

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 either Provision IV.A.1 or IV.A.2. or IV.A.3. which follow. The permittees may change from one option to another during the permit term as specifically provided in the following language or as otherwise approved in writing by TCEQ.
1. Option 1: Regional Wet Weather characterization Program (RWWCP). The permittee may participate in the Dallas-Fort Worth Area RWWCP that was approved by the TCEQ on February 11, 2011. If this option is selected by the permittees, then this program must be implemented according to the schedule provided in the proposal submitted to the TCEQ on January 14, 2011. If the program is implemented prior to the permit issuance date, the permittees may utilize the results of that sampling to comply with this permit. The Program must meet the following minimum requirements:
 - a. The watershed(s) must be sampled for the pollutants listed below, or as listed in the approved RWWCP. The permittees shall include any additional pollutants they determine to be necessary to meet the goals of the regional
 - Oil & grease;
 - pH;
 - E. coli*;
 - total coliforms;
 - total dissolved solids (TDS);
 - total suspended solids (TSS);
 - biochemical oxygen demand (BOD);
 - chemical oxygen demand (COD);
 - total nitrogen;
 - dissolved phosphorus;
 - carbaryl;
 - total arsenic;
 - total chromium;
 - total copper;
 - total lead.
 - b. The RWWCP will describe how the information collected and analyzed under the program would 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 Storm Water & Pretreatment Team (MC-148) and may only be implemented following written approval by the TCEQ.
 2. Representative Monitoring: The permittees have the option of conducting representative monitoring as described in this section.

- 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 monitoring requirements:
- (1) Pollutants. The permittees shall analyze each monitoring sample for the following parameters, and shall report the daily maximum concentration in milligrams per liter (mg/L) except as indicated below:
 - Biochemical oxygen demand, s-day;
 - 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 ($\mu\text{g/L}$);
 - total chromium ($\mu\text{g/L}$);
 - total copper ($\mu\text{g/L}$); total lead ($\mu\text{g/L}$);
 - total zinc ($\mu\text{g/L}$);
 - E. coli* (colony forming units (CFU/100mL); or Most Probable Number (MPN/100mL);
 - fecal streptococcus (CFU/100mL);
 - pH (report daily minimum and daily maximum results in standard units (S.U.));
 - hardness (as CaCO_3);
 - temperature ($^{\circ}\text{C}$);
 - Atrazine ($\mu\text{g/L}$).
 - (2) Sample Type: the permittee shall collect composite samples for all pollutants except as described in Part IV, Section A.6.b. below.
 - (3) Frequency:
 - (a) Monitoring frequency for each pollutant is once per season during each year of permit term unless monitoring under Alternative Rapid Bioassessment Option (See part IV, Section A.2.). The pH shall be monitored t/season by grab sample, and the permittees shall report the minimum and maximum values in standard units.
 - (b) Seasonal monitoring periods are:
 - September to February (two samples/station)
 - March to August (one sample/station)
 - (4) Sample Locations: Discharge monitoring samples shall be collected

at the following locations:

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

- (a) Alternate representative monitoring locations may be substituted for just cause during the term of the permit. Requests for approval of alternate monitoring locations shall be made to the TCEQ Storm Water & Pretreatment Team (MC-148) in writing and include the rationale for the requested monitoring station relocation. Unless disapproved by the TCEQ, or unless the outfall contains numeric effluent limitations 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, the permit must be modified prior to substitution of alternate monitoring locations. Six samples shall be collected during the first year of monitoring at substitute outfalls.
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, other than the program included in the RWWCP (Part IV.A.1), they shall submit the rapid bioassessment monitoring program to the TCEQ Storm Water & Pretreatment Team (MC-148) for approval no later than one year from the effective date of this permit. The permittees shall provide written notification to the TCEQ's Storm Water & Pretreatment Team (MC-148) at least 14 days prior to commencing a rapid bioassessment monitoring program.
 - b. The permittees may implement the alternative 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.A.2. of this permit, except the monitoring for Years Two, Three, and Five are no longer required; however, if the permittee(s) had previously chosen to monitor according to the RWWCP, then the permittee(s) shall sample each watershed once per permit term as described in Part IV.A.3. of this permit or as otherwise prescribed in the latest approved RWWCP. All other requirements of Part IV.A of this permit remain unchanged.
 - e. An alternative rapid bioassessment monitoring program must include requirements for the permittee(s) to monitor:
 - (a) a station in at least two water bodies receiving storm water discharges from the MS4 and a reference station located within the same ecological region as the MS4;

- (b) each monitoring station at least twice per year, with monitoring conducted at essentially the same time periods each year; and
 - (c) the reference station within a reasonable time frame in which conditions are as similar as possibly each time a station located in the receiving waters of the MS4 is monitored.
- 4. Storm Event Data: For sampling conducted for Part IV.A.2. of this permit and any additional sampling conducted for Part IV.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.A.2.a. of this permit, the permittees shall maintain records of the storm events which generated the sampled runoff. The records must include: (1) date and duration (in hours); (2) rainfall measurements or estimates (in inches); (3) 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 (4) an estimate of the total volume (in gallons) of the discharge sampled.
- 5. Seasonal Loadings and Event Mean Concentrations. For sampling conducted for Part IV.A.2. or IV.A.3. of this permit, all necessary sampling data shall 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.A.3 of this permit. This information may be estimated from the representative monitoring locations and shall take into consideration land uses and drainage areas for the outfall. The estimates of seasonal loadings and event mean concentrations shall be included in the Fourth Year Annual Report for this permit term.
- 6. Sample Type, Collection, and Analysis: The following requirements apply only to samples collected for Parts IV.A.2 and 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, cyanide, oil & grease, *E.coli* (MPN/100 ml), and fecal streptococcus. For all other parameters, data shall 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 resulting from a storm event that is greater than 0.1 inches and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event shall be collected. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by at least fifteen minutes.

The required 72 hour storm event interval is waived if the preceding 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: Requirements to conduct representative monitoring as described in Part IV.A.2 within a prescribed monitoring period may be temporarily suspended for adverse weather conditions. Adverse weather conditions are conditions that are either dangerous to personnel (e.g. high wind, excessive lightning) or weather conditions that prohibit access to a discharge (e.g. 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. 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.