develop, fund, and implement the requirements of the permit. However, the City of Melissa has made progress and addressed many of the structural requirements of the permit conditions through various engineering activities and reviews for development activities, city council adopted ordinances and standards, and general good housekeeping practices implemented by the city. These proactive measures establish a good foundation on which to demonstrate the city is making progress in regard to improving stormwater quality.

Legal Authority

The City of Melissa is a "Home Rule" city under the laws and authority of the State of Texas. As such, the city has the authority to adopt resolutions and ordinance necessary to implement and address the requirements of the General Permit including the collection of fines and fees necessary to implement the ordinances. The City of Melissa has adopted several ordinances that require new development and redevelopment projects to follow certain design, operation, and construction standards including the procedures and standards required by this SWMP. Additional requirements are contemplated under this SWMP and are subject to City Council consideration, public participation, and funding/resource availability.

Current city ordinances that provide authority for the requirements, development process, inspection, and standards established in this plan include the following:

The following is a list of key dates applicable to the city as a result of the general Permit:

- Permit Effective Date and applicability to the City of Melissa: First Permit December 13, 2013, Resubmission of NOI and SWMP

- Permit Expiration: December 2018
- Application deadline for permit renewal: July 23, 2019 includes submission of current Notice of Intent (NOI) and SWMP due to TCEQ:
- Annual Reports: 90-days from end of permit year: March 31, 2020 (note, this date is based on designating the calendar year for permit term: alternatives include calendar year, MS4 general permit year, or fiscal year – refer to NOI)

Content of the SWMP

The January 2019 permit requires that the SWMP include, at a minimum, the following items:

1. A description of Minimum Control Measures (MCM) with measurable goals, including, as appropriate, the months and years when the permittee will undertake required actions, including interim milestones and the frequency of the action for each MCM described in Part III, Section B.
2. A measurable goal that includes the development of ordinances or other regulatory mechanisms allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;
3. The measurable goals selected by the permittee must be clear, specific, and measurable.
4. A summary of written procedures describing how the permittee will implement the provisions in Parts III (SWMP) and IV (Recordkeeping and Reporting) of the general permit.
5. A description of a program or a plan of compliance with the requirements in Part II.D.4. (relating to Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements)
6. Identification of any impaired waters that have been added in accordance with Part II.D.4.

Definitions:

The following definitions are excerpts from the TCEQ General Permit for convenience; TPDES General Permit No. TXR040000. These definitions are provided as a quick reference for definitions used in this plan and for commonly used terms associated with stormwater management. For a full list of definitions, refer to the TPDES General Permit No. TXR040000. Note that the January 2019 permit reissuance added a requirement that BMPs are “Clear, Specific, and Measurable”. A definition of BMPs are “Clear, Specific, and Measurable” has been added based on available TCEQ guidance.

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices

to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Catch basins - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

Classified Segment - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

Clear, Specific, and Measurable –

> Clear: Certainty in specific actions and requirements.
> Specific: Provide a level of detail in requirements ant portray level of effort needed from MS4 to comply.
> Measurable: Requirement needs to be articulated in a manner to assess compliance in a straightforward way.

Construction Activity - Soil disturbance, including clearing, grading, and excavating; and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Small Construction Activity is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.

Large Construction Activity is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land.

Construction Site Operator - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

> (a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or
>
> (b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution

prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure - Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

Conveyance - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

Discharge – When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

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

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

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

(1) The homebuilder completing final stabilization as specified in condition (a) above; or

(2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

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

Hyperchlorinated Water – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

Illicit Connection - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge - Any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting activities.

Impaired Water - A surface water body that is identified on the latest approved CWA §303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

Industrial Activity - Any of the ten (10) categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;

(b) That is designed or used for collecting or conveying stormwater;

(c) That is not a combined sewer; and

(d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

Notice of Change (NOC) - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

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

Notice of Termination (NOT) - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

Outfall - A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the

U.S. and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-or-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

Point Source - (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Redevelopment - Alterations of a property that changed the ”footprint” of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

Small Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;

(b) Designed or used for collecting or conveying stormwater;

(c) Which is not a combined sewer;

(d) Which is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2; and

(e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those

storm drains do not function as a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

Stormwater and Stormwater Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff from an area where there is either a large construction or a small construction activity.

Stormwater Management Program (SWMP) - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Traditional Small MS4 - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

Urbanized Area (UA) - An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial census.

Waters of the United States - (According to 40 CFR § 122.2) Waters of the United States or waters of the U.S. means:

> (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
>
> (b) All interstate waters, including interstate wetlands;
>
> (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
>
> > (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
> >
> > (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

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

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

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

(f) The territorial sea; and

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

Minimum Control Measures

The Applicable Minimum Control Measure (MCM) is the explicit permit section and reference that the city must address in this Plan. The city is given a great deal of latitude and flexibility in the development of BMPs and measurable goals necessary to meet the permit requirement. This column of the plan provides the title and permit reference with a brief summary of the objective associated with each MCM. The Permit establishes seven Minimum Control Measures (MCMs) of which, five are applicable to the City of Melissa. These include:

MCM 1: Public Education, Outreach and Involvement – BMPs have been established for this MCM.

MCM 2: Illicit Discharge Detection and Elimination (IDDE) – BMPs have been established for this MCM.

MCM 3: Construction Site Stormwater Runoff Control -– BMPs have been established for this MCM.

MCM 4: Post Construction Stormwater management in New Development and Redevelopment – BMPs have been established for this MCM.

MCM 5: Pollution Prevention and Good Housekeeping for Municipal Operations – BMPs have been established for this MCM.

MCM 6: Industrial Stormwater Sources – this MCM does not apply to Level 1 Operators.

MCM 7: Authorization for Construction Activities where the Small MS4 is the Site Operator – the city does not conduct projects where the city is the Site Operator; the city uses subcontracted construction companies for projects under this category consequently, this MCM does not apply.

Storm Water Program Best Management Practices

The Storm Water Management Program Best Management Practices for the City of Melissa (SWMP BMPs) includes the following headings:

Best Management Practice: The General permit requires that each small MS4 designate a practice that the city will follow to demonstrate compliance with each of the five Minimum Control Measures (MCMs). The BMP is a general description of the objective associated with the detailed activities described for the MCM. As noted in the definitions section, a BMP is a, "Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas." Each BMP has a measureable goal and required documentation to demonstrate compliance and progress toward completion of the goal. These requirements are noted for each BMP; it is a good practice to maintain copies of the documentation with this plan for ease of reference, reporting, and compliance inspection.

Responsible Department: Accountability is an important part of permit compliance. The column entitled "Responsible Department" refers to the organizational unit of the city that is given responsibility, sufficient authority, and resources to implement the BMP.

Year 1-5 Measurable Goal: The intent of the permit is for the city to make progress in the control, management, and reduction of stormwater pollution throughout the five-year life of the permit. Each BMP has a measurable goal for each year of the permit that the city is committing to achieve.

Impaired Water Bodies

Stormwater runoff from the city of Melissa is discharged to the East Fork of the Trinity River (Segment 0821D) water body. The East Fork Trinity River (0821D) is designated as an impaired water body according to the latest EPA-approved 303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d). This water body is designated impacted for bacteria, category 5C.

Consequently, bacteria specific BMPs have been established to decrease the level of bacteria contaminated stormwater reaching this receiving stream.

Storm Water Management Program Best Management Practices for the City of Melissa

MCM 1: Public Education, Outreach, and Involvement (Permit Part III.B.1.a.)

Objective: Increase support and compliance through partnerships, access to information, and general awareness.

MCM 1, BMP 1: Develop, Distribute, and Document Educational Material to Citizens in monthly newsletter and utility bill insert including instructions for reporting illicit discharges via city hotline or other reporting opportunity. Include reference to availability of additional information regarding stormwater pollution control on city website (:https://www.cityofmelissa.com/452/3061/Stormwater-Protection). Refer to BMP 4 for information regarding update to city website.

Annual Actions:
Year 1-5: Distribute stormwater pollution control information in six (6) monthly city newsletters.

Responsible Department: Public Information Officer.

Documentation: Copies of documentation to be maintained electronically and hard copy folder.

Implementation Schedule:

BMP 1					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Distribute 6 monthly city newsletters with stormwater pollution control information	x	x	x	x	x

MCM 1, BMP 2: Develop and Present Educational Material to Citizens

Annual Actions:
Year 1: Develop educational material and demonstration project for city events, civic organizations, and school children (K-12) presentations.
Year 2-5: Conduct educational presentation at 1 city-wide event per year and at two (2) public schools (grades K-12), per year.

Responsible Department: Public Information Officer

Documentation: Photograph presentation and record date of each presentation event – maintain information electronically and hard copy folder.

Implementation Schedule:

BMP 2					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Development of educational material (Year 1); Conduct at least 1 educational presentations (Year 2-5)	x	x	x	x	x

MCM 1, BMP 3: Create opportunity for Citizen Involvement

Annual Actions:
Year 1-5: Provide City Council update regarding annual MS4 plan actions and provide opportunity for City Council input.

Responsible Department: Engineering Staff via City Manager.

Documentation: Include copy of council agenda and presentation material in MS4 files.

Implementation Schedule:

BMP 3					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Present MS4 update at least 1 time annually, or as needed if issues arise, at City Council meetings	x	x	x	x	x

MCM 1, BMP 4: Update city website (https://www.cityofmelissa.com), with additional information regarding stormwater pollution prevention, public participation, and this SWMP, plan updates, and annual reports including the following:

- Availability and a copy of this plan,
- Procedures for reporting illicit discharges,
- Citizen complaint and spill reporting,
- Annual reports, and
- Opportunity for public comment.

Annual Actions:
Year 1: Identify resources, source information, and requirements to be placed on city website. Identify persons and resources to maintain information sources.
Year 2: Place information on city website.
Year 3-5: Maintain city website stormwater pollution prevention information on city website with a minimum of annual updates.

Responsible Department: Engineering and Public Information officer.

Documentation: Maintain documentation on city website.

Implementation Schedule:

BMP 4					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Identifying information and responsible parties (Year 1); Place information on city website (Year 2); Provide at least 1 new stormwater pollution prevention-related document or section on city website (Year 3-5)	x	x	x	x	x

MCM 2: Illicit Discharge Detection and Elimination (IDDE) (Permit Part III.B.2.)

Objective: Identify and eliminate illicit discharges.

MCM 2, BMP 5: Develop and maintain a map of the City of Melissa storm sewer system outfalls to aid in the detection and elimination of illicit discharges and to address non-stormwater discharges including illegal dumping into the MS4. Include identification of all discharge points, receiving streams, and retention/detention facilities.

Annual Actions:
Year 1-5: Document quarterly updates and maintain city map of stormwater sewer system with new construction, new subdivision development projects, and other connections to the city stormwater sewer system.

Responsible Department: Engineering and GIS.

Documentation: Maintain map of city storm sewer system, receiving stream outfall locations and GIS mapping.

Implementation Schedule:

BMP 5					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Develop and maintain city storm sewer map including a minimum of 25% of the total system and outfalls (Year 1); Progress and maintain city storm sewer map to include a minimum of 50% of the total system and outfalls (Year 2); Progress and maintain city storm sewer map to include a minimum of 75% of the total system and outfalls (Year 3); Maintain city storm sewer map making quarterly updates (Year 4-5);	x	x	x	x	x

MCM 2, BMP 6: Annually review, update, and document review of Illicit Discharge Response Plan, inspection forms, and protocol. Verify that plan is adequate to identify potential problem areas, approach for source identification if illicit discharges are detected, procedures for removal or correction of the source and documentation procedures for action taken. Response plan must address identification of illicit discharges, identification of discharge source, notification to responsible party for source removal, notification procedures to TCEQ, public reporting (complaints), spill response procedures, complaint/source identification follow-up procedures, and documentation.

Annual Actions:
Year 1-5: At time of annual training (BMP 7), review IDDE response policy and inspections forms. Update forms or response actions based on prior year experience.

Responsible Department: Engineering.

Documentation: Prepare summary of review and any changes made to plan on cover sheet of response plan. Maintain documentation and photographic records of any reported or identified illicit discharges.

Implementation Schedule:

BMP 6					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Review IDDE response policy and procedures at quarterly meetings and update IDDE at least 1 time annually, or as needed	x	x	x	x	x

Documentation: MCM 2, BMP 7: Complete annual training program for new and existing engineering and inspection staff responsible for MS4 implementation.

Annual Actions:
Year 1-5: Conduct annual review and staff training. At time of training, review all instances of illicit discharges and results of inspections for past year. Conduct training and education of field staff to identify, report, and, to the extent feasible, mitigate illicit discharges to the storm system. Recommend changes or updates to inspection forms, response plan, and reporting procedures. Implement changes within six (6) months of annual training program.

Responsible Department: Engineering.

Documentation: Maintain training information and training logs in MS4 File. Distribute revisions to inspection forms, and response plan to affected staff.

Implementation Schedule:

BMP 7					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Conduct at least 1 training class annually	x	x	x	x	x

MCM 2, BMP 8: Develop city ordinance and enforcement approach to identify and prohibit illicit discharges. In addition to the existing authorities under City Ordinances listed in the introduction, additional authority, fines and/or fees, and procedures may be determined other necessary following public input and city council consideration.

Annual Actions:
Year 1: Prepare draft city ordinance regarding authority to inspect, prohibit, and enforce illicit stormwater discharges. Use available model ordinances as baseline and adapt for city.
Year 2: Present draft ordinance to city council for review and adoption as determined by city council.
Year 3-5: Implement ordinance as adopted by city council or revise ordinance for adoption as directed by city council.

Responsible Department: Engineering and City Attorney.

Documentation: Maintain copy of proposed ordinance, council agenda, meeting minutes, and briefing material. Maintain weekly inspection reports.

Implementation Schedule:

BMP 8					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Develop, prepare, present, and implement city ordinance as described above. Perform inspections to identify and document potential illicit discharges weekly	x	x	x	x	x

MCM 3: Construction Site Stormwater Runoff (Permit Part III.B.3)

Objective: Develop, implement, and enforce a program to reduce pollutants from construction activities for developments greater than one acre(including larger common plan)..

MCM 3, BMP 9: Develop and Implement Program to Reduce Construction Site Pollution Discharges Construction Site Stormwater Runoff Control through city adopted ordinances.

Review existing procedures and development standards that are not formalized in city ordinance that are appropriate for including in ordinance form.
Requirements to implement erosion and sediment control best management practices (BMPs),
Requirements to control other waste at the construction site,
Procedures for reviewing construction site plans,
Procedures to receive and consider information submitted by the public, and
Develop procedures for inspections and enforcement of stormwater requirements at construction sites.

Annual Actions:
Year 1: In conjunction with BMP 8, ordinance development, propose city ordinance establishing current program of SWP3 preparation, review, and approval for construction projects. Include in ordinance form, the current requirements, processes, and review/approval procedures that formalizes identify construction operation and maintenance of detention and retention facilities. Present options to city council for funding programs such as stormwater fees and enforcement fines.
Year 2: Present draft ordinance to city council for review and adoption as determined by city council.
Year 3-5: Implement ordinance as adopted by city council or revise ordinance for adoption as directed by city council.

Responsible Department: Engineering and City Attorney.

Documentation: Document review of city standards, policies and ordinances regarding permit requirements. Document construction site inspections. Maintain copy of proposed ordinance, council agenda, meeting minutes, and briefing material.

Implementation Schedule:

BMP 9					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Develop, prepare, present, and implement city ordinance as described above. Perform inspections to identify and document potential illicit discharges weekly.'	x	x	x	x	x

MCM 3, BMP 10: Construction Site Stormwater Runoff Control
Continue Program to require and review SWP3 as part of ongoing pre-development and pre-construction meetings. Conduct weekly inspections of construction projects including inspection and identification of stormwater control BMPs.

Annual Actions:
Year 1-5: Conduct pre-development and pre-construction meetings with development community and document design review meetings including review of construction plans, stormwater management plans and inspection procedures.

Responsible Department: Engineering and Planning

Documentation: Maintain copies of design and SWP3 plans with development plans. Maintain electronic copies of inspection reports and any follow-up enforcement actions.

Implementation Schedule:

BMP 10					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Conduct pre-development and pre-construction meetings for 100% of new construction sites, as well as design review meetings for all projects	x	x	x	x	x

MCM 4: Post-Construction Stormwater Management in New Development and Redevelopment (Permit Part III.B.4.)

Objective: Develop, implement, and enforce a program to reduce pollutants following completion and acceptance of construction activities (post-construction) for projects greater than one acre(including projects disturbing less than one acre, that are p art of a larger common plan of development).

MCM 4, BMP 11: Post-Construction Stormwater Management in New Development and Redevelopment

Implement Program to Control Post-Development Runoff through inspection and enforcement of stormwater detention and retention facilities on commercial and residential properties.

Annual Actions:
Year 1: In conjunction with BMP 8, ordinance development, propose city ordinance establishing procedures for annual maintenance inspections of commercial and residential stormwater detention and retention facilities. Include in ordinance form, the current requirements to construct, regularly maintain, and repair conveyance and retention/detention facilities constructed as part of new development and redevelopment projects.
Year 2: Present draft ordinance to city council for review and adoption as determined by city council.
Year 3-5: Implement ordinance as adopted by city council or revise ordinance for adoption as directed by city council.

Responsible Department: Engineering and City Attorney.

Documentation: Document review of city standards, policies and ordinances regarding permit requirements. Document construction site inspections. Maintain copy of proposed ordinance, council agenda, meeting minutes, and briefing material.

Implementation Schedule:

BMP 11					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Develop, prepare, present, and implement city ordinance as described above. Perform inspections on 25% of stormwater detention and retention facilities within city limits every year.	x	x	x	x	x

MCM 4, BMP 12: Post-Construction Stormwater Management in New Development and Redevelopment

Implement Program to Control Post-Development Runoff through annual inspection of commercial and residential detention/retention facilities. Document inspection with written and photographic observations. Identify trash, debris, and vegetation that may lead to stormwater pollution or reduced effectiveness of facility for stormwater control and pollution control.

Annual Actions:
Year 1-5: Inspect and document inspection result for 25 percent of the detention/retention facilities in the city. Conduct follow-up notification (and enforcement based on available authority) for 100 percent of facilities with noted pollution, debris, or overgrown of vegetation issues.

Responsible Department: Engineering and Public Works inspection staff.

Documentation: Maintain electronic and photographic documentation of inspection results, and follow-up actions and, if available, enforcement actions.

Implementation Schedule:

BMP 12					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Inspect and document 25% of detention/retention facilities annually	x	x	x	x	x

MCM: 5. Pollution Prevention and Good Housekeeping for Municipal Operations (Permit Part III.B.5.)

Objective: preventing or reducing pollutant runoff from municipal activities and municipally owned areas, develop and maintain an inventory of the MS4's facilities and stormwater controls and maintain structural BMPs .

MCM 5, BMP 13: As part of annual training (BMP 7), identify good housekeeping practices and identify necessary updates for good housekeeping based on prior year experience, approach to requiring subcontractor personnel representing or acting on behalf of the city to comply with city standards of stormwater pollution control and good housekeeping.

Annual Actions:
Year 1-5: Annually review past year operations including sanitary sewer overflow (SSO) prevention, indoor and outdoor storage facilities, and ROW maintenance activities that may contribute to stormwater pollution. Identify and document opportunities for improvement and pollution reduction associated with ROW maintenance, sanitary sewer operations, and city owned facilities.

Responsible Department: Engineering and Public Works inspection staff.

Documentation: Maintain electronic and photographic documentation of inspection results, and follow-up actions.

Implementation Schedule:

BMP 13					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Annual review of past year operations	x	x	x	x	x

MCM 5, BMP 14: Inspect city owned facilities for good housekeeping practices.

Annual Actions:
Year 1-5: Annually inspect city owned storage, stockpiling, and maintenance facilities.

Responsible Department: Engineering and Public Works inspection staff.

Documentation: Maintain electronic and photographic documentation of inspection results, and follow-up actions.

Implementation Schedule:

BMP 14					
Measurable Goals	Deadlines (December 31 annually)				
	2019	2020	2021	2022	2023
Annual inspections on city-owned storage, stockpiles, and maintenance facilities	x	x	x	x	x

Attachment 1

Memorandum and list of relevant City of Melissa Ordinances

Memo

To: **Bob Helmberger, P.E.**

From: **Rob Franke, P.E.**

cc: **City of Melissa File**

Date: **5/08/17**

Re: **City of Melissa, Various Ordinance– Environmental Review**

This memorandum summarizes the review and relevant city ordinances that may be used for enforcement of various storm water control measures.

Based on the list of ordinances, there appears to be sufficient authority to require and impose restrictions to development projects that have the potential to discharge storm water to the public infrastructure. The current practice of requiring SWP3 implementation consistent with the TCEQ General Permit and ongoing inspection of construction projects is relevant and appropriate.

Moving forward, adopting a city Right of Way ordinance can improve management of the ROW and control of potential discharges.

Proposed blocking of downstream sanitary sewer manholes/pipes will help prevent overloading the sanitary sewer system during rainfall events and may prevent potential overflow situations (SSO). Consequently, we need to address this practice in the CMOM and the MS4 permit updates to document the practice and enforceability.

Ongoing infrastructure projects that will remove the Fannin Rd. lift station from service and implementing a gravity sewer system will further reduce the potential for sanitary sewer overflows and potential bacterial contamination to surface waters. This approach should be documented in the CMOM that is currently being prepared.

§ 11.1101 - Definitions

As used in this article:

(7) Control Point — Point of access to a course of discharge before the discharge mixes with other discharges in the public sewer.

(10) Industrial Water Charge — The charge made on those persons who discharge industrial wastes into the City's sewerage system.

(12) Natural Outlet — Any outlet into a watercourse, ditch, lake, or other body of surface water or groundwater.

(17) Public Sewer — Pipe or conduit carrying wastewater or unpolluted drainage in which owners of abutting properties shall have the use, subject to control by the City of Melissa, Texas.

(18) Sanitary Sewer — A public sewer that conveys domestic wastewater or industrial wastes or a combination of both, and into which stormwater, surface water, groundwater, and other unpolluted wastes are not intentionally passed.

(21) Storm Sewer — A public sewer which carries storm and surface waters and drainage and into which domestic wastewater or industrial wastes are not intentionally passed.

(22) Stormwater — Rainfall or any other forms of precipitation.

§ 11.1102 - Prohibited Discharge

(a) No person may discharge to public sewers any waste which by itself or by interaction with other wastes may:

(1) injure or interfere with wastewater treatment processes or facilities;

(2) constitute a hazard to humans or animals; or

(3) create a hazard in receiving waters of the wastewater treatment plant effluent.

(b) All discharges shall conform to requirements of this article.

§ 11.1106 - Stormwater and Other Unpolluted Drainage

(a) No person may discharge to public sanitary sewers:

(1) unpolluted stormwater, surface water, groundwater, roof runoff or subsurface drainage;

(2) unpolluted cooling water;

(3) unpolluted industrial process waters;

(4) other unpolluted drainage; or make any new connections from inflow sources.

(b) In compliance with the Texas Water Quality Act and other statutes, the Approving Authority may designate storm sewers and other watercourses into which unpolluted drainage described in § 11.1106 (a) may be discharged.

§ 11.1109 - Impairment of Facilities

(a) No person may discharge into public sewers any substance capable of causing:

(1) obstruction to the flow in sewers;

(2) interference with the operation of treatment processes of facilities; or

(3) excessive loading of treatment facilities.

(b) Discharges prohibited by § 11.1109(a) include, but are not limited to, materials which inert or cause concentrations of:

(1) inert suspended solids greater than 300 mg/l including, but not limited to:

(a) Fuller's earth,

(b) lime slurries, and

(c) lime residues.

(2) dissolved solids greater than 500 mg/l including but not limited to:

(a) sodium chloride; and

(b) sodium sulfate.

(3) excessive discoloration including, but not limited to:

(a) dye wastes; and

(b) vegetable tanning solutions; or

(4) BOD, COD, or chlorine demand in excess of normal plant capacity.

(c) No person may discharge into public sewers any substance that may:

(1) Deposit grease or oil in the sewer lines in such a manner as to clog the sewers;

(2) overload skimming and grease handling equipment;

(3) pass to the receiving waters without being effectively treated by normal wastewater treatment processes due to the nonamenability of the substance to bacterial action; or

(4) deleteriously affect the treatment process due to excessive quantities.

(d) No person may discharge any substance into public sewers which:

(1) is not amenable to treatment or reduction by the processes and facilities employed; or

(2) is amenable to treatment only to such a degree that the treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

(e) The Approving Authority shall regulate the flow and concentration of slugs when they may:

(1) impair the treatment process;

(2) cause damage to collection facilities;

(3) incur treatment costs exceeding those for normal wastewater; or

(4) render the effluent unfit for stream disposal or industrial use.

(f) No person may discharge into public sewers solid or viscous substances which may violate § 11.1109(a), if present in sufficient quantity or size including, but not limited to:

(1) ashes, (2) cinders, (3) sand, (4) mud, (5) straw, (6) shavings,

(7) metal, (8) glass, (9) rags, (10) feathers, (11) tar,(12) plastics,

(13) wood, (14) unground garbage, (15) whole blood, (16) paunch manure,

(17) hair and fleshings, (18) entrails, (19) paper products, either whole or ground by garbage grinders, (20) slops, (21) chemical residues; (22) paint residues, or (23) bulk solids.

§ 11.1110 - Compliance With Existing Authority

(a) Unless exception is granted by the Approving Authority, the public sanitary sewer system shall be used by all persons discharging:

(1) wastewater;

(2) industrial waste;

(3) polluted liquids.

(b) Unless authorized by the Texas Water Commission, no person may deposit or discharge any waste included in § 11.1110(a) on public or private property, or into or adjacent to any:

(1) natural outlet;

(2) watercourse;

(3) storm sewer;

(4) other area within the jurisdiction of the City.

(c) The Approving Authority shall verify prior to discharge that wastes authorized to be discharged will receive suitable treatment within the provisions of laws, regulations, ordinances, rules and orders of federal, state and local governments.

§ 11.1126 - Notice

The City shall serve persons discharging in violation of this article with written notice stating the nature of the violation and providing a reasonable time limit for satisfactory compliance. *Comment Text (parent not a footnote)(Ord. 89-13 adopted 11-14-89, Sec. 26)*

§ 11.1127 - Continuing Prohibited Discharges

No person may continue discharging in violation of this article beyond the time limit provided in the notice. *Comment Text (parent not a footnote)(Ord. 89-13 adopted 11-14-89, Sec. 27)*

§ 11.1128 - Penalty

(a) A person who continues prohibited discharges is guilty of a misdemeanor and upon conviction is punishable by a fine for each act of violation and for each day of violation. *Comment Text (parent not a footnote)(Ordinance adopting Code)* (b) In addition to proceeding under authority of subsection (a) of this section, the City is entitled to pursue all other criminal and civil remedies to which it is entitled under authority of states or other ordinances against a person continuing prohibited discharges.

§ 11.1607 - Continuing Public Education and Information Campaign

The continuing public education and information campaign on water conservation includes the following elements:

- Utilize the "Water IQ: Know Your Water" and other public education materials produced by the NTMWD.

- Insert water conservation information with water bills. Inserts will include material developed by City of Melissa staff and material obtained from the TWDB, the TCEQ, and other sources.

- Encourage local media coverage of water conservation issues and the importance of water conservation.

- Notify local organizations, schools, and civic groups that the City of Melissa staff and staff of the

NTMWD are available to make presentations on the importance of water conservation and ways to save water.

- Promote the Texas Smartscape web site (www.txsmartscape.com) and provide water conservation brochures and other water conservation materials available to the public at City Hall and other public places.

- Make information on water conservation available on the City of Melissa website and include links to the "Water IQ: Know Your Water" website, Texas Smartscape website and to information on water conservation on the TWDB and TCEQ web sites and other resources.

- NTMWD is an EPA Water Sense Partner and participates in the EPA Water Sense sponsored "Fix a Leak Week." NTMWD encourages all member cities and customers to become EPA Water Sense Partners.

- Utilize the Water My Yard website and encourage customers to sign-up to receive weekly watering advice.