PART IV. MONITORING AND REPORTING REQUIREMENTS

- A. Storm Event Discharge Monitoring: Beginning upon permit issuance (unless stated otherwise), the permittees shall implement a Wet Weather Characterization sampling program in accordance with Option 1, 2, or 3; Part IV, Section A.1, Part IV, Section A.2., or Part IV, Section A.3.
 - 1. **Option 1:** Regional Wet Weather Characterization Program (RWWCP). The permittees may participate in the TCEQ approved North Central Texas Council of Government (NCTCOG) RWWCP as approved by the TCEQ on June 30, 2017. If this option is selected by the permittees, the RWWCP must be implemented according to the schedule provided in the approved RWWCP. If the program is implemented prior to this permit issuance date, the permittees may use the results of all sampling that is conducted prior to permit issuance to comply with this requirement.
 - a. The permittees shall collect and analyze samples for the following parameters or as listed in the most recently approved RWWCP:

Oil & grease; pH; E.coli: total, dissolved solids (TDS); total suspended solids (TSS); biochemical oxygen demand (BOD); chemical oxygen demand (COD); total nitrogen: dissolved phosphorus; total phosphorus; atrazine; total arsenic: total chromium: total copper: total lead; total zinc: ammonia nitrogen; nitrate nitrogen; orthophosphate; and any other pollutants the permittee determine are necessary to meet the goals of the RWWCP.

- b. The RWWCP must describe how the information collected and analyzed under the RWWCP will meet or exceed the goals of the sampling identified in Part IV, Section A.2.
- c. The permittees shall coordinate with all participants in the RWWCP on proposed amendments to the approved regional program. Amendment requests may be submitted for TCEQ consideration at any time. Such requests must be submitted in writing to the TCEQ's Stormwater & Pretreatment Team (MC-148) and may only be implemented following written approval by the TCEQ.

- 2. **Option 2:** *Representative Monitoring*. In lieu of the RWWCP described in Section A.1. above, the permittees may either conduct representative monitoring as described in this section or conduct rapid bioassessment protocol as described in the next section (A.3.). To characterize the quality of stormwater discharges from the MS4 monitoring shall be collected from representative outfalls, internal sampling stations, or instream monitoring locations
 - a. Monitoring Requirements and Locations. During the period beginning upon date of issuance and lasting through date of expiration, the permittees are authorized to discharge from the MS4 subject to the following requirements.
 - b. Pollutants. The permittees shall analyze each collected monitoring sample for the following parameters and shall report the daily maximum concentration in milligrams per liter (mg/L) except as indicated:

Biochemical oxygen demand, 5-day (BOD5); chemical oxygen demand (COD); oil and grease; total suspended solids (TSS); total dissolved solids (TDS); total nitrogen; total kjeldahl nitrogen (TKN); nitrate+nitrite; total arsenic; total phosphorus; dissolved phosphorus; total cadmium (micrograms per liter, or $\mu g/L$); total chromium ($\mu g/L$); total copper ($\mu g/L$); total lead ($\mu g/L$); total zinc ($\mu g/L$); E. coli (Most Probable Number (MPN)/100 mL; or colony forming units, (cfu) per 100 m/l); fecal streptococcus (in cfu MPN/100 ml); pH (report daily minimum and daily maximum results in standard units, "S.U."); hardness (as CaCO₃); temperature (degrees Centigrade, °C); and Atrazine (μ g/L).

- c. The permittee shall collect composite samples for all pollutants except as described in Part IV, Section A.6. below.
- d. Monitoring frequency for each pollutant is once per season (1/season) during each year of permit term unless monitoring under the representative Rapid Bioassessment Monitoring Option (See Part IV, Section A.2.). The pH shall be monitored 1/Season (*1) by grab sample, and the permittees shall report the minimum and maximum values in standard units. Seasonal monitoring periods are:

- i. September-February (two samples/station)
- ii. March to August (one sample/station)
- e. Sample Locations.
 - i. Discharge monitoring samples shall be collected at the following locations:

Outfall 001, located at Eastern Hills High School at Weiler Drive (City) Outfall 002, located at Joel East Road at Oak Grove (City) Outfall 003, located at Deer Creek at I-35 (TRWD), and Outfall 004, located at Sycamore Creek at Vickery Street (City)

- ii. Alternate representative monitoring locations may be substituted for just cause during the term of the permit.
- iii. Requests for permanent approval of alternate monitoring locations must be made as minor amendment application and must be submitted to the TCEQ's Application Review and Processing Team (MC-148). The application must include the rationale for the requested monitoring station relocation.
- iv. Requests for temporary approval to substitute monitoring locations (for safety concerns, repairing an outfall, etc.) may be made at any time in writing to the TCEQ's Stormwater & Pretreatment Team (MC-148). Unless disapproved by the TCEQ, or unless the outfall contains numeric effluent limitations, temporary (i.e., for one year or less) use of an alternate monitoring location may commence 30 days from the date of the request. For outfalls where numeric effluent limitations have been established and for permanent changes to locations, the permit must be modified prior to substitution of alternate monitoring locations.
- 3. **Option 3:** *Representative Rapid Bioassessment Monitoring*. The permittees have the option of developing and implementing a rapid bioassessment monitoring program.
 - a. If the permittees implement a rapid bioassessment monitoring program, they shall submit the rapid bioassessment monitoring program to the TCEQ Stormwater & Pretreatment Team (MC-148) for approval no later than one year from the date of permit issuance. The proposal must include an appropriate bioassessment monitoring protocol (e.g., based on EPA published protocol) and the permittees shall provide written notification to the TCEQ's Stormwater & Pretreatment Team at least 14 days prior to commencing a rapid bioassessment monitoring program.
 - b. The permittees may implement the alternate rapid bioassessment program, unless it is contacted in writing by the TCEQ within 60 days of the date the written notification was provided to the TCEQ.
 - c. The permittees shall obtain all necessary aquatic wildlife permits from appropriate State or Federal agencies.

- d. Monitoring of the MS4 must be conducted as described in Part IV, Section A.2. of this permit, except that monitoring for years two, three, and five are no longer required; however, if the permittees had previously chosen to monitor according to the RWWCP, then the permittees shall sample each watershed once per permit term as described in Part IV, Section A.1 of this permit or as otherwise prescribed in the latest approved RWWCP. All other requirements of Part IV, Section A of this permit remain unchanged.
- e. An alternate rapid bioassessment monitoring program must include requirements for the permittees to monitor:
 - i. a station in at least two water bodies receiving stormwater discharges from the MS4 and a reference site located within the same ecological region as the MS4. Monitoring needs to be conducted using TCEQ metrics;
 - ii. each monitoring station at least twice per year, with monitoring conducted at essentially the same time periods each year; and
 - iii. the reference site within a reasonable time frame in which the conditions are as similar as possible each time a station located in the receiving waters of the MS4 is monitored.
- 4. Storm Event Data. For sampling conducted for Part IV, Section A.2 of this permit and any additional sampling conducted for Part IV, Section A.5., quantitative data shall be collected to estimate pollutant loadings and event mean concentrations for each parameter sampled. In addition to the parameters listed in Part IV. Section A.2 of this permit, the permittees shall maintain records of the storm events which generated the sampled runoff. The records must include:
 - a. date and duration (in hours);
 - b. rainfall measurements or estimates (in inches);
 - c. the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and
 - d. an estimate of the total volume (in gallons) of the discharge sampled.
- 5. Seasonal Pollutant Loadings and Event Mean Concentrations. For sampling conducted for Part IV, Section A.2 or Section A.3 of this permit, all necessary sampling data must be collected to provide estimates for each of the selected monitoring locations (Outfalls 001 through 004 in this permit) of seasonal pollutant loadings and event mean concentrations for a representative storm event for the parameters listed in Part IV, Section A.2 of this permit. This information may be estimated from the representative monitoring locations and must take into consideration land uses and drainage areas for the outfall. The estimates of seasonal loadings and event mean concentrations must be included in the Annual Report for Reporting Year 4 of this permit term.
- 6. Sample Type, Collection, and Analysis. Requirements a c below apply only to samples collected for Part IV, Sections A.2 or A.5 of this permit.

- a. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample must be taken.
- b. Grab samples taken during the first two hours of discharge shall be used for the analyses (if required) of pH, temperature, hardness, cyanide, oil & grease, *E. coli*, and fecal streptococcus. For all other parameters, data must be reported for flow-weighted composite samples of the entire event or, at a minimum, the first three hours of discharge.
- c. Samples of a discharge from the outfalls listed in Part IV, Section A.2. of this permit must be the result of a storm event that is greater than 0.1 inch and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Composite samples may be taken:
 - i. with a continuous sampler; or
 - ii. by combining a minimum of three sample aliquots taken:
 - A) in each hour of discharge for the entire discharge; or
 - B) for the first three hours of the discharge, with each aliquot being separated by at least fifteen minutes.
- d. Samples of a discharge from the outfalls listed in Part IV, Section A.2. of this permit do not have to be taken if the preceding 72 hour storm event did not result in a measurable discharge. The required 72 hour storm event interval is also waived if the permittees document that less than a 72 hour interval is representative for local storm events during the season when sampling is being conducted.
- 7. Temporary Suspension and Waivers.
 - a. Requirements to conduct representative monitoring as described in Part IV, Section A.2.c. within a prescribed monitoring period may be temporarily suspended for adverse weather conditions. Adverse weather conditions are conditions that are either dangerous to personnel (for example high wind, excessive lightning) or weather conditions that prohibit access to a discharge (for example flooding, freezing conditions, extended period of drought). Adverse weather conditions that result in the temporary suspension of a permit requirement to conduct seasonal monitoring must be documented and included as part of the Annual Report. Documentation shall include the date, time, names of personnel that witnessed the adverse condition, and the nature of the adverse condition.
 - b. When seasonal monitoring is temporarily suspended, that monitoring must be conducted in the same season of the following year, in addition to any monitoring required for that season. If the temporarily suspended monitoring requirement cannot be fulfilled during the same season of the following year,

then it is permanently waived.

B. Floatables Monitoring

The permittees shall maintain two locations where floatable material can be removed before the stormwater is discharged to or from the MS4. Floatable material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than twice per year. The amount of material collected shall be estimated by weight, volume, or by other practical means. Results shall be included in the Annual Report required in this permit.

C. Annual System-Wide Report

- 1. Each permittee shall contribute to the preparation of an annual system-wide report to be submitted to the Stormwater and Pretreatment Team, MC-148, P.O. Box 13087, Austin, Texas, 78711-3087 no later than 90 days following end of the permit year. The report must cover the previous reporting year as defined in Part VI. E.
- 2. The annual report must contain the following sections or chapters to describe the status of implementing the SWMP including the status of complying with new requirements, or must cross-reference the items in this list so that the following topics may be easily located in the order provided in Part III, Section B.2. The report must be provided in either the following format or a format approved in writing by the Stormwater and Pretreatment Team:
 - a. MS4 Maintenance Activities
 - i. Structural Controls
 - ii. Floatables
 - 111. Roadways
 - b. Post-Construction Stormwater Control Measures
 - i. Areas of New Development and Significant Redevelopment
 - ii. Evaluation of the existing SWMP to ensure implementation and enforcement of a regulatory mechanism
 - iii. Flood Control Projects
 - c. Illicit Discharge Detection and Elimination
 - i. Illicit and Allowable Discharges
 - ii. Detection and Elimination of Illicit Discharges, including the status of complying with new requirements
 - iii. Evaluate and update the list of priority areas
 - iv. Overflows and Infiltration
 - v. Household Hazardous Waste and Used Motor Vehicle Fluids
 - vi. MS4 Screening and Illicit Discharge Inspections
 - vii. NPDES and TPDES Permittee List
 - viii. MS4 Map
 - ix. Spill Prevention and Response

- d. Pollution Prevention/Good Housekeeping for Municipal Operations
 - i. Pollution Prevention/Good Housekeeping Program
 - ii. Structural Control Maintenance
 - iii. Waste Handling
 - iv. Pesticide, Herbicide, and Fertilizer Application
 - v. List of Municipal Facilities
- e. Industrial & High Risk Runoff
 - i. Priorities and Procedures for Inspections and Implementing Control Measures
 - ii. Industrial and High Risk Monitoring Program (alternatively, this may be referenced in the Monitoring section of the annual report)
- f. Construction Site Stormwater Runoff
 - i. Requirements for Structural and Non-Structural BMPs
 - ii. Inspection of Construction Sites and Enforcement Requirements
 - iii. Education and Training for Construction Site Operators;
 - iv. Notification of Requirements to Construction Site Operators
 - v. List of Construction Sites
- g. Public Education and Outreach/Public Involvement and Participation
 - i. Public Education and Outreach
 - ii. Public Involvement and Participation
 - iii. Evaluation of the effectiveness of this MCM
- h. Monitoring, Evaluation and Reporting
 - i. Dry Weather Screening Program
 - ii. Wet Weather Screening Program
 - iii. Industrial and High Risk Runoff Monitoring Program
 - iv. Wet Weather Characterization Program. Note that for Reporting Year (RY) 4, the permittee(s) shall provide the estimates of seasonal loadings and event mean concentrations in accordance with Part IV, Section A.5. of this permit, related to Seasonal Loadings and Event Mean Concentrations. Reporting of Storm Event Discharge Monitoring may be accomplished by submittal of the NCTCOGs' RWWCP.
 - v. Floatables Monitoring
 - vi. If applicable, Impaired Water Bodies and TMDL requirements
- 3. For each program element listed above, the permittees shall include the following separate sections, with an overview for the entire MS4:
 - a. For shared programs, a description of the portion of the current program that the permittee has implemented for each SWMP element;
 - b. the status of implementing the SWMP (status of compliance with any schedules established under this permit);

- c. any proposed changes to the SWMP for the next reporting year; and
- d. a summary describing the number and nature of enforcement actions and inspections, where applicable.
- 4. The report must include the following appendices after the program/MCM descriptions:
 - a. identification of any water quality improvements, degradations, and progress toward any measurable goals or measured reduction in pollutants;
 - b. annual expenditures for the reporting period, with a breakdown for the major elements of the SWMP;
 - c. the proposed budget for the upcoming reporting year;
 - d. revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application or the most recent annual report;
 - e. a summary of the number of NPDES and TPDES notices of intent received for each general permit and the number of site notices received from construction site operators seeking coverage for stormwater discharges;
 - f. the number of inspections conducted at industrial and construction sites; and
 - g. representative monitoring data and a summary of any additional data that was collected during the reporting year and the status of complying with the new SWMP elements in Part III, Section B. of the permit.
- 5. The report must also include the following:
 - a. A summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the BMPs currently used by the permittees to address the pollutant of concern; and
 - b. A description and schedule for the implementation of any additional BMP's that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementations plans.

Preparation and submittal of a system-wide annual report shall be coordinated by the City of Fort Worth. The report shall indicate which, if any, permittees have failed to provide required information to the City of Fort Worth on the portions of the MS4 that is their responsible no later than 45 days prior to report due date. Joint responsibility for report submission shall be limited to participation in preparation of the overview for the entire system and inclusion of the identity of any permittee who failed to provide input to the annual report. Each individual permittee shall be individually responsible for content of the report relating to the portions of the MS4 that is their responsibility and for failure to provide information for the system-wide annual report in a timely manner. Each permittee shall sign and certify the annual report in accordance with Part V, Section B.8. of this permit and include a statement or resolution that the permittee's governing body or agency (or delegated representative) has reviewed or been apprised of the content of the annual report.

D. Certification and Signature of Reports

All reports required by the permit and other information requested by the TCEQ shall be signed and certified in accordance with Part V, Section B.8. of this permit.

E. Reporting: How, When, and Where to Submit

1. Effective December 21, 2016, representative monitoring results (Part IV, Section A.2 obtained during the reporting period running from September 1 through August 31 must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Permittees that are issued an electronic reporting waiver shall submit analytical results to the TCEQ Enforcement Division (MC-224) on an approved DMR form (EPA No. 3320-1). Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in this general permit. Monitoring results must be signed and certified as required by Part IV, Section D. along with the Annual Report required by Part IV, Section C. of this permit.

Effective September 1, 2020, annual reports must be submitted using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

Separate reporting is required for each monitoring period specified in Part IV.A.2. If the permittees participate in the approved regional monitoring program, the data may be submitted in a single region-wide report which is to be submitted no later than March 1 of the following year. A copy of this report must be submitted for each permit covered by the plan (i.e., City of Fort Worth must ensure that a copy of the regional plan is submitted for this permit, TPDES Permit Number WQ0004350000).

2. Signed copies of the annual report required by Part IV, Section C. and all other reports required by this permit, shall be submitted to the TCEQ's Wastewater Permitting Section, Stormwater & Pretreatment Team (MC-148) and the TCEQ Region 4 Office.