1 STORMWATER MANAGEMENT EXECUTIVE SUMMARY

In 1972, the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), was amended to make illegal the discharge of any pollutant as a point source to any water body in the United States without authorization by a National Pollutant Discharge Elimination System (NPDES) permit. Pollution control measures were implemented first in industrial wastewater operations and municipal sewerage systems; however, it became apparent that more regulations were needed to include the identification of stormwater drainage systems as a point source. In 1987, the Clean Water Act was again amended to implement a two-phase approach to the reduction of stormwater discharges. The first phase was aimed at large and medium municipal separate stormwater systems (typically systems serving populations of 100,000 or more), industrial activities, and construction activities that disturbed five acres or more of land. The Phase I permitting process, implemented Nov. 16, 1990, required these larger cities to develop and implement a stormwater management program, and to address stormwater management at specific municipal facilities. It also required certain industries as well as any construction project disturbing greater than five acres to obtain NPDES permit coverage through the development and implementation of stormwater pollution prevention plans that would control erosion and sedimentation as well as pollutant discharges.

On December 8, 1999, the NPDES Phase II Stormwater Rule was published in the Federal Register by the United States Environmental Protection Agency. The NPDES Phase II Stormwater requirements focused on small Municipal Separate Storm Sewer systems (MS4) (usually cities with populations of less than 100,000) and small construction activities (construction activity that disrupts one-five acres of land). The basis of this Phase II approach was to design a stormwater management program that focused on five (5) with an optional sixth minimum control measures. The NPDES Phase II program requires the development of best management practices (BMPs) for each of the minimum control measures and the development of an implementation schedule and measurable goals throughout the five-year permitting period.

In 1998, the Texas Commission of Environmental Quality (TCEQ) was granted administration rights for the NPDES program in the State of Texas, commonly known as the Texas Pollutant Discharge Elimination System (TPDES).

This Storm Water Management Plan (SWMP) has been created to meet the requirements of the Texas Pollutant Discharge Elimination System (TPDES) permit and to guide Richardson's Stormwater Program over the permit term (five (5) years). The goal of the SWMP is to assist in the effect to reduce pollutants in stormwater runoff to the "maximum extent practicable" and ultimately from entering waterways within the City of Richardson. The plan outlines best management practices for handling stormwater, including maintenance of the MS4 controls for construction and post-construction sites; detection and monitoring of illicit discharges; pollution prevention and housekeeping for the City of Richardson facilities; education of the public, Richardson employees, and City developers; and MS4 monitoring, evaluation, and reporting.

The Impaired Waters 303(d) Listings, 2018 Texas Integrated Report – Texas 303(d) List (Category 5), and City of Richardson ordinances, regulations, policies, plans, maps and other documents were reviewed. In addition, meetings and discussions with various Richardson departments were held. The City of

Richardson's Code of Ordinances is in place to protect the residents' welfare and includes regulations concerning stormwater quality.

1.1 Background

EPA studies have demonstrated that stormwater pollution is one of the most significant sources of water pollution today. When it rains, the resulting stormwater picks up or dissolves pollutants and washes them into stormwater conveyance systems. Polluted stormwater runoff is often discharged into local rivers and streams without treatment. Common pollutants include oil, grease and metals from cars and roadways; pesticides and fertilizers from lawn maintenance activities; sediment from construction sites; and the improper disposal of litter including cigarette butts, paper wrappers and plastic bottles. Stormwater can impair waterways, degrade animal habitat, pollute drinking water, increase flooding, cause erosion of streambeds or siltation of waterways, and decrease the amount of water recharged to aquifers.

The City of Richardson is located in Dallas and Collin Counties, approximately fifteen (15) miles north of downtown Dallas. Richardson covers approximately 28 square miles and is made up of five (5) major drainage basins which include Duck Creek, Cottonwood Creek, Spring Creek, Floyd Branch, and Rowlett Creek. Richardson contains over 45 miles of creek beds. Richardson has identified the types and sources of pollution and has implemented plans to protect Richardson's creeks.

The City of Richardson acknowledges the presence of the least tern (Sterna antillarum) and Navasota ladies'(Spiranthes parksii) species in the municipal stormwater receiving waterbodies. The coexistence of these species in our local waterbodies highlights the importance of maintaining a healthy and sustainable environment for both wildlife and the community. There is no reason to believe that the stormwater discharges, allowable non-stormwater discharges and discharge-related activities will jeopardize the continued existence of any species or result in adverse modification or destruction of critical habitat.

In 2014, Rowlett Creek (0820B) was included in the Texas 303(d) list due to an assessment of water quality conditions, which identified bacteria as the primary pollutant responsible. On June 3, 2015, the Texas Commission on Environmental Quality officially adopted the Draft 2014 Texas 303(d) List. The Environmental Protection Agency subsequently granted approval to the 2014 Texas 303(d) List on November 19, 2015.

For Municipal Separate Storm Sewer Systems (MS4s) discharging a recognized pollutant of concern into impaired water bodies, their Stormwater Management Program (SWMP) should encompass details about the execution of 'targeted measures.' These measures encompass activities, practices, or structural interventions aimed at mitigating the adverse water quality effects of the specific pollutant. Each targeted measure should include the establishment of a quantifiable objective, a timeline for implementation, and a 'benchmark.' A benchmark serves as a measurable objective to aid in assessing the effectiveness of the targeted measures in addressing the pollutant. It's essential to note that exceeding a benchmark does not constitute a permit violation; rather, it contributes to the assessment of progress toward reducing pollutant discharges.

To address discharges from the MS4 that will ultimately flow into one or more surface water bodies already listed on the most recently approved Clean Water Act §303(d) list as failing to meet relevant state water quality standards due to bacterial issues, the City of Richardson has identified potential significant sources of bacteria and has implemented targeted controls for the reduction of bacteria

loading to Rowlett Creek. By identifying pet waste focus for bacteria reduction along with control of discharges from the sanitary sewer system and illicit discharge and dumping, including onsite sewer system. Focused best management practices have been identified that are intended to specifically address bacteria loading and they include pet waste installation and maintenance, 24-hour operations reporting hotlines, onsite sewage disposal inspections, and illicit discharge detection and elimination (IDDE).

The implementation plan located in Appendix A describes in further detail all the above-mentioned focused best management practices and specific actions to control the discharge of pollutants of concern to impaired waters and evaluate the progress of controlling those pollutants.

1.2 Objective

Richardson has updated the Stormwater Management Plan (SWMP) in accordance with TPDES Permit No. TXR040042 issued on January 24, 2019. The permit requires Richardson to develop a management plan to include five (5) minimum control measures (MCMs). The objective of this stormwater management plan is to develop a program of stormwater mitigation for the City of Richardson, Texas based on the guidelines established under the Municipal Separate Storm Sewer System (MS4) stormwater management program by the U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Rule. The MS4 Phase II program was created with the intention of improving the quality of the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into stormwater systems and discharges to surface water bodies. EPA requires that MS4 Phase II owners/operators reduce pollutants in stormwater to the maximum extent practicable (MEP) to protect water quality. Based on the 2010 U.S. Census, Richardson has a population of 99,223. Richardson has been classified as a Phase II Level 3 operator of a traditional small MS4.

The MCMs that Richardson's SWMP must address are the following minimum control measures:

1. MCM 1: Public Education, Outreach, Involvement and Participation
2. MCM 2: Illicit Discharge Detection and Elimination (IDDE)
3. MCM 3: Construction Site Stormwater Runoff Control
4. MCM 4: Post-Construction Stormwater Management in New Development and Redevelopment
5. MCM 5: Pollution Prevention and Good Housekeeping for Municipal Operations

1.3 Definitions

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.

Clean Water Act (CWA) - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

Commencement of Construction - The initial disturbance of soils associated with clearing, grading, or excavation activities, as well as other construction-related activities (e.g., stockpiling of fill material, demolition).

Common Plan of Development or Sale - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

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 cap, 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 rights-of-way, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Small Construction Activity means 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 means 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.

General Permit - A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

High Priority Facilities - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

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 firefighting 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.

Indicator Pollutant - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

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).

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

MS4 Operator - For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

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 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 section 208 of the Clean Water Act that discharges into waters of the United States.
(b) That is designed or used for collecting or conveying storm water.
(c) That is not a combined sewer; and
(d) That is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2."

Non-Point Pollution means pollution that occurs when water runs over land or through the ground and picks up natural and human-made pollutants and discharges them in surface waters or introduces them into groundwater.

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 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-of-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 - 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. (Definition from 40 CFR 122.22)

Pollutant means any element or property of sewage, agricultural, industrial, or commercial waste, runoff, leachate, heated effluent, or other matter in whatever form, and whether originating at a *point* or nonpoint source, that is or may be discharged, drained or otherwise introduced into any sewage system, treatment works or waters of the City of Richardson.

Pollutants of Concern - Includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment in any water body to which the MS4 discharges. (Definition from 40 CFR 122.3(e)(3))

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 road with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(a) Owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, 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 section 208 of the CWA.
(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 is 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).

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.

Surface Water in the State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Total Maximum Daily Load (TMDL) - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Urbanized Area (UA) – A land area comprising one or more places – central place(s) – and the adjacent densely settled surrounding area – urban fringe – that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. The area of high population density included in a small MS4 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.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland.

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.

2 CONTACT INFORMATION

This Stormwater Management Plan has been completed for the City of Richardson, Texas to satisfy the requirements of the NPDES Phase II Stormwater Program as defined under the Clean Water Act.

The contact information for the person and department responsible for the implementation of this program is listed below.

Mr. Bill Alsup, Director of Health

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Mailing Address
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Richardson, TX 75083-0309

Preparer Contact Information

Danea Newman
Environmental Health Manager

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Richardson, TX 75083-0309

3 ALLOWABLE NON-STORMWATER DISCHARGES

In accordance with the requirements of the small MS4 general permit, the following non-stormwater sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the permittee or the TCEQ to be significant contributors of pollutants to the small MS4, or they are otherwise prohibited by the MS4 operator:

1. Water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;
13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper waste water;
15. Discharges or flows from emergency firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

4 MINIMUM CONTROL MEASURES

Operators of Phase II MS4s are required to design stormwater management programs that accomplish these three (3) objectives:

- Reduce the discharge of pollutants to the maximum extent practicable (MEP)
- Protect water quality
- Satisfy the appropriate water quality requirements of the CWA

The City of Richardson has developed and implemented a SWMP that includes the following five (5) minimum control measures (MCMs), as applicable. All program elements are or will be implemented according to the schedule as required by the TCEQ General Permit. These BMPs have been developed for the MCMs that are expected to minimize and/or eliminate stormwater pollutants discharged to the City's stormwater system and provide water quality protection for the City's receiving water bodies. Below is a general description of the MCMs. The specific requirements for each MCM are provided in Appendix A.

4.1 Public Education, Outreach, and Involvement

The goal of the Public Education and Outreach Program is to increase public knowledge of local water quality problems caused by urban runoff in order to maintain public support for local stormwater quality programs. This support ranges from individuals changing their daily actions to communities' adoption of stormwater program elements. The program should take into account pollutants commonly associated with the urban environment.

Pollutants found in stormwater runoff during wet weather can originate from commercial, industrial, residential, and vehicular activities; leaking underground storage tanks; accidental spills; construction sites; and, sewer infiltration. The primary pollutants found in heavily urban areas include pathogens, metals, oil and grease, nutrients, and organic enrichment. Residents and businesses can play a major role in the reduction of stormwater impacts to surface water bodies. When residents and businesses are provided with the appropriate information they can better understand the effects of improper disposal of waste. The public education program creates expectations that greater awareness will influence behavior and habits that exacerbate the problems.

The objective of the Public Education and Outreach minimum control measure is to inform the community of the impacts of stormwater runoff and what can be done to reduce stormwater pollution. This objective may be met through a variety of means, including the development and dissemination of educational material.

Required Elements:

- Develop and implement a public education program to distribute educational material to the community.
- Public education program will provide information concerning stormwater discharge impacts on water bodies.
- Public education program will address steps and/or activities that the public can take to reduce pollutants in stormwater runoff.

BMP 1 – Stormwater Information on the City of Richardson Website

The Richardson Health Department currently hosts a dedicated webpage for its Stormwater Program at the following URL: https://www.cor.net/departments/health-department/health-programs/environmental-education.The City is periodically updating its website in an effort to provide a more accessible and user-friendly web page. In addition to providing the current City's Stormwater Management Plan and the last four (4) years' current annual reports, this web page will continue to be devoted to informing the community of ongoing stormwater management efforts and provide links to additional sources of information on stormwater management resources.

Responsible Department:
Health Department

BMP 2 – Distribute Educational Material

In an effort to provide relevant information to the community, targeted educational and outreach materials as well as materials developed by EPA and TCEQ will be distributed to residents and businesses.

The City of Richardson has developed several brochures that provide information on topics of: pet waste, stormwater pollution prevention for businesses, drainage and backwash of pools legally, etc. These materials contain basic stormwater information about how these activities impact water quality. Additionally, specific commercial activities have been targeted such as restaurants and automobile service facilities.

Richardson began its Fats, Oils, and Grease (FOG) Program in August of 2017. The FOG Program was enacted to combat sanitary sewer overflows where grease related blockages were being observed in a high frequency. The City focuses outreach and education material for food service establishments, residents, schools, and other organizations in support of the FOG Program. These materials are available to the food service establishment, inspectors, for food service facility employees and management. For residential FOG Program Outreach, exhibits with educational information are placed at special events along with FOG disposal containers and bags distributed to the public.

According to the 2010 U.S. Census many foreign languages are spoken as primary languages in Richardson households. Efforts will be made to provide stormwater educational information in the major languages spoken in these households according to the 2010 U.S. Census.

Responsible Department:
Communications Department

BMP 3 – Stormwater Videos on the City of Richardson Webpage and Cable TV Public Channel

Stormwater educational videos provide information to businesses, industries, and citizens regarding the stormwater drainage system in the City of Richardson. In addition, they will be able to see how pollution affects water quality and aquatic life.

Responsible Department:
Health Department

BMP 4 – Building Construction Community Education

Building construction stormwater contamination information and the direct impact it has on the storm drain system as it flows to our rivers and streams are included in all building permit approved applications. This information assists commercial/industrial business operators on ways they can reduce and/or eliminate activities that could be potentially dangerous to our local streams and rivers.

Responsible Department:
Building Inspections Department

BMP 5 – Trash Bash

The City of Richardson holds a city-wide litter collection event known as "Trash Bash". This is a time when volunteers collect litter from parks, neighborhoods, and waterways to bring awareness to water pollution and reduce pollution in the City. Collections of trash, used cooking oil, and recyclables, as well as donations of clothing and books, are counted and documented each year.

Responsible Department:
Health Department in coordination with the others in the Health Department and many other city departments.

BMP 6 – Community and Corporate Environmental Cleanup Program

The City, in coordination with private business owners, civic clubs, citizens, students and other stakeholders work to collect litter in Parks and Recreation maintained areas, parking areas and trash receptacles in efforts to remove floatable litter from public waterways. Volunteerism opportunities are provided to individual corporate entities, neighborhoods, youth organization, and etc. in the City of Richardson's Clean Up Program. This program allows groups to collect litter from an area they select inside the city in order to bring awareness to water pollution and reduce pollution in the City.

Responsible Department
Health Department

BMP 7 – Presentations to Civic Groups, Schools, and Neighborhood Leadership Groups

Provide group presentations about pollution prevention and recycling to civic groups, schools, and neighborhood leadership groups. Distribute educational specific for the target audience at each event to increase awareness regarding programs and volunteer opportunities related to stormwater activities.

Responsible Department
Health Department in coordination with other city departments.

BMP 8 – Stormwater Education Using the Newspaper, the City's Website, Richardson Today's Website, Social media, YouTube, and Public spaces

The City of Richardson provides stormwater education information through the City newspaper, the City's Website, Week in Review, Richardson Today's Website, social media such as Twitter and Facebook, and other public spaces in print, through email, and online (as on the City's Website, Richardson Today's Website, and YouTube). The city provides information regarding issues that affect neighborhoods so residents themselves may control and/or minimize their actions that could adversely affect rivers and streams in their own neighborhood. This information is also forwarded to the City's home owners associations (HOAs) to distribute during HOA meetings, to post on their website, and to post at their facilities.

In addition, the City's Parks and Recreational Facilities (Huffines Recreational Facility, Heights Recreational Facility, and Senior Citizens Center) has made space available for additional stormwater education material. This material can be rotated out during the year to address common stormwater pollution problems found every day and those that commonly occur seasonally.

Responsible Department:
Health Department
Communications Department

BMP 9 – Proper Disposal of Household Hazardous Waste (HHW)

Assuring proper disposal of HHW helps to keeping hazardous materials out of landfills and incinerators. Richardson participates in the Dallas County Household Hazardous Waste Network. A Home Chemical Collection Center (HC3) provides accessibility for residents to dispose of household hazardous waste (HHW). Education and information regarding household hazardous waste is provided on the City of Richardson's website under Health Program. Efforts will be made to increase public awareness of the HC3 by providing information at public events, posting information on social media and/or newspaper articles, and posting information in public spaces throughout the City.

Responsible Department:
Health Department

BMP 10 – Pet Waste Station Installation and Maintenance

Richardson has ninety (90) pet waste stations throughout the City and at City parks areas for people with pets to dispose of pet waste. The City maintains the stations by adding new pet waste bags and empting the waste containers often. Richardson has also developed several brochures that provide information on how to manage pet waste. These materials contain basic stormwater information about how pet waste can impact stormwater quality.

Responsible Department:
Parks and Recreation

BMP 11 – Storm Drain Curb Markers

A common misunderstanding many residents and businesses' employees have is that the catch basin is connected to the sanitary sewer system. The City of Richardson, as part of a regional effort of over thirty metroplex communities, is putting a message in the form of a 4 inch diameter plastic decal that is affixed to the storm drain inlets on the streets. The marker states "This Drain for Rain, Flows to Creek, Don't Dump". Volunteers from the area help with the placing of these decals. Over this permit term, the map of marked drains will be evaluated for accuracy and updated as necessary so that areas targeted for future work and/or new installation will be noted on future maps.

Responsible Department:
Health Department

BMP 12 – 24-Hour Operations Reporting Hotlines

The City of Richardson maintains a 24-hour operations hotline for reporting of complaints/concerns via Response Center at 972-744-4111, MyRichardson smart phone app, and online web submission. Education on these reporting opportunities is provided to the public through distributed material at City facilities and City events, the City's website, the "Richardson Today" website, in printed media (as in the "Richardson Today" monthly publication), and on social media (i.e. Facebook, Twitter, and YouTube).

Response Center issues are documented with as much of, but not limited to, the following relevant information that can be collected from the submitter:

- Time and date the call was received
- Specific location of complaint/concern
- Time complaint/concern was noticed by the submitter
- Submitter's name and phone number
- Observations of the submitter (e.g., odor, duration, back or front of property)
- Other relevant information that will enable the responding City staff to quickly locate and respond to the submitter's observation

These resources allow public employees, businesses, and the general public to inform City employees of hazards associated with improper disposal of waste, sanitary sewer overflows, and potable water line breaks. Education on the existence of these reporting tools is posted at City facilities, distributed during City events, and posted on the City's website.

These procedures insure that the appropriate department is dispatched for proper response. Calls are reviewed in an effort to identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting line improvement, and areas requiring additional educational and/or enforcement in an effort to protect stormwater quality. Based on these needs, written procedures are updated accordingly.

Responsible Department:
Health Department
Building Inspections Department
Capital Projects-Building Inspectors
Parks and Recreation Department
Public Services Department – Solid Waste Services, Streets Maintenance, Water & Sewer Operations

BMP 13 – Public Notification Process of the City of Richardson's Stormwater Management Plan (SWMP)

The goal or objective of this minimum control measure is to get the public more involved in stormwater quality and pollution prevention issues. An involved public is more likely to

understand the goals of the plan, to share that understanding with others, and to generate public support for the plan.

The City of Richardson will participate in public meetings to discuss water quality and the City's Stormwater Management Program activities. Meetings will be advertised using various methods, such as newspaper notices, flyers, website postings, through e-mail list servers, and local organizations' newsletters and will comply with public notice requirements. This will give the public the opportunity to participate in the implementation and review of the Stormwater Management Program.

For additional public information and education, you can find links to the current SWMP, SWMP Annual Report, and City ordinances on the City's website. You can access these resources by visiting the following URL: https://www.cor.net/departments/health-department/health-programs/environmental-education.

Responsible Department:
Health Department
Communications Department

BMP 14 – Grease Traps

A Fats, Oil and Grease ordinance has been enacted for the City. This ordinance contains the requirements to install grease interceptors at appropriate facilities (i.e., food service establishments). Additionally, these facilities are required to properly maintain the grease interceptors and have them serviced by City permitted liquid waste haulers on a regular basis. Information and education flyers are provided to businesses with grease interceptors during inspections. Grease traps are cleaned at a minimum twice a year.

This ordinance also addresses periodic inspections of the grease interceptors with appropriate legal authority to enforce the requirements necessary to prevent any sanitary sewer overflows, due to grease clogs, that could enter into the city's stormwater conveyance system and ultimately affect water quality in the city's creeks and streams.

Responsible Department:
Health Department

BMP 15 – Annual North Central Texas Council of Governments (NCTCOG) Fall Used Cooking Oil Collection Event

The North Central Texas Council of Governments (NCTCOG) Fall Grease Roundup is held annually soon after Thanksgiving thru the beginning of December. The City of Richardson, along with other area towns and cities, work with other regional partners to collect and recycle

used cooking oil. This event is aimed at educating residents about the negative impacts of improper Fats, Oils, and Grease (FOG) disposal. Residents are invited and encouraged to bring their used cooking oil to dispose of in designated containers. Health Department Staff monitors the location and contacts an appropriate for disposal/processing

Responsible Department:
Health Department

BMP 16 – Environmental Partnership Initiative and Richardson's Environmental Resources Newsletter

The City of Richardson began publishing the Environmental Resources Newsletter in March of 2015. This newsletter is published each month and is designed to keep Richardson residents informed of environmental-oriented events, news and activities. The newsletter is sent out to all Homeowner Association Presidents and a list of residents who have signed up to receive a copy. It is also posted on the City's Environmental Partnership Initiative web page.

The City of Richardson began its Environmental Partnership Initiative (EPI) in March of 2018. The Environmental Partnership Initiative includes a web page, which highlights its three (3) initiatives:

1. Richardson Plants
2. Richardson Conserves
3. Richardson Informs

This initiative is a web page on our City of Richardson Website at:

https://www.cor.net/services/environmental-partnership-initiatives

For Richardson Plants, the web page informs residents on enhancing our community through all types of properly placed and spaced plantings. For Richardson Conserves, the webpage helps to raise awareness about and fostering conservation of our natural resources. And for Richardson Informs, the web page encourages involvement in events and programs that promote environmental stewardship.

The Environmental Partnerships Initiative has its own branding and logo. In addition to the web page, City staff also highlight EPI events and activities on social media and in Richardson Today, a monthly newspaper mailed out to all residents. All articles and social media posts include the EPI logo in order to make the item easily identifiable by Richardson residents.

Responsible Department
Communications Department

BMP 17 – Phil-Up the Blue Bag Mascot

The City of Richardson has a Richardson Recycles Mascot whose name is Phil-up. Phil-up tells a story to help spread the word that recycling is awesome. He hits the road to hand out free rolls of recycling blue bags/vouchers for fee bags, plus other recycling promotional material including coloring books, sunglasses of kids, recycling magnets and more. These events provide education and information on recycling and reducing the amount of floatable material that can be carried away in stormwater that would end up in our City's creeks and streams.

Responsible Department
Public Services – Solid Waste Services

4.2 Illicit Discharge Detection and Elimination (IDDE)

The objective of the illicit discharge detection and elimination minimum control measure is to eliminate point source discharges of pollutants to receiving waters to the maximum extent practicable, to reduce the frequency and environmental impact of illicit discharges in which pollutants are intentionally or accidentally discharged into the storm sewer system. The illicit discharge detection and elimination measure will involve both municipal employees and local citizens. Illicit discharges have been defined in 40 CFR 122.26(b)(2) as "any discharge to a municipal separate storm sewer that is not composed entirely of stormwater…" with some exceptions as listed in Section 3.

City staff performs surveillance to locate signs of previous, current, and/or potential illegal discharges and illicit connections to the storm drain system. Activities are focused on preventing new illicit connections and addressing illegal discharges. During the course of regular maintenance activities, City staff conduct visual inspections of existing storm drain inlets, open channels, and basins to look for illegal discharges. Municipal Staff regularly observe the storm drain system during their scheduled/assigned job duties aiding in the effort to identifying possible illegal discharges.

Possible signs of illegal discharges include non-storm related flows, stains, deposited materials, and pipes or hoses. Staff members will be instructed and trained to look for signs of illegal discharges as they conduct their regular activities and immediately report or respond to any observed incidents. By increasing the stormwater pollution prevention awareness of City staff, the stormwater facilities receive a higher frequency of surveillance, and the water quality personnel can concentrate on follow-up, resolution, and enforcement.

As part of the illicit discharge program, Richardson plans to continue to update the stormwater drain system information in the City's Geographic Information System (GIS), evaluate possible

changes to the existing Sewer Use Regulations, and continue refining and/or updating our educational program, if necessary, to inform residents, businesses and municipal employees in identification of illicit discharges. An informed community can also be enlisted to aid in the identification of illicit discharges. Richardson currently has a successful illicit detection program and will continue to identify and remove illicit connections as they are identified.

Required Elements:

- Procedures for informing and/or training the city's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection.
- Procedures for tracing and/or removing the source of the illicit discharge.
- Procedures for inspection, prevention, and correction of any leaking on-site sewage disposal systems.
- Continue to update the stormwater drainage system map, including the location of outfalls and the names of waters that receive discharges from those outfalls.
- Continue to prohibit, through an ordinance and other regulatory mechanisms, non-stormwater discharges into the stormwater system and implement appropriate enforcement procedures and actions.
- Publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges.
- Develop and maintain on site procedures for responding to illicit discharges and spills to include investigation and elimination of the source of the discharge.
- Non-stormwater discharges listed in Part II Section C of the TCEQ's General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems must be addressed if they are identified as being significant contributors of pollutants.

BMP 1 – Legal Authority and Enforcement Measures

The City of Richardson is operated as a council/manager form of government. The City council consists of seven (7) members comprised of a mayor and six (6) council members. The city regulates activities within its boundaries through ordinances designed to protect the health, safety, and welfare of its citizens.

The City of Richardson Ordinance Chapter 23 - Water, Sewers, and Sewage Disposal currently addresses stormwater discharges. Other ordinances support the various aspects of the SWMP including, but not limited to, the Buildings and Building Regulations Ordinance, Animal Ordinance, Nuisances Ordinance, Parks and Recreation Ordinance, Health and Human Services Ordinance, and the Solid Waste Ordinance. The City also retains the legal authority through contracts, service agreements, and other legally binding documents.

The City is reviewing all existing ordinances to determine if there is a need to revise and/or add new ordinances, to enhance legal authority.

Responsible Department:
Health Department along with other Departments

BMP 2 – MS4, Stormwater, and Sewer System Mapping

Mapping of the MS4, sewer, and stormwater drainage systems was completed in 1998. The original sewer and stormwater systems were mapped during a project led by the Public Services Department. Revisions to the map occur when the GIS Department is supplied with updated asbuilts and/or when other City departments inform the GIS Department of changes that are needed. The GIS Department is supplied with 'asbuilts' via a database application that is then digitized. An asset management database is utilized to let GIS know that data needs to be changed.

Richardson's GIS group provides mapping support, analysis, training, and database management to City departments while maintaining all the Geographic Information System Databases (digital maps). Custom GIS applications are prepared in-house and distributed to City departments.

Responsible Department:
GIS Department

BMP 3 – Outfall Inventory and New Outfall Reconnaissance

The City of Richardson conducts reconnaissance for new outfalls and updates the MS4, sewer, and stormwater drainage systems, accordingly. Majority of stormwater outfall locations are identified and mapped. Maps are routinely updated as new information is provided.

Responsible Department:
Health Department
GIS Department

BMP 4 – MS4 Surface Water Surveillance via Development of Surface Water Observation Database

The City of Richardson GIS Department has created a mobile application called the Collector App for use by city employees. This app allows City employees to record observation data and field investigate illicit discharges into surface waters. Employees in the field collect data and notes on Outfall Discharge Points. The following data field is available to be collected for each Outfall Discharge Point:

- Facility ID
- Facility Location

- Facility Description
- Distance
- Outfall Flow
- Outfall Odor
- Outfall Color
- Outfall Cloudy
- Outfall Floatable
- Additional Comments, if required

The Collector App also allows the user to input Outfall Observation Points during routine water surveillance.

The data is uploaded for the GIS Department to place the data point on the Collector App Maps. City area maps, along with the data collected using the app, are available for app users to pull up on their smart devices. This stream area surveillance allows the City to towards decreasing the potential for discharges to go undetected.

Responsible Department:
GIS Department in coordination with the Health Department

BMP 5 – Prevention and Response to Sanitary Sewer Overflow (SSO)

A sanitary sewer overflow may be detected by City staff, residents, businesses, or by others. The City's 24-hour Response Center at (972) 744-4111 is primarily responsible for receiving phone calls from the public and directing them to the appropriate department. Other methods of contact for the City are online service at www.cor.net, the smart phone application MyRichardson, social media accounts, and email alerts.

The Sanitary Sewer Overflow Response Plan (SSORP) is designed for the response and reporting of SSOs. This policy and procedure ensures that each confirmed report of a sewer overflow is dispatched to the appropriate Utilities crew and resolved as soon as possible. In the event that the number of SSO calls outnumber the available response staff, calls will be prioritized according to the steps in the SSORP. In addition, all sanitary sewer overflows are reported to the Health Department for investigation of possible impacts to citizens and the environment. The SSORP effectively minimizes the volume of sewage discharging into the stormwater conveyance systems ultimately discharging into the City's streams and creeks.

The Utilities Systems Superintendent tracks the frequency a location has sewer overflows and the frequency a lift station overflows. The database assists the Director of Public Services or their designee in directing corrective action measures and prioritizing maintenance activities where chronic problems have been historically encountered.

Responsible Department:
Health Department
Capital Projects
Public Services – Water & Sewer Operations

BMP 6 – Fire Department Spill Response and Hazardous Material Response

The Richardson Fire Department responds and mitigates releases of pollutants from hazardous material response calls. They mitigate spills and limit the environmental impact of the spill. All spills are documented as to the type of spill and the method in which the spill was cleaned.

Responsible Department:
Fire Department

BMP 7 – Contractors Spill Response and Hazardous Material Response

A third-party contractor is occasionally used to respond to and mitigate hazardous material response releases of pollutants. They mitigate spills and limit the environmental impact of the spill. All spills are documented as to the type of spill and the method in which the spill was cleaned.

Responsible Department:
Health Department
Fire Department

BMP 8 – Informing and Training Field Staff

The City of Richardson continues to evaluate the existing approach to personnel training related to IDDE (storm sewer system mapping, IDDE inspections, IDDE response and investigations, spill response, stormwater reporting line, etc.). Training will be reviewed and updated, as necessary, to educate pertinent employees on stormwater pollution prevention issues.

The Health Department will work with department managers to identify personnel with stormwater responsibilities. These departmental managers will record the number of pertinent staff who attend and receive training, and pertinent staff with responsibilities and work tasks that can impact stormwater quality in the City.

Training will address general stormwater issues, specific pollutants of concern for receiving waters in Richardson, methods for spotting and reporting stormwater runoff problems, illicit discharges, and/or suspicious stormwater drainage discharges.

Responsible Department:
Aquatics Department
Building Inspections
Capital Projects-Building Inspectors
Fire Department
Parks and Recreation Department
Public Services – Solid Waste Services, Street Maintenance, Water & Sewer Operations
Fleet
Traffic
Community Services

BMP 9 – Illicit Discharges Reporting

The City of Richardson maintains 24-hour operations hotline for reporting of illicit discharges via Response Center at 972-744-4111. This hotline as well as the MyRichardson smart phone app and online web submission are publicized on the City's website, in print media, and on social media (i.e. Facebook and Twitter).

Response Center issues are documented with as much of, but not limited to, the following relevant information that can be collected from the submitter:

- Time and date the call was received
- Specific location of complaint/concern
- Time complaint/concern was noticed by the submitter
- Submitter's name and phone number
- Observations of the submitter (e.g., odor, duration, back or front of property)
- Other relevant information that will enable the responding City staff to quickly locate and respond to the submitter's observation

These procedures insure that the appropriate department is dispatched for proper response. Calls are reviewed in an effort to identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting line improvement, and areas requiring additional educational or enforcement effort to protect stormwater quality. Based on these needs, written procedures are updated accordingly.

Responsible Department:
Health Department
Building Inspections
Capital Projects-Building Inspectors
Parks and Recreation Department
Public Services – Solid Waste Services, Street Maintenance, Water & Sewer Operations

BMP 10 – On-Site Sewage Disposal Systems

The City maintains a list of on-site sewage systems within its jurisdiction and investigates use and proper function to help prevent discharges to the storm drainage system. All deficiencies and the resolutions of the deficiencies are noted, as applicable.

Responsible Department:
Health Department

BMP 11 – IDDE Response, Investigation, and Inspections

Each call, web submission, or referral is dispatched to the appropriate department for proper response. Richardson staff then respond to the illicit discharges and investigate to determine what is being discharged, the original location where the discharge began, and what, if any, corrective action is taken. If corrective action is taken, Richardson staff proceeds with enforcing the corrective action of the responsible party, reporting to TCEQ if a threat to human health or the environment is detected, and performing scheduled inspections. Any actions from the beginning of the discharge to TCEQ notification to follow-up investigations and/or field screening procedures are completed, as applicable and recorded in the Response Center.

Responsible Department:
Health Department
Building Inspections
Capital Projects-Building Inspectors
Parks and Recreation Department
Public Services – Solid Waste Services, Street Maintenance, Water & Sewer Operations

4.3 Construction Site Stormwater Runoff Control

The goal of the Construction Site Runoff Control minimum control measure is to develop a stormwater runoff control program that allows for the review, implementation, and enforcement of this program to reduce pollutant runoff from construction activities that result in the land disturbance of greater than or equal to one acre.

For construction sites disturbing one acre or more, a Storm Water Pollution Prevention Plan (SWPPP) is required to be developed and site controls such as, but not limited to, silt fence, inlet protection, and construction entrance stabilization must be in place and maintained. These site controls help to minimize the discharge of sediment and other pollutants from the construction site area. When the construction is complete and stabilized, then the control measures may be removed.

The City of Richardson requires contractors to submit a package of Construction Contract Documents for all public and private construction projects for the city. These packages include, at a minimum, information such as:

- Plans
- Provisions
- Specifications
- Contractor's Contract with the City
- Notes
- Erosion and Sediment Control Plan
- SWPPP
- Notice of Intent (NOI), if necessary
- Construction Site Notices (CSN)
- Sequence and Schedule of Construction Activities

These documents are incorporated with other stormwater management guidance materials that are standardized for use by all City departments.

The city has developed, implemented, and enforced a program to reduce pollutants in any stormwater runoff to the separated stormwater drainage system. The program will have the following requirements:

Required Elements:

- Develop, implement and enforce a program requiring operators of small and large construction activities to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the maximum extent practical.
- To the extent allowable under state or local law, develop an ordinance or other regulatory mechanism to require sediment and erosion control at construction sites
- To the extent allowable under state or local law, develop sanctions to ensure compliance with the program
- Require construction site operators to implement an erosion and sediment control program, which includes appropriate best management practices at the site
- Require the control of wastes during construction operations
- Develop procedures for site plan review including procedures, that incorporate consideration of potential water quality impacts
- Develop procedures for the receipt and consideration of information from the public
- Develop procedures for inspection and enforcement of control measures at construction sites
- Develop procedures ensuring that staff are informed and trained to conduct activities related to their perspective job duties that include implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement)

- Maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or the result in a total land disturbance of less one acre if part of a larger common plan or development or sale

BMP 1 – Construction Site Plan and Permitting Procedures and Legal Authority

Engineers from Capital Projects and Development Services work with public and private construction contractors to review SWPPP, Erosion and Sediment Control Plans, and other stormwater guidance prior to any construction activities. After plans are reviewed and approved construction can commence. At this time, Capital Projects Construction Inspectors and Building Inspectors perform routine inspections to ensure all construction contractors are in compliance with the city's contractual stormwater agreements as well as TCEQ's General Permit to Discharge Under the Texas Pollutant Discharge Elimination System – Stormwater Discharges Associated with Construction Activities, TXR150000.

The legal framework for noncompliance, enforcement, and assessment of violations regarding stormwater discharges from land disturbance (construction) activities that are greater than or equal to one acre is under Chapter 23 Article VI Section 23-281 – Discharge to public storm sewers, streets, and watercourses. The ordinance also includes compliance sanctions.

The City of Richardson will review existing planning and construction permitting policies and procedures for necessary changes, any additional requirements, and/or direct regulatory mechanisms/legal authority for the Capital Projects Construction Inspectors.

- The SWPPPs and Erosion and Sediment Control Plans shall include best management practices for water quality that will address soil stabilization, structural controls (temporary and permanent), sediment control practices, and storm water management controls, at a minimum. Guidance is provided for preferred structural and non-structural BMPs that include pollutant removal effectiveness.
- Maintain and implement site plan review procedures, that describe which plans will be reviewed as well as when an operator may begin construction.
- Maintain and implement procedures for the receipt of public inquiries, concerns, and information.
- Maintain and implement procedures for inspections during construction activities.
- Ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities.

Responsible Department:
Capital Projects
Development Services

BMP 2 – Construction Site Inventory

The City of Richardson currently maintains an inventory of active public and private construction sites that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Inventory is edited as updates are received during construction stages.

Responsible Department:
Capital Projects
Development Services

BMP 3 – Construction Site Inspections and Enforcement

Once construction commences, Construction Building Inspectors from Capital Projects and Building Inspection Department perform routine inspections to ensure construction contractors are in compliance with the city's contractual stormwater agreements as well as TCEQ's General Permit to Discharge Under the Texas Pollutant Discharge Elimination System – Stormwater Discharges Associated with Construction Activities, TXR150000.

If there is a need for enforcement, Capital Projects Construction Inspectors refer the case to the Health Department's Water Quality Personnel.

The City of Richardson will continue to review existing procedures for inspecting large and small projects to include inspection frequency criteria, written and/or electronic reporting, and tracking of enforcement requirements.

Responsible Department:
Capital Projects Inspectors
Building Inspections

BMP 4 – Informing and Training Construction and Building Inspectors

The City of Richardson continues to evaluate the existing approach of personnel training related to Building Construction Best Management Practices and other stormwater issues related to building construction. Training has been developed and implemented, on an annual basis, to educate employees on stormwater pollution prevention issues.

The Health Department will work with department managers to identify personnel with stormwater responsibilities and work tasks that can impact stormwater quality. These departmental managers will record the number of staff who attend and receive training.

Training will address general stormwater issues, specific pollutants of concern for receiving waters in Richardson, methods for spotting and reporting stormwater runoff problems, and other building construction activities that may impact stormwater quality.

Responsible Department:
Building Inspections
Capital Projects-Building Inspections

BMP 5 – Informing and Training Capital Projects and Development Services Project Managers

Project Managers review construction SWPPPs and Erosion and Sediment Control Plans for appropriate BMPs and erosion control measures as required in TXR150000. Richardson continues to evaluate the existing process of personnel training related to the required contents of a SWPPP and Erosion and Sediment Control Plans. Training will be reviewed and updated, as necessary, to educate pertinent employees on stormwater pollution prevention issues.

Training will address general stormwater issues, specific pollutants of concern for receiving waters in Richardson, methods for spotting and reporting stormwater runoff problems, and illicit discharges or suspicious stormwater drainage discharges.

The Health Department will work with department managers to identify operations personnel with stormwater responsibilities. These departmental managers will record the number of staff who attend and receive training, and pertinent staff with responsibilities and work tasks that can impact stormwater quality in the City.

Responsible Department:
Capital Projects
Development Services
Health Department

BMP 6 – Community Submitted Information for Construction Site Activity

The City of Richardson maintains 24-hour operations hotline for reporting of complaints/concerns via Response Center at 972-744-4111. This hotline as well as a Smart Phone Application and online web submission are publicized on the City's website, in print media, and on social media (i.e. Facebook, Twitter, and YouTube).

Response Center issues are documented with as much of, but not limited to, the following relevant information that can be collected from the submitter:

- Time and date the call was received

- Specific location of complain/concern
- Time complain/concern was noticed by the submitter
- Submitter's name and phone number
- Observations of the caller (e.g., odor, duration, back or front of property
- Other relevant information that will enable the responding city staff to quickly locate and respond to the submitter's observation

Education on the existence of these reporting tools is posted at city facilities, distributed during city events, and posted on the City's website.

These procedures insure that the appropriate department is dispatched for proper response. Calls are reviewed in an effort to identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting line improvement, and areas requiring additional educational and/or enforcement in an effort to protect stormwater quality. Based on these needs written procedures are updated accordingly.

Responsible Department:
Capital Projects
Building Inspections
Development Services

BMP 7 – Parks and Recreation Construction Projects

The City of Richardson Parks and Recreation rarely have construction projects that are greater than one (1) acre. When these projects do happen, the City's Capital Projects Construction Inspectors, in conjunction with Parks and Recreation, review and approve the contractor's SWPPP. Inspectors work to ensure all construction contractors are in compliance with the city's contractual stormwater agreements as well as TCEQ's General Permit to Discharge Under the Texas Pollutant Discharge Elimination System – Stormwater Discharges Associated with Construction Activities, TXR150000.

Responsible Department
Parks and Recreation Department

4.4 Post-Construction Stormwater Management in New Development and Redevelopment

The goal of the Post Construction Runoff Control minimum control measure is to require the implementation of post-construction runoff controls for new development and redevelopment projects which disturb areas one acre or larger, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the City's MS4. The City's goal is to ensure that to the maximum extent practicable stormwater discharges from

development and redevelopment projects comply with TCEQ Surface Water Quality Standards and the City of Richardson's Stormwater Management Plan and attenuates stormwater discharges to the municipal system.

The City will continue to develop, implement and enforce a program to address the quality of stormwater runoff from new development and redevelopment projects that disturb at least one acre and discharge into the municipal separated system. Projects less than one acre must be included in the program if the project is part of a large common plan of development that disturbs greater than one acre. The program will be established for private and public development sites. This program will require owners and operators of new development and redeveloped sites to design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and protects water quality. The post construction program will have the following requirements:

- To the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redevelopment sites which discharge into the small MS4 that disturb one acre or greater, including projects that disturb less than one acre that are part of a larger common plan of development or sale.
- To the extent allowable under state or local law, an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment.
- Procedures to ensure adequate long-term operations and maintenance of best management practices.
- Procedures to ensure any structural and non-structural BMPs put in place will prevent or minimize impacts to water quality.
- Document and maintain records of enforcement actions and make them available upon request.

The City of Richardson has implemented a Post Construction Stormwater Controls Policy. The purpose of the policy is to require the treatment of storm water run-off on a development or redevelopment site by the construction or installation of permanent post construction controls. Developers are required to complete and incorporate into the civil plans the Graphical Peak Discharge Method Worksheet provided, and a Storm Water Quality Plan (SWQP) as detailed in the following. Operation and maintenance of the installed or constructed post construction run-off controls will be the responsibility of the property owner. Each proposed development site will be categorized in one of the following areas:

1. Greenfield Development
2. Infill Development
3. Non-Residential Less than One Acre Development

For a Greenfield Development, at the preliminary stages of development a SWQP must be submitted and approved. The plan must demonstrate treatment of the first 1.5" of rainfall using the Water Quality Volume (WQV) calculation. If surface treatment cannot be achieved, then a Manufactured Treatment Device (MTD) that is designed to treat the first 1.5" of rainfall (70% TSS removal equivalent) may be used. The MTD must be sized by determining a water quality flow rate using the WQV calculation in conjunction with the Graphical Peak Discharge method.

For Infill Development, at the preliminary stages of development a SWQP must be submitted and approved. The plan must demonstrate treatment of the first 1.5" of rainfall using the Water Quality Volume (WQV) calculation. If surface treatment cannot be achieved, then a Manufactured Treatment Device (MTD) that is designed to treat the first 1.5" of rainfall (70% TSS removal equivalent) may be used. The MTD must be sized by determining a water quality flow rate using the WQV calculation in conjunction with the Graphical Peak Discharge method.

The WQV requirement may be reduced for developments that increase the amount of pervious area or implement the following practices:

- Natural Conservation Area
- Overland Flow Filtration/Groundwater Recharge Zones
- Use of Vegetated Channels

For Non-residential less than 1 Acre, at the preliminary stages of development a SWQP must be submitted and approved.

For Non-residential sites less than 1 acre where the pervious area is being increased as a result of the proposed development, no Water Quality remediation is necessary unless the development is likely to contribute identifiable pollutants or chemicals of concern. For sites where the pervious area is being decreased, the site will be considered Infill Development and must adhere to Infill Development Criteria.

The purpose of the above SWQPs is to identify required Post Construction Storm Water Controls for development and incorporate them into the overall site planning and design process. The SWQPs also assists in requiring developments likely to contribute identifiable pollutants or other chemicals of concern to implement Best Management Practices that address specific concerns.

BMP-1 – Post Construction Stormwater Ordinance and Enforcement

The City of Richardson Ordinance Chapter 23 - Water, Sewers, and Sewage Disposal speak directly to stormwater discharges. Several other ordinances support the various aspects of the SWMP including but not limited to the Buildings and Building Regulations Ordinance, Animal

Ordinance, Nuisances Ordinance, Parks and Recreation Ordinance, Health and Human Services Ordinance, and the Solid Waste Ordinance.

The City of Richardson is in the process of amending Chapter 21 of the Code of Ordinances of the City of Richardson for legal authority and enforcement measures that are inclusive and necessary to meet the requirements of the TCEQ TPDES MS4 General Permit TXR040042 Post Construction Requirements.

The amended ordinance and regulations will provide the legal authority for post construction stormwater management in new development and redevelopment. This amendment shall establish, implement, and enforce the requirement that owners of new development and redevelopment sites design, install, implement, and provide annual operation and maintenance records to the City upon request.

The proposed ordinance will require the owner or operators to prepare and implement a Post Construction Stormwater Maintenance Plan (PCSMP). The PCSMP must be filed in the real property records of the county in which the post construction stormwater control is located prior to the issuance of the Certificate of Occupancy for the property. If use of the property does not require a Certificate of Occupancy, then the maintenance plan must be filed prior to the completion of the final inspection by the City of Richardson or acceptance of any public improvements associated with the development or redevelopment. The owner or operator must also maintain on-site documentation regarding their operation and maintenance performed and make it available upon request by the City of Richardson staff.

The Development Services Department maintains a database of post construction stormwater devices under control of the property owner or operator. This database is updated with new post construction structural stormwater control measures as they are completed.

Responsible Department:
Development Services

4.5 Pollution Prevention and Good Housekeeping for Municipal Operations

The goal of pollution prevention and good housekeeping minimum control measures are to examine municipal operations to ensure a reduction in the amount of pollution that discharges to receiving waters as a result of municipal actions and practices. The City of Richardson operations that include street sweeping, catch basin cleaning, and stormwater drainage system maintenance help to reduce the amount of sediment and pollutants. The City will reassess existing stormwater management programs for municipal facilities in separated catchment areas. Good housekeeping inspections at City facilities will help to assess facility activities and

potential impacts on stormwater. Current best management practices will be assessed and recommendation for improvements provided.

The City has various municipal facilities throughout the City. The goal of this effort is to identify those facilities that may have operations with the potential to pollute, to develop policies and procedure to ensure appropriate actions are taken to prevent or reduce pollutant runoff from their operations, and to develop a schedule for maintenance activities.

Required Elements:

- Develop and maintain an inventory of facilities and stormwater controls that are owned and operated by the city within the regulated area of the small MS4
- Develop contractual requirements for third party contractors to perform maintenance activities on city owned facilities and properties with all the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures
- Develop oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs
- Evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater
- Identify pollutants of concern that could be discharged from O&M activities
- Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater
- Inform and/or train appropriate employees involved in implementing pollution prevention and good housekeeping practices
- Disposal of Waste Material
- Develop inspection procedures and schedules for long-term structural controls

BMP 1 – Facility Inventory

The City of Richardson has completed an inventory of city-owned facilities. These facilities are mapped, and the assessment of the facilities' pollutant discharge potential has been conducted. The following facilities have been identified as *high priority* because they have a high potential to generate stormwater pollutants.

- City of Richardson Service Center.
    - Vehicle maintenance: oil and grease
    - Fueling operations: fuel
    - Cold weather operations: sand and salt
    - Equipment and vehicle maintenance: oil, grease, chemical fluids, sediments, and debris
- City Greenhouse Facility
    - Herbicide and pesticide applications

- Breckinridge Park Maintenance Facility
    - On-Site Sewage disposal

In order to minimize the risk of stormwater pollution originating from activities at the specified high-priority sites, the City of Richardson has instituted Best Management Practices (BMPs), which are detailed in BMPs 2-12 within this section. Standard Operating Procedures have been developed that identify BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility. Hard copies and/or electronic copies of the facility-specific stormwater management SOP are maintained on-site. City owned facilities that are *high priority* are inspected periodically and the inspections and observations are documented and available for review.

Responsible Department:
Capital Projects
Parks and Recreation Department

BMP 2 – Training and Education for Municipal Staff

The City of Richardson begins introductory training for all new incoming staff on stormwater pollution prevention at our Quarterly New Employee Orientation. After the introductory training, each staff member is then trained in their assigned department based on their assigned job duties and responsibilities. Training has been developed and implemented, on an annual basis, to educate employees on stormwater pollution prevention issues based on their departmental job assignments. For example, staff are trained to look for leaks from vehicles, improperly stored items, leaks from generators, and proper use of diverter valves from wash stations. Training will also address general stormwater issues, specific pollutants of concern for receiving waters in Richardson, methods for spotting and reporting stormwater runoff problems, and/or suspicious stormwater drainage discharges.

The Health Department will work with department managers to identify operations personnel with stormwater responsibilities. These departmental managers will record the number of pertinent staff who attend and receive training, and staff with responsibilities and work tasks that can impact stormwater quality in the city.

Responsible Department:
Public Services – Solid Waste Services, Street Maintenance, Water & Sewer Operations
Capital Projects
Parks & Recreation Department
Sherrill Park Golf Course
Human Resources
Health Department
Traffic

Fleet Services

BMP 3 – Street and Parking Lot Sweeping and Cleaning Program

The City of Richardson has a proactive street-sweeping program. Street sweeping activities take place on a regular basis with approximately 18,000 street miles cleaned/swept annually removing road debris before it gets into the drainage system. During clean-up after street sanding operations, debris collected from street sweeping operations is disposed of at the City's spoils pile. All in-house sweeping debris is disposed of at a solid waste transfer station.

Responsible Department:
Parks and Recreation Department

BMP 4 – Disposal of Waste Material

The City of Richardson's waste materials removed from the small MS4 are disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable. The City's waste management program has a comprehensive collection strategy including recycling and brush and bulky waste pick up. Over 100,000 tons of trash and 5,100 tons of recycled material are collected annually. In addition to residential curbside recycling, Richardson as provided a recycling drop-off center for residents. Items eligible for drop off include paper, cardboard, glass, plastic, and metal containers.

Responsible Department:
Public Services – Solid Waste Services

BMP 5 – Herbicide and Pesticide Application to Minimize Runoff

The City of Richardson Parks and Recreation Department cares for approximately 38 parks. This department also maintains public buildings, grassy areas, medians, right-of-ways, some creeks, green belts, and landscape plantings. There are over 600 discrete locations and two (2) athletic complexes. The city also has a municipal golf course that functions as its own discrete department. Proper handling of any pesticides and fertilizers are implemented at the golf course and the areas maintained by Parks and Recreation Department staff.

Parks and Recreation Department and Sherrill Park Golf Course evaluate annually the pesticide and herbicide application methods and procedures for operation and maintenance for the potential to discharge pollutants to stormwater. Applications are done only when necessary and, if feasible, not within 24 hours of a predicted rainfall event in order to help reduce runoff and adverse environmental impacts. Pesticide applicators maintain a one spray boom width, 18 feet, buffer along the perimeter of any body of water or creek bed while making any herbicide/pesticide application. Staff are Texas Department of Agriculture (TDA) licensed

applicators. Detailed application records are kept at the Golf maintenance barn and in the Parks and Recreation Department.

Responsible Department:
Parks and Recreation Department
Sherrill Park Golf Course

BMP 6 – Maintenance of Structural Control Measures at Municipal Facilities

The City of Richardson is ultimately responsible for maintenance of approximately 38 public buildings which includes police and fire stations, library, water treatment facilities, parking garage, city facilities and administrative offices. The city is responsible for sweeping parking lots and cleaning catch basins at these facilities.

Richardson's Fleet Services currently provides maintenance for approximately 713 municipal vehicles and trucks in a 11,000 square foot facility. They provide a wide variety of services to various city departments such as Streets, Utilities (water and sewer), Traffic, and Solid Waste, in their day-to-day operations. Keeping the maintenance garage clean and the vehicles is good working order is a priority.

To document operation and maintenance (O&M) of the City's drainage system, cleaning and repairs will be recorded in a work order system. This work order and asset management system that allows the city to keep track of the number and location of O&M activities.

The City of Richardson has identified facilities with grease traps and structural stormwater controls such as sand traps, a sediment tank, StormCeptors, and oil/water interceptors. These equipment items are checked regularly and cleaned at a minimum of twice per year.

Policies and procedures have been put into place to ensure the long-term operation and maintenance of the City's structural stormwater control measures. Maintenance activities are entered and scheduled through a digital work order and asset management system to ensure that maintenance is performed on-time and documented. Records are retained for three (3) years in the Capital Projects Department.

All new facility locations are built with measure in place such as, but not limited to, bioswells, traps, and diverters.

Responsible Department:
Capital Projects - Facility Maintenance

BMP 7 – Third-Party Contractor Requirements

Richardson employs several third-party contractors for facility, building, grounds maintenance, etc. These contractors are contractually obligated to have trained and certified staff as well as policies and procedures that limit/eliminate any potential discharge of pollutants to the environment/stormwater while performing operations and maintenance activities. These contracts ensure that the contractors are using appropriate control measures and comply with applicable requirements for training and education, waste disposal, and maintenance of City owned operations.

The purchasing Department has included the following language in our Terms and Conditions on all solicitations, purchase orders, and change orders:

"All Contractors shall comply with all local, state, and federal stormwater pollution prevention rules, regulations, laws, and ordinances. For more information, please visit http://www.cor.net/stormwater."

Responsible Department:
Capital Projects
Parks and Recreation Department
Purchasing Department
Public Services – Streets and Water and Sewer

BMP 8 – Litter Collection by Municipal Staff

Parks Department ensures proper collection and disposal of trash in City parks by completing trash rotations approximately 360 days a year in their maintained areas and parking area trash receptacles to reduce the introduction of pollutants into the waterways.

Responsible Department:
Parks and Recreation Department

BMP 9 – Stormwater System Inspections, Operations, and Maintenance

There are approximately 444 miles of stormwater system lines in the City of Richardson. Operation and maintenance activities to be conducted on stormwater systems reduce the amount of sediment and associated pollutants discharged to the MS_4 catch basins and surface drains. Problem areas are noted and evaluated each year in order to correct any deficiencies during operations and maintenance activities.

Utilities department utilizes their implemented Standard Operating Procedures (SOP)'s to inspect, clean, and repair stormwater lines. A Third-party contractor has also been added to help Richardson assess these lines for cleaning and repair.

Closed Circuit Television (CCTV) internal inspection is utilized by the Utilities Department and a third-party contractor for these assessments. This effective tool is used to determine the condition of the lines and to gather information for repairs and rehabilitation. Results of these inspections provide help, direction, and focus for cleaning, repairs, and maintenance. Observations and problems are noted during these inspections and maintenance activities are performed.

Responsible Department:
Capital Projects
Public Services – Street Maintenance

BMP 10 – Sewer System Inspections, Operations, and Maintenance

There are approximately 421 miles of sanitary sewer lines in the City of Richardson. Operation and maintenance activities to be conducted on sewer systems reduce the amount of sediment and associated pollutants discharged to the MS_4 catch basins and surface drains. Problem areas are noted and evaluated each year in order to correct any deficiencies during operations and maintenance activities.

The Utilities Department utilizes their implemented Standard Operating Procedures (SOP)'s for inspect, clean, and repair sanitary sewer lines. A Third-party contractor has also been added to help Richardson to assess lines for cleaning and repair.

Closed Circuit Television (CCTV) internal inspection is utilized by the Utilities Department and a third-party contractor for the assessment of sanitary sewer lines. This effective tool is used to determine the condition of the lines, the causes of infiltration and inflow (I/I), the causes of Sanitary Sewer Overflows (SSOs) and to gather information for repairs and rehabilitation. These efforts limit the environmental impact of sewage flowing into our stormwater conveyance systems ultimately discharging into the City’s streams and creeks.

The Utilities Department has compiled an inventory of sewer mains that require flushing. This criterion is based on the type of assets, age, data collected from sewage blockages, back-ups, and overflows, as well as roots in the sewer line, grease, pipe offsets, dips, sags, and number of customer complaints. These also help to limit sanitary sewer discharges and the environmental impact of sewage flowing into our stormwater conveyance systems ultimately discharging into the city’s streams and creeks.

Reviews of SOPs are conducted annually and updated as necessary.

Responsible Department:
Capital Projects
Public Services – Water and Sewer Operations

BMP 11 – Storm Inlet Debris Removal and Maintenance

City of Richardson Staff collects field data through a smart phone application during creek surveillance and incoming complaints regarding roads, alley ways, City stormwater drainage system, and creeks. These activities help to locate blocked storm inlet points so that work orders are generated directing the cleaning of these areas. Areas with on-going problems and/or concerns are noted and evaluated for improvements.

Responsible Department:
Health Department
Public Services – Street Maintenance

BMP 12 – Chemical Applications and Industrial Materials Management

The City of Richardson's ongoing chemical and materials management procedures are reviewed and evaluated regularly including landscape maintenance, city public swimming pools, golf course maintenance, mosquito abatement, street repair, as well as, miscellaneous activities and material usage.

Pertinent staff are trained regularly on chemical storage and handling, applicator/distributor education and certification, non-chemical pest management measures, scheduling of chemical applications, and proper disposal of unused chemicals and associated containers. Safety Data Sheets are made available in all locations where chemicals are stored and used. Dates of each chemical application are tracked. The city also maintains a list of licensed applicators with knowledge and training regarding proper disposal protocol reducing potential stormwater pollution.

Richardson Service Center houses sand and salt that are spread on the City's bridges and over passes during the winter months when ice is expected to accumulate. Once the ice accumulation has melted, a third-party contractor is called in to deploy a street sweeper to clean and collect the sand and salt from locations identified on a map supplied by the Streets Department. Debris is disposed of at the City's spoils pile.

The Parks and Recreation Department utilized chemicals that can be applied to ponds, lakes, or other bodies of water. These chemicals are specifically labeled for this use and they do not pose any environmental pollution.

The Streets Department uses a number of chemicals in their daily activities. The City equips its streets staff with knowledge and training regarding proper use and disposal protocol as to not pollute stormwater and to prevent run-off water from entering storm drains, sewers, surface water, and soils.

Responsible Department
Parks and Recreation Department
Public Services – Street Maintenance
Parks and Recreation Department
Health Department

5 STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY

The TCEQ TPDES General Permit No. TXR150000 regulates stormwater discharges for most construction activity. Construction sites where generally one (1) acre or more is being disturbed, a stormwater pollution prevention plan (SWPPP) must be developed, and site controls must be installed.

6 IMPLEMENTATION SCHEDULE

Implementation of this stormwater management plan will be completed over a five-year permitting period, with the goal of reducing stormwater pollution to the maximum extent practicable. The implementation schedule proposed by the City of Richardson and the measurable goals that will be used to determine the effectiveness of the plan are in Appendix A.

7 RECORDKEEPING AND REPORTING

Annual Status Reporting

As required by the permit, a status report will be completed on an annual basis and will be submitted as part of this TCEQ TPDES General Permit No. TXR040042. Information included in this status report shall include, but not be limited to the following:

- A self-assessment review of compliance with the permit conditions.
- An assessment of the appropriateness of the selected BMPs.
- An assessment of the progress towards achieving the measurable goals.
- A summary of results of any information that has been collected and analyzed. This includes any type of data.
- A discussion of activities for the next reporting cycle.
- A discussion of any changes in identified BMPs or measurable goals.

• Reference any reliance on another entity for achieving any measurable Goal.

All records, a copy of the TPDES general permit, and records of all data used to complete the application (NOI) for the general permit and satisfy the public participation requirements are maintained for a period of at least three (3) years, or for the remainder of the term of this general permit, whichever is longer.

Appendix A
Implementation Plan

APPENDIX B
MAPS

Figure 1
City of Richardson Creeks

Figure 2
Creek Stormwater Drainage Basins

APPENDIX C

NOTICE OF INTENT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4S)

APPENDIX F - BIBLIOGRAPHY

BIBLIOGRAPHY

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City of Richardson – Code of Ordinance

- Chapter 14 – Nuisances
- Chapter 15 – Parks and Recreation
- Chapter 19 – Solid Waste
- Chapter 23 – Water, Sewers and Sewage
- Appendix A – Comprehensive Zoning Ordinance