

*City of Pelican Bay*

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# *City of Pelican Bay*

## *Storm Water Management Plan*

Revised 12-10-18

The City of Pelican Bay has implemented the revised storm water management plan (**SWMP**) as required for coverage under the Texas Pollutant Discharge Elimination System (**TPDES**) General Permit NO. TXR04000. The SWMP includes a listing of Best Management Practices (**BMP'S**) that will be implemented by the City of Pelican Bay in order to achieve the regulatory standard of reducing pollutants in the City's storm water to the "maximum extent practicable" (**MEP**). Existing City of Pelican Bay storm water programs and activities were designed to protect the City's water quality, and will be supplemented with the new BMP activities. Measurable goals and an implementation schedule were developed for each of the BMP's in the SWMP. BMP's, measurable goals, and the implementation schedule were selected based upon the ability to meet specific permit requirements and to reduce pollutants in the City's storm water to the maximum extent practicable. As well as selected, based upon a general assessment of the BMP's. Effectiveness of the selected BMP's and success in achieving the selected measurable goals will be reviewed annually.

The City of Pelican Bay (City) has revised the developed SWMP that describes specific actions that will be taken over a five year period to reduce pollutants and protect the City's storm water quality to the (MEP). The specific activities to be implemented are the BMP's. The SWMP must also set measurable goals and provide a schedule for the implementation of the BMP's. Various BMP's must be developed for each of the six minimum control measures (**MCM's**) that are required by the Phase II Rule. This Five MCM's are as follows:

- Public Education, outreach and involvement;
  - Illicit Discharge Detection and Elimination;
  - Construction Site Stormwater Runoff Control;
  - Post-Construction Stormwater Management in New Development and Redevelopment;
  - Pollution Prevention and Good Housekeeping for Municipal Operations
- Specific requirements of each MCM are attached. Following each listing of MCM requirements, a table is provided, that list the BMP's selected for that MCM, along

with a description of the **BMP** and its measurable goals and implementation schedule. Also attached is a description of the City in which this **SWMP** is designed for. This Description is to give the Texas Commission on Environmental Quality (**TCEQ**) a context for reviewing the **SWMP**.

# *Description and Operations of Pelican Bay*

## *For the SWMP*

The City of Pelican Bay is Located in the Northwest corner of Tarrant County Texas. The City has a population of 2,000 with approximately 700 water connections within the two square miles.

The City has a Total of 3 commercial properties. Which include a Lease Office, a convenience store, and a metal fabrication shop. Mobile homes make up approximately 90% of the homes in the City.

The City relies mainly on bar ditches for our watersheds.

The City of Pelican Bay boundaries are, The City of Azle, to the north and west, Tarrant County to the north, and Eagle Mountain Lake to the west and south.

Pelican Bay's legal authority is the Police Dept. of approximately 5 excluding reserves and Ordinance Enforcement of 1, Also Pelican Bay has a volunteer Fire Dept. of approximately 10, and 5 employees for the Public Works dept.

The City of Pelican Bay's Council is the form of Governance.

The portion of the City that is undeveloped is approximately 10%.

Adjoining MS4's are The City of Azle, Community Water, and Tarrant County.

A copy of the City's entire budget is attached for review.

Revenue sources for the city are included in the budget.

Number of Employees are 13 excluding volunteers and reserves.

The City's equipment includes 4 police cars, In the Police Dept., 4 work trucks, a Backhoe, Two Brush hogs, 1 Durapatcher, a Dump trailer, and a Dump Truck in the Public Works Dept., The squad, attack truck, and 2 Engines, in the Fire Dept.

The water is supplied by the City from 14 groundwater wells. The city has a collection system for the waste water; it is pumped to Azle where it is treated. Allied Waste provides the trash collection for the City. School Services are the Azle ISD.

## *SWMP Development*

The City has the Public Works Dept, Code Enforcement, Fire Dept., Police Dept. City council, and the Neighborhood committee helps to assist in with the SWMP.

The purpose of the SWMP is to ensure the cleanliness of all water flowing thru the bar ditches to the lake. Make the public aware of the importance of the SWMP. As well as getting public knowledge and involvement.

The BMP's for the City were chosen to the best needs for the area.

The measureable goals were selected based upon the manpower, resources, and the type of area we have for potential pollution. We hope to broaden these goals in the future with more support from the community.

## *Allowable Non-Storm Water Discharges*

Allowable Non-Storm Water Discharges will be, flushing of hydrants, City water-breaks from the potable water system, draining of DE chlorinated swimming pools, irrigation watering, Individual car washing, foundation and footing drains, rising ground water and springs, Pavement and exterior building washes conducted without the use of detergents or chemicals, and discharges or flows from firefighting activities.

## *Minimum Control Measures*

Minimum control measures for the City will be the outline of the following BMP's in the SWMP.

# *Public Education and Outreach on Storm Water Impacts*

## *Specific Requirements*

- (a) A public education program to distribute educational materials to the community or conduct equivalent outreach activities that will be used to inform the following groups within the MS4 area complying with state and local public notice requirements. With the target audiences being the residents.
- (1) Residents;
  - (2) Visitors;
  - (3) Public service employees;
  - (4) Businesses;
  - (5) Commercial and industrial facilities; and
  - (6) Construction site personnel

The outreach must inform the public about the impacts polluted storm water run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and ways they can minimize their impact on storm water quality. Utilizing professional agencies literature such as but not limited to T.C.E.Q., E.P.A., T.D.P.H., N.C.T.C.G. etc... To ensure appropriate educational material is delivered.

- (b) Via documentation, the Municipal Separate Storm Sewer System (MS4) operator must ensure that a reasonable attempt was made to reach all constituents within the MS4 area to meet this measure.

## *Public Involvement/Participation*

### *Specific Requirements:*

- (a) Identify and implement a public involvement and participation program. This must include provisions to allow opportunities for all constituents within the MS4 area to participate in the Storm Water Management Program development and implementation.
- (b) The MS4 Operator must, at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program.
- (c) The MS4 Operator must, via documented efforts, ensure that sufficient opportunities were allotted to involve all constituents interested in participating in the program process to meet this measure. Correctional facilities will not be required to implement this MCM.

**Revised November 2018**

**MCM 1: Public Education, Outreach, and involvement on Storm Water**

<b>Best Management Practice</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goal</b>
<b>BMP 1.1</b> Educational Displays The displays will include storm water education per TCEQ guidelines	1-5	Continue keeping displays at City Hall fulfilled with several educational brochures, Updating and renewing materials as needed.	Educate the public, new residents, and visitors with appropriate educational material on Storm Water Management.
<b>BMP 1.2</b> MAIL OUTS	1-5	By Mail, Distribute educational materials to all residents and businesses by mail. The mail outs will include storm water education in general per the TCEQ general permit guidelines.	Educate the public relating to fertilizer, herbicide, and pesticide usage, proper disposal of household hazardous waste and oils, and other educational and participatory opportunities.



<b>Best Management Practice</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goal</b>
BMP 1.3 City Employee Education	1-5	City Employees will receive storm water education in accordance with the TCEQ educational Guidelines and will receive information relating to Pelican Bays Phase II program, with a focus on good housekeeping measures.	Educate employees on the SWMP during regular scheduled meetings at a minimum of once a year.
BMP 1.4 Web Page	1-5	Post links on the City's web page to inform the public on storm water management.	Educate the public on the SWMP with a focus on good housekeeping, As well as encouragement of water conservation.

<b>Best Management Practice</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goal</b>
BMP 1.5 Community Clean-up days	1-5	Continue our City Wide Clean-up days	Reduce or eliminate any potential contributor to pollution that may enter the lake by having a city wide cleanup at a minimum of once a year.
BMP 1.6 Utilize Eagle Mountain Lake Clean-up Day.	1-5	Annually Evaluate and assess the areas to be focused on.	Find the most problem areas of concern for pollution impacts.
		Inform the public and get participants. At regular scheduled meetings. Clean major outfalls of the City to reduce any or all pollutants from entering Eagle Mountain Lake.	Set this date for the public to participate, primarily on the SWMP. Inspect and clean the major waterways in the city to reduce pollution.
BMP 1.7 Web page	1-5	Research Regularly and update valuable links.	Educate the public and get public involvement.

# *Illicit Discharge Detection and Elimination*

## *Specific Requirements:*

### (a) Illicit Discharges

A section within the SWMP must be developed to establish a program to detect and eliminated illicit discharges to the MS4.

The SWMP must include the manner, ordinance or other regulatory mechanism, used to prohibit illicit discharges.

#### (1) Detection

The SWMP must list techniques used for detecting illicit discharge.

#### (2) Elimination

The SWMP must list appropriate enforcement procedures and actions for removing the source of an illicit discharge.

See IDDE section of the SWMP

### (b) Non-Storm Water Discharge

A section within the SWMP must be developed to establish a program to detect and address non-storm water discharges and illegal dumping to the MS4. All non-storm water flows, including those listed in part II. B. and Part VII.B. Must be considered by the permittee to determine if they are a significant contributor of pollutants to the MS4. All non-storm water discharges that significantly contribute pollutants to the MS4 must be effectively prohibited. The prohibition must be through an ordinance. The regulation must include appropriate enforcement procedures and actions. Fire fighting activities are excluded from being prohibited and only need to be addressed if they are determined to be a significant contributor of pollutants to the MS4.

### (c) Incidental Non-Storm Water Discharges

A list of occasional incidental non-storm water discharges that will not be addressed as illicit discharges will also be developed. The listed discharges must not be reasonably expected to be significant sources of pollutants, because of the nature of the discharge or the conditions that have been established for allowing these discharges to the MS4. Any local controls or conditions placed on these discharges must be documented in the SWMP. The SWMP must also include a provision prohibiting any individual non-storm water discharge that is determined to be contributing significant amounts of pollutants to the MS4.

(d) Storm Sewer Map

(1) A map of the storm sewer system must be developed and include the following:

- (i) The location of storm sewer pipes, ditches, and other conveyances owned by the permittee, or at a minimum the drainage area for each outfall;
- (ii) The location of all major outfalls; and,
- (iii) The name and location of all waters of the U.S. that receive discharges from the outfalls.

(2) The SWMP must include the source of information used to develop the storm sewer map, including how the outfalls were verified and how the map will be regularly updated.

**MCM 2: illicit Discharge Detection and Elimination**

<b>Best Management Practice</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goals</b>
BMP 2.1 Dry Weather Screening	1-5	Conduct visual dry weather screening of the city's storm water outfalls.	Continue annual rotation program of screening minimum of 50% of the City's storm water outfalls per year.
BMP 2.2 Illicit Discharge Inspections	1-5	Conduct inspections and train new employees to conduct inspections, Using the NCTCOG (IDDE) field investigation guide to determine the source of illicit connection and illegal dumping.	Continue standard inspection procedures following the (IDDE) Field investigation guide at a minimum of 50% of all outfalls per year in an attempt to prevent and eliminate all illicit discharges.
BMP 2.3 Educate the public on of illicit connections or illicit discharges and illegal dumping.	1-5	Continue educating the public with bill inserts, mail outs, brochures, hand outs and City Web page.	Encourage residents to report to City Hall any possible or suspected illicit connections or illicit discharges as well as any illegal dumping activities.

<p><b>BMP 2.4</b> Responses to notification of illicit connections or illicit discharges.</p>	<p>1-5</p>	<p>Utilize the City Hall for the central point for notifications of illicit connections and illicit discharges. Utilize the NCTCOG (IDDE) field investigation guide, Educational videos from Excal Visual, and hands on field inspection training from the operator to train field staff.</p>	<p>Document all information of the notifications of possible illicit connections and illicit discharges on work orders. All work orders will be directed to the MS4 Operator, The operator will respond to the area of concern within 24 hours. Each incident will be handled on a case by case basis following the (IDDE) field investigation guide. All findings and actions taken along with possible follow ups will be reported and kept on file at City Hall. In an attempt to eliminate illicit discharges and connections.</p>
<p><b>BMP 2.5</b> Storm Sewer System Map</p>	<p>1-5</p>	<p>Update a Storm Sewer System Map coded to target the most problem areas in accordance with TCEQ requirements.</p>	<p>The Storm Sewer Map consists of seven outfalls outlined, numbered, &amp; labeled, traced to the receiving water body (Eagle Mountain Lake) to easily identify the most problem outfalls. This Map was generated using google earth.</p>

# Construction Site Storm Water Runoff Control

## Specific Requirements

The MS4 operator must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The MS4 operator is not required to develop, implement, and or enforce a program to reduce pollutant discharges from construction activities smaller than one acre that the TCEQ has waived the permitting requirements for storm water discharges associated with small construction activities.

- (a) The program must include the development and implementation of, at a minimum, an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and Local law.
- (b) Requirements for construction site contractors to, at a minimum:
  - (1) Implement appropriate erosion and sediment control best management practices; and
  - (2) Control waste such as discarded materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse effects to the quality of water.
- (c) The MS4 operator must develop procedures for:
  - (1) Site plan review, which incorporate consideration of potential water quality impacts;
  - (2) Receipt and consideration of information submitted by the public; and,
  - (3) Site inspection and enforcement of control measures.

**MCM 3: Construction Site Runoff Control**

<b>Best Management Practices</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goal</b>
BMP 3.1 Controlling Ordinances	1-5	Continue to Utilize Ordinance # 238 to enforce and ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.	Utilize ordinance to ensure all requirements and control measures in the TPDES General Permit TXR040000, Under (Construction Site Stormwater Runoff controls) are achieved on any and all construction site activities.
BMP 3.2 Receipt and Consideration of Information from Public	1-5	Receive public concerns regarding construction site run off at City Hall, and the web site to reduce or eliminate unknown or un inspected sites.	Continue the Developed system for receiving, considering, and tracking comments from the public regarding the City's erosion control program and for specific project-related complaints.



# *Post-Construction Storm Water Management in New Development and Redevelopment*

## *Specific Requirements*

The MS4 operator must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a common larger plan of development or sale that will result in disturbance of one or more acres, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.

- (a) Develop and implement strategies, which include a combination of structural and, or non-structural BMP's appropriate for the community;
- (b) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and Local laws; and,
- (c) Ensure adequate long-term operation and maintenance of BMP's.

**MCM 4: Post-Construction storm water Management in New Development/Redevelopment**

<b>Best Management Practices</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goals</b>
BMP 4.1 Follow guidance of ordinance as necessary to fulfill the requirements of this MCM	1-5	Conduct inspections in finalizing construction confirming the SWMP along with City ordinance goals are obtained.	Facilitate implementation of the manual through ordinances (revise if necessary).
BMP 4.2 Maintenance Program for Structural BMP's	1-5	Continue the designed sufficient Maintenance Program for Structural BMP's.	Follow the designed maintenance program for the BMP's chosen for the area to eliminate or greatly reduce any impacts on pollution in storm water.
	1-5		Continue the Program by having placed a schedule to support the Developed manual.
BMP 4.3 Documented and Maintained Records	1-5	Document all inspection findings in inspection reports, enforcement actions in citations and warnings to be on file at City Hall.	Keep all records and reports for this MCM on file at City Hall to be available for review by TCEQ.

# Pollution Prevention/Good Housekeeping for Municipal Operations

## Specific Requirements:

A section within the SWMP must be developed to establish an operation and maintenance program. The operation and maintenance program must have the ultimate goal of identifying methods and practices for conducting municipal operation in a manner to prevent or reduce pollution in storm water runoff.

### (a) Good housekeeping and Best Management Practices (BMP's).

Controls must be used to reduce or eliminate the discharge of pollutants when runoff from municipal operations is determined to be a significant contributor of pollution to the MS4. Examples of municipal operations and municipally owned areas include, but not limited to:

- (1) Park and open space maintenance;
- (2) Street, road, or highway maintenance;
- (3) Fleet and building maintenance;
- (4) Storm water system maintenance;
- (5) New construction and land disturbances;
- (6) Municipal parking lots;
- (7) Vehicle and equipment maintenance and storage yards;
- (8) Waste transfer stations
- (9) Salt, sand, rock, and asphalt stations;

### (b) Training

A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing storm water pollution from municipal operations.

Examples or descriptions of training material being used must be included in the SWMP.

### (c) Structural control maintenance

If best management practices include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP. The SWMP must list all of the following:

- (1) Maintenance activities;
- (2) Maintenance schedules, and;
- (3) Long-term inspection procedures for controls used to reduce floatable and other pollutants.

(d) Disposal of Waste

Waste removed from the MS4, structural controls, or collected because of municipal operations and maintenance activities must be properly disposed. A section within the SWMP must be developed to include procedures for the proper disposal of waste, including:

- (1) Dredge spoil
- (2) Accumulated sediments; and
- (3) Floatables.

(e) Municipal Operations and Industrial Activities

The SWMP must include a list of all:

- (1) Municipal operations that are subject to the operation, maintenance, or training program developed under the conditions of this section; and
- (2) Municipally owned or operated industrial activities that are subject to **TPDES** storm water regulations.

The SWMP must include an individual permit number, general authorization number, or a copy of a signed **NOI** (notice of intent) or **NEC** (no exposure certificate) form from TPDES General Permit **TXR050000** for each industrial activity conducted by the MS4 and subject to TPDES storm water regulations. If a NOI or NEC has been submitted, but an acknowledgement has not yet been received from the TCEQ, a copy of the submitted NOI or NEC form must be made readily available.

**MCM 5: Pollution Prevention/ Good Housekeeping for Municipal Operations**

<b>Best Management Practices</b>	<b>Year</b>	<b>Activity</b>	<b>Measurable Goals</b>
BMP 5.1 Preventing Storm Water Pollution ( What We Can Do)	1-5	Continue to Receive Resource Training Modules, on Preventing Storm Water Pollution	Receive information to inform the Public on the impacts we have on storm water, How important it is, And what we can do to prevent or even Eliminate the pollution.
	1-5	Implement using the training modules at scheduled meetings, At a minimum of once per year.	Prevent Storm Water Pollution, By educating the public, Receive public involvement and participation.
BMP 5.2 Municipal Operations.	1	Review and Revise the Developed list of Municipal Operations that are subject to the SWMP as listed in the SWPPP, including	Revise the maintenance and training program, From the compiled list of Municipal Operations to reduce any impacts on the SWMP.
	1-5	impacts from possible hired contractors operations.	Follow guidelines of the maintenance and training program for Municipal Operations. See SWPPP. All Contractors hired must comply with all operating procedures in the SWMP.
BMP 5.3 Catch Basin and Storm Drain Cleaning Program	1-5	All of the City's MS4 consist of streets and open ditches. The City will keep the ditches clean as required.	Continue scheduled rotation of cleaning outfalls at a minimum of 50% per year.

BMP 5.4 Waste Disposal procedures	1-5	Used oil recycling	Continue the City's oil recycling program.
	1-5		Utilize the SWP3 program getting the public involved by accepting used oil from Residents of the City.
	1-5	Use Trinity waste with proper procedures for the disposal of any pollutant matter.	Follow protocol for the disposal of all hazardous waste, dredge soil, or any other pollutant that may need special attention when disposing of, After being accumulated during the cleaning of the water ways to protect SWMP.
BMP 5.5 Fleet Vehicle Washing/Maintenance Procedures	1-5	Use the joining City car washes concerning the washing and maintenance of City vehicles.	Reduce the impacts of pollution in the SWMP from the washing and maintenance of City vehicles.
BMP 5.6 Park Maintenance Procedures	1-5	Follow protocols in the Maintenance program for the City parks. See SWPPP	Reduce debris of all kinds to prevent any pollutants from entering the ditches and protecting the City's SWMP.

