



Notice of Intent (NOI) for Small Municipal Separate Storm Sewer Systems (MS4) authorized under TPDES Phase II MS4 General Permit TXR040000

IMPORTANT:

Use the [INSTRUCTIONS](#) to fill out each question in this form.

Once approved, your permit authorization can be viewed at:
<http://www.tceq.texas.gov/goto/wq-dpa>

APPLICATION FEE:

You must pay the **\$400** Application Fee to TCEQ for the application to be complete. Payment and NOI must be mailed to separate addresses.

You can pay online at: <http://www.tceq.texas.gov/goto/epay>

Select Fee Type: GENERAL PERMIT MS4 PHASE II STORMWATER DISCHARGE NOI APPLICATION

Provide your payment information below, for verification of payment:

Mailed Check/Money Order Number:
Check/Money Order Amount:
Name Printed on Check:

EPAY Voucher Number: 478910
Is a copy of the Payment Voucher enclosed? Yes

One (1) copy of the NOI, Stormwater Management Program (SWMP) cover sheet, and SWMP MUST be submitted with the original NOI, SWMP cover sheet, and SWMP.

Is the copy attached? Yes

REASON FOR APPLICATION:

Select the reason you are submitting this application:

- New authorization
 Renewal of authorization number: TXR04

Note: An authorization cannot be renewed after July 23, 2019

Section 1. OPERATOR (Applicant)

- a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? CN 600693113
- b) What is the exact Legal Name of the entity (applicant) applying for this permit?
City of Nassau Bay
- c) Complete and attach a Core Data Form (TCEQ-10400) for this customer.

Section 2. ANNUAL BILLING CONTACT

The operator is responsible for paying the annual water quality fee. The annual fee will be assessed to permits active on September 1 of each year. TCEQ will send a bill to the address provided in this section. The operator is responsible for terminating the permit when it is no longer needed.

Provide the name and contact information of the billing contact.

Prefix (Mr. or Ms.): Mr.

First and Last Name: Paul Lopez

Title: Director of Public Works

Organization Name: City of Nassau Bay

Phone Number: 281-333-4211

Fax Number:

Email: paul.lopez@nassaubay.com

Mailing Address: 1800 Space Park Drive 2nd Floor

City, State, and Zip Code: Nassau Bay, TX 77058

Section 3. APPLICATION CONTACT

This is the person TCEQ will contact if additional information is needed about this application.

Provide the name and contact information of the application contact.

Prefix (Mr. or Ms.): Mr.

First and Last Name: David Kasper

Title: City Engineer

Organization Name: ARKK Engineers LLC

Phone Number: 713-254-0091

Fax Number:

Email: david.kasper@arkkengineers.com

Mailing Address: 7322 Southwest Fwy. Ste 1040

City, State, and Zip Code: Houston, TX 77074

Section 4. REGULATED ENTITY (RE) INFORMATION FOR SITE

- a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN 105591226
- b) Name of site as known by the local community:
Nassau Bay
- c) Name of the urbanized area(s) the Phase II MS4 is located within:
Houston
- d) Provide a brief description of the regulated MS4 boundaries: *Example: Area within the City of XXXX limits that is located within the xxx urbanized area.*
Area within the City of Nassau Bay limits that is located within the Houston Urbanized Area.

Section 5. GENERAL CHARACTERISTICS

- a) Is this site located on Indian Country Lands?
- Yes, do not submit this form. You must obtain authorization through U.S. EPA Region 6.
- No, continue to item b
- b) Has TCEQ formally “designated” the small MS4 as needing coverage under this general permit?
- Yes. Attach a copy of the documentation sent to the MS4 by TCEQ.
- No
- c) Select the MS4 level, which is based on the population served within the urbanized area (UA) **based on the most recent Decennial Census at the time of issuance of the general permit.**
- Level 1:** Traditional small MS4s with a population of less than 10,000.
- Level 2:** Traditional small MS4s with a population of at least 10,000 but less than 40,000.
- Non-traditional MS4s: This level also includes all non-traditional small MS4s regardless of population unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage. *Examples of non-traditional small MS4s include counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts, and other special districts.*
- Level 3:** Traditional small MS4s with a population of at least 40,000 but less than 100,000.
- Level 4:** Traditional small MS4s with a population of 100,000 or more.
- d) What is the estimated current population served by your MS4 (regulated area?)
4100 People

e) Is the MS4 part of a coalition?

Yes

No

f) If yes, list the entity names of the coalition members responsible for implementation of the SWMP *and* their unique TXR04#### number.

- | | | | |
|----|----------------------|-------|----------------------|
| 1. | <input type="text"/> | TXR04 | <input type="text"/> |
| 2. | <input type="text"/> | TXR04 | <input type="text"/> |
| 3. | <input type="text"/> | TXR04 | <input type="text"/> |
| 4. | <input type="text"/> | TXR04 | <input type="text"/> |
| 5. | <input type="text"/> | TXR04 | <input type="text"/> |
| 6. | <input type="text"/> | TXR04 | <input type="text"/> |

If needed, add a copy of this page to add more entities.

g) What is your annual reporting year?

Calendar year

Small MS4 General Permit year

MS4 Fiscal year - What is the last month and day of the fiscal year?

h) Stormwater Management Program (SWMP)

1. I certify that the SWMP submitted with this NOI has been developed according to the provisions of the Small MS4 General Permit TXR040000. Yes
2. I certify that the SWMP Cover Sheet is completed and attached to the front of the SWMP. Yes
3. Have the program elements in the previous SWMP been re-assessed and modified and new program elements been developed and implemented, as necessary?
 Yes
 No. This facility did not have a previous authorization.
4. Is the optional 7th Minimum Control Measure (MCM) for Municipal Construction Activities selected and included with the attached SWMP?
 No. Continue to Question 5.
 Yes.
If yes, is MCM 7 limited to the regulated area within the urbanized area?
 Yes. Continue to Question 5.
 No

If No, then MCM 7 is included in the geographic area or boundary outside of the urbanized area. Note: *In this case, you must incorporate the entire area*

(urbanized and non-urbanized areas) in the SWMP and implement all MCMs 1-7 in the urbanized and non-urbanized areas.

5. Provide the name and contact information of the person responsible for implementing or coordinating implementation of the SWMP.

Prefix (Mr. or Ms.): Mr.

First and Last Name: Paul Lopez

Title: Director of Public Works

Organization Name: City of Nassau Bay

Phone Number: 281-333-4211

Fax Number: [REDACTED]

Email: paul.lopez@nassaubay.com

Mailing Address: 1800 Space Park Drive

City, State, and Zip Code: Nassau Bay, TX 77058

i) Discharge Information

1. What is the name of the waterbody(ies) receiving stormwater discharges from the MS4? 2425 Clear Lake
2. What is the classified segment number(s) that the discharges will eventually reach? 2425 Clear Lake, 1101_04 Clear Creek Tidal, 1101C Cow Bayou

Does the small MS4 discharge directly or indirectly into the classified segment(s)?

Directly

Indirectly

3. Are any of the waterbody(ies) receiving discharges from the small MS4 identified as impaired waters (Category 4 or 5) in the *Texas Integrated Report of Surface Water Quality*?

Yes

What is the name of the impaired waterbody(ies) receiving the discharge from the small MS4? 2425_01 Clear Lake; 1101_04 Clear Creek

What is/are the pollutants(s) of concern? Copper in Water, Dioxin in Edible Tissue, PCB's in edible tissue

No

4. Does the impaired water body(ies) have a TMDL (Category 4 waterbody)?

Yes

What is/are the pollutants with a TMDL? [REDACTED]

No

5. Does your MS4 discharge into any other MS4 entity's jurisdiction prior to discharge into water in the state?

Yes

What is the name of the MS4 operator?

No

6. Edwards Aquifer Rule

Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, within the Contributing Zone within the Transition Zone, or zero to ten (0 to 10) miles upstream of the Recharge Zone of the Edwards Aquifer?

Yes - **NOTE: A copy of the agency approved Water Pollution Abatement Plan (WPAP) required by the Edwards Aquifer Rule (30 TAC Chapter 213) must be either included or referenced in the SWMP.**

No

j) Public Participation Process

1. Provide the name and contact information of the person responsible for publishing notice of the executive director's preliminary determination on the MS4's NOI and SWMP?

Prefix (Mr. or Ms.): Mr.

First and Last Name: Paul Lopez

Title: Director of Public Works

Company: City of Nassau Bay

Phone Number: 281-333-4211

Fax Number:

Email: paul.lopez@nassaubay.com

Mailing Address: 1800 Space Park Drive 2nd Floor.

Internal Routing (Mail Code, Etc.): 2nd Floor

City, State, and Zip Code: Nassau Bay, TX 77058

2. Provide the name and location of the public place where copies of the NOI, SWMP, Small MS4 General Permit TXR040000, and general permit fact sheet may be viewed and copied by the public?

Name of Public Place: City Hall

Address of Public Place: 1800 Space Park Drive 2nd Floor

County of Public Place: Harris

3. Provide the address for the website where the MS4's SWMP and annual report will be posted. Nassaubay.com

Do not have a website.

Section 6. CERTIFICATION

I certify that I have obtained a copy and understand the terms and conditions of the Phase II (Small) MS4 General Permit TXR040000 issued January 24, 2019.

Yes

I certify that the small MS4 qualifies for coverage under the Phase II (Small) MS4 General Permit TXR040000.

Yes

I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.

Yes

I understand that authorizations active on September 1st of each year will be assessed an Annual Water Quality Fee.

Yes

Operator Certification

Operator Signatory Name: Paul Lopez

Operator Signatory Title: Director of Public Works

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____ Date: _____

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 478510
Trace Number: 582EA000401367
Date: 10/01/2020 12:51 PM
Payment Method: ACH - Authorization 0000000000
Voucher Amount: \$400.00
Fee Type: GENERAL PERMIT MS4 PHASE II STORM WATER DISCHARGE NOI APPLICATION
ePay Actor: DAVID W KASPER
Actor Email: david.kasper@arkkengineers.com
IP: 66.196.236.66

Payment Contact Information

Name: DAVID W KASPER
Company: ARKK ENGINEERS LLC
Address: 7322 SOUTHWEST FWY SUITE 104, HOUSTON, TX 77074
Phone: 713-400-2755

Site Information

Site Name: CITY OF NASSAU BAY
Site Address: ENTIRE CITY LIMIT, NASSAU BAY, TX 77058
Site Location: CITY LIMITS - CITY OF NASSAU BAY

Customer Information

Customer Name: ARKK ENGINEERS LLC
Customer Address: 7322 SOUTHWEST FWY SUITE 104, HOUSTON, TX 77074
State Franchise Tax ID: 32045198614

Other Information

Program Area ID: TXR150000
Comments: Payment on behalf of the City of Nassau Bay for the NOI for Stormwater Discharge

[Close](#)



TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 600693113		RN 105591226

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		
<input type="checkbox"/> New Customer		<input checked="" type="checkbox"/> Update to Customer Information		<input type="checkbox"/> Change in Regulated Entity Ownership
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)				
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			If new Customer, enter previous Customer below:	
City of Nassau Bay				
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
Government:	<input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees	<input type="checkbox"/> 0-20 <input checked="" type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		13. Independently Owned and Operated?	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following				
<input type="checkbox"/> Owner		<input type="checkbox"/> Operator		<input checked="" type="checkbox"/> Owner & Operator
<input type="checkbox"/> Occupational Licensee		<input type="checkbox"/> Responsible Party		<input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:
15. Mailing Address:	1800 Space Park Drive			
	Suite 200			
	City	Nassau Bay	State	TX
	ZIP	77058	ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
			paul.lopez@nassaubay.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)
(281) 333-4211				() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information	
<i>The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
City of Nassau Bay	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	1800 Space Park Drive							
	Suite 200							
	City	Nassau Bay	State	TX	ZIP	77058	ZIP + 4	
24. County	Harris							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	City Limits of the City of Nassau Bay, Texas							
26. Nearest City						State	Nearest ZIP Code	
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:					
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
9111								
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>								
34. Mailing Address:	1800 Space Park Drive							
	Suite 200							
	City	Nassau Bay	State	TX	ZIP	77058	ZIP + 4	
35. E-Mail Address:		paul.lopez@nassaubay.com						
36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>		
(281) 333-4211						() -		

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
	TXR040000			
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	David Kasper		41. Title:	City Engineer	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(713) 254-0091		() -			

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	ARKK Engineers, LLC		Job Title:	Senior Project Manager	
Name <i>(In Print)</i> :	David W. Kasper			Phone:	(713) 254- 91
Signature:				Date:	

STORMWATER MANAGEMENT PROGRAM (SWMP) COVER SHEET

This cover sheet MUST be attached to the front of the SWMP.

Operator

Operator name: City of Nassau Bay

Required Program Elements

The SWMP needs to include:

- BMPs and measurable goals that are clear, specific, and measurable,
- Annual Reporting Year selected, and
- Estimated population served by the MS4.

Legal Authorities

Include in the SWMP the list of local legal authorities (i.e., ordinance, rule) that the MS4 has adopted to implement any of the MCMs. List all and what MCM they each cover.

Minimum Control Measures

For each MCM, complete the table by entering the page number where the required element can be found in the SWMP

MCM 1: Public Education, Outreach, and Involvement

Table 1: Required Elements for MCM 1

MCM 1 Required Elements	SWMP page number
SWMP includes a stormwater education and outreach program to educate public employees, business, and the general public about hazards associated with the illegal discharges and improper disposal of waste and about the impacts stormwater can have on water quality, and steps they can take to reduce pollutants in stormwater	8
Clearly define the goals and objectives of the program based on high-priority community-wide issues	8-11
Identify the target audiences	8
Develop or use appropriate educational material	8-11,
Procedures to distribute educational material	8-11
Make the educational material available to the target audience at least annually	8-11

MCM 1 Required Elements	SWMP page number
Post the SWMP and annual reports on the MS4's website, if the MS4 has a website	10
Include the MS4's website address where the SWMP and annual reports will be found, if the MS4 has a website	10
SWMP includes a program that complies with state and local public notice requirements	10
Include public input in the implementation of the program	12
Include opportunities for citizen to participate in implementation of control measures	12
Ensure the public can easily can find information about the SWMP.	10
SWMP lists Best Management Practices (BMPs) used to fulfill this MCM. Examples of possible BMPs could be stream-clean-ups, storm drain stenciling, volunteer water quality monitoring, brochures, billboards, and websites.	8-14
SWMP includes measurable goals that are clear, specific, and measurable, and the method of measurement, for addressing stormwater quality	8-14
SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from the general permit issuance date of January 24, 2019	8-14

MCM 2: Illicit Discharge Detection and Elimination

Table 2: Required Elements for MCM 2

MCM 2 Required Elements	SWMP page number
Description of the program that will be used to detect, investigate and eliminate illicit discharges. The program includes a plan to detect and address illicit discharges, including illegal dumping to the MS4 system.	15
MS4 map: The map includes: <ul style="list-style-type: none"> • Location of all small MS4 outfalls operated by the MS4 and that discharge into waters of the U.S.; • Location and name of all surface waters receiving discharge from the MS4s outfalls; • For Level 3 and 4 small MS4s: Location of MS4 owned or operated facilities and stormwater controls; and • For Level 4 small MS4s: Location of priority areas. 	15
Methods for informing and training MS4 field staff	16
Procedures for tracing the source of an illicit discharge	16

MCM 2 Required Elements	SWMP page number
Procedures for removing the source of the illicit discharge	16
Procedures to facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4	18
Procedures for responding to illicit discharges and spills	16
Procedures for inspections in response to complaints	18
For Level 2, 3, and 4 small MS4s: Procedures to prevent and correct leaking on-site sewage disposal systems	
For Level 3 and 4 small MS4s: Procedures for follow-up investigation to verify that the illicit discharge has been eliminated	
For Level 4 small MS4s: Procedures for identifying and creating a list of priority areas within the small MS4s likely to have illicit discharges	
For Level 4 small MS4s: Procedures for a dry weather field screening program to assist in detecting and eliminating illicit discharges to the small MS4. Dry weather field screening consists of (1) field observations and (2) field screening.	
For Level 4 small MS4s: Procedures to reduce the discharge of floatables in the small MS4	
SWMP lists BMPs used to fulfill this MCM. Examples of possible BMPs could be hazardous materials disposal opportunities, inspections of the storm sewer system, and dye testing.	15-19
SWMP includes measurable goals that are clear, specific, and measurable, and the method of measurement, for addressing stormwater quality	15-19
SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from the general permit issuance date of January 24, 2019	15-19

MCM 3: Construction Site Stormwater Runoff Control

Table 3: Required Elements for MCM 3

MCM 3 Required Elements	SWMP page number
Program requires operators of construction sites one acre and greater (including larger common plan) to select, install, implement, and maintain stormwater control measures	20
Description of 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	19

MCM 3 Required Elements	SWMP page number
Program requires construction site operators to implement BMPs for erosion and sediment control	20
Program requires construction site operators to have procedures for initiating and completing soil stabilization measures	20
Program requires construction site operators to implement BMPs to control pollutants from equipment and vehicle washing and other wash waters	20
Program requires construction site operators to implement BMPs to minimize exposure to stormwater of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials	20
Program requires construction site operators to implement BMPs to minimize the discharge of pollutants from spills and leaks.	20
Program ensures that the construction site has developed a stormwater pollution prevention plan in accordance with the TPDES Construction General Permit TXR150000	20
Program prohibits illicit discharges such as wash out wastewater, fuels, oils, soaps, solvents, and dewatering activities	20
Procedures for construction site plan review to consider water quality impacts	23
Procedures for construction site inspections and enforcement of control measures, to the extent allowable under state and local law	20
Procedures for receipt and consideration of information submitted by the public	18
Procedures for MS4 staff training	21
For Level 3, and 4 small MS4s: Procedures to develop and maintain an inventory of all permitted active public and private construction sites greater than one acre (and sites that are less than one acre if part of larger common plan of development or sale)	
SWMP lists BMPs used to fulfill this MCM. Examples may include: notification to discharger of responsibilities under TPDES CGP; hire staff to review construction site plans; provide a web page for public input on construction activities; perform site inspections and enforcement; provide education and training for construction site operators; and mechanism to prohibit discharges into MS4 where necessary.	19-21
SWMP includes measurable goals that are clear, specific, and measurable, and the method of measurement, for addressing stormwater quality	19-21

MCM 3 Required Elements	SWMP page number
SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from the general permit issuance date of January 24, 2019	19-21

MCM 4: Post Construction Stormwater Management in New Development and Redevelopment

Table 4: Required Elements for MCM 4

MCM 4 Required Elements	SWMP page number
Description of a program that will be developed, implemented and enforced, to control stormwater discharges from private and public new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more (and sites that disturb less than one acre that are part of a larger common plan of development or sale)	23-24
Description of ordinance or other regulatory mechanism that is in place or planned which will regulate discharges from new development and redevelopment projects	23-24
Establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality	23-24
Procedures to document and maintain records of enforcement actions	23-24
Procedures to ensure long-term operation and maintenance of post construction stormwater control measures	23-24
Operation and maintenance of post construction stormwater control measures is documented	23-24
For Level 4 small MS4s: Develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained. Inspections must be documented	
SWMP lists BMPs used to fulfill this MCM. Examples may include: local ordinance in place or planned; guidance document for developers to use; specific BMPs established for particular watersheds; list of appropriate BMPs provided to operators; elimination of curbs and gutters; incentives for use of permeable choices, such as porous pavement; requirements for wet ponds or other BMPs for certain size sites; and xeriscaping.	23-24
SWMP includes measurable goals that are clear, specific, and measurable, and the method of measurement, for addressing stormwater quality	23-24

MCM 4 Required Elements	SWMP page number
SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from the general permit issuance date of January 24, 2019	23-24

MCM 5: Pollution Prevention and Good Housekeeping for Municipal Operations

Table 5: Required Elements for MCM 5

MCM 5 Required Elements	SWMP page number
Description of an operation and maintenance (O&M) program, including an employee training component, to reduce/prevent pollution from municipal activities and municipally owned areas included but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations	28-30
Develop and maintain an inventory of facilities and stormwater controls that are owned or operated by the MS4	28-30
Procedures to inform or train staff involved in implementing pollution prevention and good housekeeping practices. Maintain training attendance records	28
Procedures to remove and properly dispose of waste from the MS4	26
Contractors hired by the MS4 must be required to comply with operating procedures. Develop contractor oversight procedures	29
Evaluate O&M activities for their potential to discharge pollutants in stormwater for road and parking lot maintenance, bridge maintenance, cold weather operations, right-of-way maintenance, etc.	29
Identify pollutants of concern that could be discharged from the O&M activities	29
Develop and implement pollution prevention measures that will reduce discharge of pollutants from O&M activities	29
Conduct inspections of pollution prevention measures and maintain inspection log	29
Procedures for inspecting and maintaining structural controls	29
For Level 3 and 4 small MS4s: Develop and implement an O&M program to reduce the collection of pollutants in catch basins and other surface structures in the storm sewer system	

MCM 5 Required Elements	SWMP page number
For Level 3 and 4 small MS4s: Develop a list of potential problem areas in the storm sewer system for increased inspection (for example, areas with recurring illegal dumping)	
For Level 3 and 4 small MS4s: Implement an O&M program to reduce discharge of pollutants from roads that includes at least a street sweeping and cleaning program, or inlet protection. The program includes an implementation schedule and a waste disposal procedure	
For Level 3 and 4 small MS4s: Assess its facilities for their potential to discharge pollutants into stormwater and identify high priority facilities that have a high potential to generate stormwater pollutants. At a minimum, facilities include the MS4s maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater. Document the results of the assessments	
For Level 3 and 4 small MS4s: Develop facility specific stormwater management Standard Operation Procedures for high priority facilities	
For Level 3 and 4 small MS4s: MS4 implements stormwater controls at high priority facilities that address good housekeeping; de-icing and anti-icing storage; fueling operations and vehicle maintenance; equipment and vehicle washing	
For Level 3 and 4 small MS4s: Develop and implement an inspection program that includes high priority facilities	
For Level 4 small MS4s: Develop an application and management program for pesticides, herbicides, and fertilizers used at public open spaces. Implement the following: educational activities, permits, etc for applicators and distributors; encourage of non-chemical solutions for pest management; develop schedules that minimizes discharge of pollutants; ensure collection and proper disposal of unused pesticides, herbicides, and fertilizers	
For Level 4 small MS4s: Evaluate flood control projects. Design, construct, and maintain new flood control structures to provide erosion prevention and pollutant removal from stormwater. Retrofitting of existing structural flood control devices is implemented to the maximum extent practicable (MEP)	
SWMP lists BMPs used to fulfill this MCM. Examples may include: BMPs which address fleet vehicle maintenance/washing; BMPs which address parking lot and street cleaning; catch basin and storm drain system cleaning; landscaping and lawn care (e.g. xeriscaping); waste materials management; road salt application and storage practices; used oil recycling; pest management practices; fire training facilities; BMPs which address roadway and bridge maintenance; golf course maintenance/waste	24-30

MCM 5 Required Elements	SWMP page number
disposal; disposal of cigarette butts; and park maintenance (e.g., providing trash bags).	
SWMP includes measurable goals that are clear, specific, and measurable, and the method of measurement, for addressing stormwater quality	24-30
SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from the general permit issuance date of January 24, 2019	24-30

MCM 6: Industrial Stormwater Sources

Table 6: Required Elements for MCM 6

MCM 6 Required Elements	SWMP page number
For Level 4 MS4 only: Identify and control industrial stormwater sources that at least includes the MS4's landfills; other treatment, storage, or disposal facilities for municipal waste; hazardous waste treatment, storage, disposal and recovery facilities; and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA).	n/a
For Level 4 MS4 only: Procedures for inspecting and implementing control measures for discharges from industrial stormwater sources.	n/a

Optional MCM 7: Municipal Construction Activities

This MCM is only applicable where the small MS4 has selected to be the construction site operator for their municipal construction activities. This MCM provides an alternative to the MS4 operator seeking discharge authorization under the Construction Stormwater General Permit TXR150000.

Table 7: Required Elements for MCM 7

MCM 7 Required Elements	SWMP page number
Description of how municipal construction activities will be conducted so as to take into consideration local conditions of weather, soils, and other site specific considerations	n/a
Description of the area that this MCM will address and where the MS4 operator's municipal construction activities are covered (e.g. within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary)	n/a

MCM 7 Required Elements	SWMP page number
If the area included in this MCM includes areas outside of the UA, then all MCMs (MCM 1 through MCM 7) will be implemented over those additional areas as well	31-39
Description of how contractor activities will be supervised or overseen to ensure that the Stormwater Pollution Prevention Plan (SWP3) requirements are properly implemented at the construction site(s); or how the MS4 operator will make certain that contractors have a separate authorization for stormwater discharges if needed	31-39
General description of how a construction SWP3 will be developed for each municipal construction site	31-39
Records of municipal construction activities authorized under this optional MCM	31-39

CITY OF NASSAU BAY

STORM WATER MANAGEMENT PROGRAM



Permit Years 2019-2024
Oct, 2020



Texas PE Firm No. 13872

TABLE OF CONTENTS

CITY OF NASSAU BAY STORM WATER MANAGEMENT PROGRAM

PART I	BACKGROUND.....	3
PART II	MINIMUM CONTROL MEASURES.....	7
1	PUBLIC EDUCATION, OUTREACH, & INVOLVEMENT.....	8
	A. Selected BMPs for Public Education and Outreach	
2	ILLICIT DISCHARGE DETECTION AND ELIMINATION.....	15
	A. Selected BMPs for Illicit Discharge Detection and Elimination	
3	CONSTRUCTION SITE STORM WATER CONTROLS.....	19
	A. Selected BMPs for Construction Site Storm Water Controls	
4	POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT/REDEVELOPMENT.....	21
	A. Selected BMPs for Post Construction Storm Water Management for New Development/Redevelopment	
5	POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS.....	23
	A. Current Programs	
	B. Selected BMPs for Pollution Prevention/Good Housekeeping for Municipal Operations	
6	INDUSTRIAL STORMWATER SOURCES.....	29
	A. Selected BMPs for Industrial Stormwater Sources	
7	<i>IMPAIRED WATER BODIES AND TOTAL MAXIMUM DAILY LOAD REQUIREMENTS.....</i>	38
	A. Selected BMPs for Impaired Water Bodies and Total Maximum Daily Load	
8	<i>THREATENED AND ENDANGERED SPECIES.....</i>	39

PART I
BACKGROUND

1.1 REGULATORY BACKGROUND

In 1972, Congress amended the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act ["CWA"]) to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System ("NPDES") permit. The NPDES program is a program designed to track point sources and require the implementation of the controls necessary to minimize the discharge of pollutants.

In 1987, Congress amended the CWA to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges.

The first phase of the program, commonly referred to as "Phase I," was promulgated by EPA on November 16, 1990 (Federal Register, Volume 55, Page 47,990 [55 FR 47990]). Phase I requires NPDES permits for storm water discharge from a large number of priority sources, including municipal separate storm sewer systems ("MS4's") generally serving populations of 100,000 or more and several categories of industrial activity, including construction sites that disturb five or more acres of land.

EPA promulgated the second phase of the storm water regulatory program, commonly referred to as "Phase II," on December 8, 1999 (64 FR 68722). The complete Federal Register announcement can be viewed on the EPA website as listed in the References Section of this document. Phase II regulations address storm water discharges from certain MS4's serving populations of less than 100,000 people (called "small MS4's"). In summary, the regulations, which may be found in Title 40, Part 122 of the Code of Federal Regulations (40 CFR 122), require that all small MS4 operators located in Urbanized Areas (as defined by the latest U.S. census) must "develop, implement and enforce a Storm Water Management Program designed to reduce the discharge of pollutants from [the] MS4 to the maximum extent practicable, to protect water quality... "

EPA has delegated authority to issue MS4 storm water discharge permits, in Texas, to the State of Texas. Under the authority of the Texas Water Code and the CWA, the Texas Commission on Environmental Quality (TCEQ) has issued on January 24, 2019, a Texas Pollutant Discharge Elimination System (TPDES) general permit to discharge waste from small MS4 systems to waters of the state (TPDES General Permit No. TXR040000).

Having a population of approximately 4,100 persons, the City of Nassau Bay is classified as a Level I MS4.

1.2 THE PURPOSE OF THIS DOCUMENT

This document describes the City's SWMP activities for the implementation period of January 24, 2019 through January 24, 2024. It includes all selected BMP's for each of the five minimum control measures, measurable goals for each BMP, an implementation schedule, and a listing of the person(s) responsible for implementation of all activities. This document describes activities designed to protect the health of the recreational public and the environment, meet Clean Water Act mandates through compliance with Phase II NPDES Permit requirements and applicable regulations.

For this report and the subsequent annual updates, the following provides the date range for each Permit Year:

- Year 1: January 24, 2019 through January 23, 2020
- Year 2: January 24, 2020 through January 23, 2021
- Year 3: January 24, 2021 through January 23, 2022
- Year 4: January 24, 2022 through January 23, 2023
- Year 5: January 24, 2023 through January 24, 2024

Regarding the schedules for achieving the Measureable Goals for Each stated BMP, BMP's implemented on an annual basis should be completed by December 20 of the indicated Permit Year.

A copy of this SWMP will be available both, online and at City Hall.

1.3 CITY BACKGROUND

SETTING

The City of Nassau Bay was incorporated in 1970. It is bordered to the North by the City of Houston and the Johnson Space Center, to the West by the City of Webster, to the East by the City of Houston, and to the South by Clear Lake. It is located at latitude 29.544° N and longitude 95.09° W and elevations range from Sea Level to approximately 16-feet above Sea Level. Average temperature is 69° and the average annual rainfall is approximately 48 inches. The regional topography is flat. Currently the City of Nassau Bay has a population of approximately 4,100.

The City has several thousand feet of enclosed storm sewers. Drainage and street maintenance is handled by the Department of Public Works. The City is fully located in Harris County, Texas.

ORGANIZATION

The City is a chartered home-rule city, operated by a City Council/City Manager structure. Elected officials include a Mayor and six at-large City Council Members.

ORDINANCES and GUIDANCE

Key City of Nassau Bay ordinances and guidance that may be affected by the Storm Water Management Program are:

- Development Ordinances
- Storm Drainage Design Criteria (City of Nassau Bay Storm Drainage Design Requirements)

LEGAL AUTHORITY

The City of Nassau Bay manages storm water runoff issues through its ordinances which authorize the Department of Public Works with the proper authority to manage storm water quality within the City of Nassau Bay. The ordinances and guidance listed above may need revisions to address elements of the Storm Water Management Program.

INSPECTION/ENFORCEMENT

The City has adopted the International Building Code and conducts building inspections through the Building Official. Contract engineering personnel assist the Building Official to observe construction of municipal infrastructure. The Fire Department and Public Works respond to chemical and hazardous material spills. If a responsible party does not respond and clean up a spill, the Fire Marshall investigates and enforces cases of illegal dumping and illicit discharges.

INFRASTRUCTURE/MUNICIPAL OPERATIONS

The Department of Public Works handles storm water runoff management, drainage system maintenance, and street maintenance. The City has existing maps of the drainage system and has mapped the existing drainage system in a GIS (Arcview, ArcInfo) format. The Department of Public Works maintains the sanitary sewer system. These operations are housed at the Nassau Bay Public Works Facility. Fleet maintenance activities for City vehicles and equipment are housed at the Public Works Facility.

CONSTRUCTION AND DEVELOPMENT

The City Council and Board of Adjustments regulate development. The Building Official conducts a plan review of proposed development projects and then makes periodic construction inspection visits. Site Work Permits and Building Permits are issued by the Building Official. The Storm Water Drainage Design Requirements contain criteria for on-site detention efforts.

PROGRAM FUNDING

The City of Nassau Bay pays for the maintenance of its storm water system infrastructure out of its operating budget, as these are some of the City personnel's regular duties.

OUTREACH/TRAINING

The City provides public education to residents on a variety of subjects using numerous methods, including the weekly Bay Area Citizen newspaper, and the City of Nassau Bay monthly Newsletter. Community organizations (Rotary Club, Lion's Club, etc.) assist the City with litter control programs that involve the community.

PART II

MINIMUM CONTROL MEASURES

1. PUBLIC EDUCATION, OUTREACH, & INVOLVEMENT

The City of Nassau Bay will continue to maintain a stormwater education and outreach program to educate public employees, businesses and the general public of:

- The hazards associated with the illegal discharges and improper disposal of waste;
- The impact that stormwater discharges can have on local waterways;
- The steps that the public can take to reduce pollutants in storm water.

The City of Nassau Bay will continue to assess program elements that are described in the SWMP and modify as necessary; and will develop and implement new elements as necessary to continue reducing the discharge of pollutants from the MS4 to the maximum extent practical.

The City of Nassau Bay is dedicated to educating the community on how to prevent stormwater pollution.

The City will address the following target audiences:

- Adult residents
- Students
- Municipal employees
- Businesses, including commercial and industrial facilities
- Construction site operators
- Visitors

A. Selected BMP's for Public Education and Outreach

BMP #1.1 : Municipal Channel Storm Water Quality Messages

The City of Nassau Bay provides general public education to residents by several means of communication. The City has a website and a municipal television channel for disseminating information. There is a local weekly newspaper, the Bay Area Citizen, as well as subject-specific brochures available from various departments in the City. Brochures are available at City Hall which specifically educate the public against illegal dumping into the storm sewer system.

Measurable Goals

The measurable goal for implementation of this BMP is to broadcast storm water quality-related messages three times per year during each permit year.

Schedule

Program	BMP	Activity	Date Due
1. Public Education & Outreach	Storm Water Quality Broadcast on Local Municipal Channel	1. Post 3 storm water quality messages annually	Each Year by Dec 20th

Responsible Persons

The **Director of Public Works** will be responsible for implementing Storm Water Quality Broadcast on Local Municipal Channel to meet Measurable Goal 1.1

BMP #1.2 – Anti-Littering/Dumping Brochure

The City of Nassau Bay has created an anti-littering/dumping brochure. The brochure will advise the public to refrain from littering and dumping waste materials into storm sewer inlets and manholes. The City will print these brochures and distribute them at the various Departments for dissemination. The City will include these brochures on display at City Hall so that visitors to the City and businesses in the City will have access to these materials.

Measurable Goals

The measurable goal for implementation of BMP #1.2 is to print 200 copies of the anti-littering/dumping brochure and distribute them to the various Departments for dissemination. Each Department will keep the brochures in stock and on prominent display for residents and commercial customers to take.

Schedule

Program	BMP	Activity	Date Due
1. Public Education & Outreach	Anti-Littering/Dumping Brochure	1. Print 200 copies of brochure in year one.	Year 1
		2. Distribute brochure to various Departments	Each Year
		3. Yearly monitor and reproduce additional brochures as needed	Each Year

Responsible Persons

The **Director of Public Works** will be responsible for printing and distribution of the anti-littering/dumping brochure to meet Measurable Goal 1.2

BMP #1.3 – Utility Bill Inserts

The City of Nassau Bay will continue to provide utility bill inserts which describe storm water quality and drainage issues that affect area residents and commercial customers, and what they can do to help address these issues. This insert will be distributed in the City water bills.

Measurable Goals

The measurable goal for implementation of BMP #1.3 is to distribute the utility bill insert to area customers once per year.

Schedule

Program	BMP	Activity	Date Due
1. Public Education & Outreach	Distribute Storm Water Quality Message in Utility Bill Insert	Mail 1 storm water quality message per year as in insert to the utility bill	Each Year by Dec 20th

Responsible Persons

The **Director of Public Works** will be responsible for printing and for distribution of the water bill insert in the water bill.

BMP #1.4 – Municipal Website Storm Water Information

The City of Nassau Bay will use the municipal website to inform the public about the storm water management program. It will include general storm water quality information as well as topics of interest to the general public, such as litter control and proper management of pesticides, fertilizer, used oil, and household hazardous waste. The website will also allow the public to submit comments and complaints concerning the program or possible violations and illicit discharges and dumping. The website address is www.nassaubay.com.

Measurable Goals

The measurable goal for implementation of this BMP is to continue to provide a website with a storm water message and links. Allow provision for public comment via the website. Monitor the site, and update yearly.

Schedule

Program	BMP	Activity	Date Due
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1. Public Education & Outreach	Municipal Website Storm Water Information	1. Include storm water quality information and links on City website. Allow provision for public comment. Monitor and update yearly.	Each Year by Dec 20th
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Responsible Persons

The **Director of Public Works** has responsibility for implementation of Public Education BMP #1.4.

BMP #1.6 – Participation in Clean Water Clear Choice

The City of Nassau Bay will continue to participate in the Clean Water Clear Choice program under the direction of the Stormwater Management Joint Task Force, which is being lead by Harris County. This program promotes the education and involvement of the public in the reduction of pollutants entering the State’s waterways. Members of the Joint Task Force include the Texas Department of Transportation, the City of Houston, Harris County, and the Harris County Flood Control District. Participation in this program helps to provide educational materials to the public, to provide speakers for group meetings, and to promote volunteer efforts in cleanup of the metropolitan area. Participation in this program satisfies some requirements of the Storm Water Management Program by utilizing a group effort from the Joint Task Force. It is estimated that the City will distribute 200 copies of educational materials developed by the Clean Water Clear Choice program annually. It is estimated that one (1) public meeting will be held each year to educate City residents and business on the Storm Water Management Program.

Measurable Goals

The measurable goal for implementation of this BMP is continue participation in this program and continue participation throughout the five-year period; to distribute educational materials.

Schedule

Program	BMP	Activity	Date Due
1. Public Education & Outreach	Participation in Clean Water Clear Choice Program	1. Participate in the program and pay appropriate dues. Distribute literature.	Each Year

Responsible Persons

The **Director of Public Works** has responsibility for implementation of Public Education BMP #1.

BMP #1.7 – Community Hotlines

The City will continue to provide a hotline for citizens to contact the appropriate authority when they see water quality problems. The hotline consists of a telephone number that citizens may call to report problems as well as an electronic form linked to the City’s website. An investigation team will be assigned to scrutinize the problems. Remedial actions will be taken to water quality problems and responsible parties will be identified for further action.

Measurable Goals

The measurable goal for implementation of BMP #1.7 is to continue the hotline each year. A telephone number is advertised and a form and link have been provided on the City’s website. An investigation team will be assigned to assess reports of water quality problems.

Schedule

Program	BMP	Activity	Date Due
1. Public Involvement	Community Hotlines	1. Continue to provide the hotline phone number, linked to website.	Each Year

Responsible Persons

The **Director of Public Works** is responsible for implementation of the BMP #1.7.

BMP #1.8 – Advisory Committee

The City of Nassau Bay will use its Planning and Zoning Committee as an “Advisory Committee” as part of this Storm Water Management Program. The Committee represents different segments of the community that will be affected by the Storm Water Management Program (SWMP) implementation. The Committee will review plans for storm water quality and offer recommendations to facilitate implementation. It will also review this Storm Water Management Program and may provide recommendations to facilitate implementation. The Committee will receive periodic updates from City personnel regarding the ongoing program implementation.

Measurable Goals

The measurable goal for implementation of this BMP is to continue the Advisory Committee activities.

Schedule

Program	BMP	Activity	Date Due
1. Public Involvement	Advisory Committee	1. Continue activities of the Advisory Committee	Each Year

Responsible Persons

The **Director of Public Works** is responsible for implementation of the BMP #1.8.

BMP #1.9 – Public Meeting

Following review and comment of the storm water management/maintenance plan and this Storm Water Management Plan by the Advisory Committee, the City of Nassau Bay will hold a Public Meeting to present the Plan to the public. Post notice of public meeting at City Hall.

Measurable Goals

The measurable goal for implementation of BMP #1.9 is to hold a Public Meeting in plan year 1. Implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
1. Public Involvement	Public Meeting	1. Hold public meeting.	Year 1

Responsible Persons

The **Director of Public Works** are responsible for implementation of the BMP #1.9.

BMP #1.10 – Storm Water Quality Volunteer Opportunities

The City of Nassau Bay will identify suitable opportunities for area volunteers to participate in storm water quality activities and will develop support materials and provide them to interested parties. The volunteer opportunities may include such items as storm drain stenciling, volunteer monitoring, planting campaigns, and Adopt-a-Stream programs.

Measurable Goals

The measurable goal for implementation of this BMP is to provide support materials to interested volunteers for the identified opportunities.

Schedule

Program	BMP	Activity	Date Due
1. Public Involvement	Volunteer Opportunities	1. Identify volunteer opportunities. 2. Develop support materials and provide them to interested volunteers.	Each Year

Responsible Persons

The **Director of Public Works** is responsible for implementation of BMP #1.10.

2. ILLICIT DISCHARGE DETECTION AND ELIMINATION

A. Selected BMP's for Illicit Discharge Detection and Elimination

BMP #2.1 – Storm Sewer Map

The City of Nassau Bay has developed a GIS-based storm sewer system map, showing the location of all outfalls that receive discharges from those outfalls. Locating of outfalls was aided by investigations performed by the Public Works Department. The existing GIS shall be periodically reviewed and updated as necessary to reflect changes due to construction and repairs. This mapping update is performed by the City Engineer on an annual basis. The source of information is from the City Department of Public Works, and the Building Inspection Department, and from As-Built plans of infrastructure improvements.

Measurable Goals

The measurable goal for implementation of BMP #2.1 is to continue to update the City's storm system map when any revisions are made to the storm water system.

Schedule

Program	BMP	Activity	Date Due
2. Illicit Discharge Detection and Elimination	Update Map of Storm Sewer System	1. Review any construction or other changes to the drainage system and update the City's GIS.	Each Year by Dec 20 th

Responsible Persons

The **Director of Public Works** is responsible for implementation of this BMP.

BMP #2.2 – Illicit Discharge Ordinance

The City of Nassau Bay has adopted an ordinance to prohibit non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions.

Measurable Goals

The measurable goal for implementation of this BMP is to continue enforcement of the illicit discharge ordinance during the permit period.

Schedule

Program	BMP	Activity	Date Due
2. Illicit Discharge Detection and Elimination	Ordinance for Illicit Discharge Detection and Elimination	1. Continue enforcement of Ordinance.	Each Year

Responsible Persons

The **Director of Public Works** is responsible for development and implementation of the illicit discharge ordinance. The Fire Marshall, the Director of Public Works, and the Building Official shall investigate illicit discharges and shall take enforcement action as necessary.

BMP #2.3 – Training Program and Inspection to Detect and Address Illicit Discharges

The City will evaluate existing training programs and identify additional program requirements and staff training needs to detect and address non-storm water discharges including illegal dumping in the storm sewer system. The program will be a report or complaint driven program along with periodic inspection of storm sewer outfalls by the Public Works Department. Inspection of storm sewer outfalls will be conducted during periods of extended dry weather. As part of their periodic inspections, the Public Works Department shall inspect storm sewer systems, inlets, manholes, and other controls to identify deficiencies. Those deficiencies shall be addressed in a timely fashion.

Measurable Goals

The measurable goal for implementation of BMP #3 is to evaluate the existing program and identify additional program requirements and training needs in Year 1. Continue with routine outfall inspections.

Schedule

Program	BMP	Activity	Date Due
2. Illicit Discharge Detection and Elimination	Program to Detect and Address Illicit Discharges	1. Evaluate existing program and identify additional program requirements and resource and training needs.	Year 1 by Dec 20 th
		2. Implement inspection of outfalls. Inspect 10 Storm Sewer Outfalls per year	Year 1-5 by Dec 20 th

		3. Train 2 employees each year	Years 1 – 5 by Dec 20 th
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Responsible Persons

The **Director of Public Works** is responsible for development and implementation of the illicit discharge detection program.

BMP #2.4 – Public Education on Illegal Discharges and Improper Disposal

The City of Nassau Bay will continue public education efforts to inform public employees, local school children, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Measurable Goals

The City will acquire public education materials in each year of the permit period and determine an effective means of distribution. The materials will be distributed to City employees in each year of the permit period. The materials will be distributed to businesses and elementary schools each year.

Schedule

Program	BMP	Activity	Date Due
2. Illicit Discharge Detection and Elimination	Public Education on Illegal Discharges and Improper Disposal	1. Acquire public education materials and disseminate 50 brochures/materials each year to schools, businesses, City employees, and residents	Each Year by Dec 20 th

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #2.5 – Storm Drain Labeling

Working with the Clean Water Clear Choice program, The City of Nassau Bay will install tamper resistant labeling or stenciling on each storm drain.

Measurable Goals

Nassau Bay will identify each year any newly installed or replaced storm drain and see to it that the storm drains receive labeling.

Schedule

Program	BMP	Activity	Date Due
2. Illicit Discharge Detection and Elimination	Storm Drain Labeling	<ol style="list-style-type: none">1. Identify list of storm inlets installed during the permit year.2. Label each new inlet.	Each Year

Responsible Persons

The **Director of Public Works** is responsible for implementing stenciling of storm drains by volunteer organizations. The **Director of Public Works** is responsible for implementing labeling of storm drains.

BMP #2.6 – Reporting Hotline

The City has a reporting hotline (i.e., a published phone number) for the public to report construction site problems. This facilitates the ability of the public to provide information that assists in detection of problem discharges. In addition, the City website allows the public to submit reports of site problems. The City has a Work Order program in place to ensure follow – up is performed.

Measurable Goals

The Measurable Goal will be to continue to operate and publicize the hotline.

Schedule

Program	BMP	Activity	Date Due
2. Construction Site Storm Water Controls	Reporting Hotline	1. Continue response program.	Years 1-5

Responsible Persons

The Director of Public Works has responsibility for implementation of this BMP.

3. CONSTRUCTION SITE STORM WATER CONTROLS

A. Selected BMPs for Construction Site Storm Water Controls

BMP #3.1 – Evaluate and Update Regulatory Authority and Procedures

The City of Nassau Bay will evaluate the existing legal authority to enforce the requirements for erosion and sediment controls and proper waste management at construction sites, as well as the sanctions to ensure compliance with the requirements. If necessary, ordinances or other regulatory mechanisms will be updated to provide the formal authority.

Measurable Goals

The measurable goal for implementation of BMP #1 is to evaluate existing legal authority and procedures in Permit Year 1. If necessary, the ordinance or other regulatory mechanism and procedures will be updated and adopted in the second permit year. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
3. Construction Site Storm Water Controls	Ordinance Requiring Erosion and Sediment Controls at Construction Sites	1. Evaluate existing legal authority and procedures.	Year 1 by Dec 20 th
		2. Update ordinance or other regulatory mechanisms and	Years 2-5 by Dec 20 th

		procedures and adopt them.	
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Responsible Persons

The **City Building Official** has responsibility for implementation of this BMP.

BMP #3.3 – Construction Site SWPPP

The City of Nassau Bay will continue to require all Contractors to apply to the TCEQ for a Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit Number TXR 150000 for any construction which will disturb more than 1 acre. As part of this permit, the contractor shall train his staff on storm water controls, as well as post a notice informing the public of the activities applicable to runoff.

Measurable Goals

The measurable goal for implementation of this BMP is to continue to require the acquisition of the above General Permit for the above covered construction. The Building Inspection Department tracks all private construction, and the Public Works Department tracks all public construction. The tracking and documentation of all construction sites is an integral part of each department's function. Numbers of permits and citations will be reflected in yearly reports.

Schedule

Program	BMP	Activity	Date Due
3. Construction Site Storm Water Controls	Construction Site SWPPP	1. Continue to require operators of construction sites one acre and greater (including larger common plan) to select, install, implement, and maintain stormwater control measures	Each Year / Continuous
	Construction Site SWPPP	2. Continue to require construction site operators to implement BMPs to minimize the discharge of pollutants from spills and leaks, wash out wastewater, fuels, oils, soaps, solvents, and dewatering activities	Each Year / Continuous

	Construction Site SWPPP	3. Train one (1) staff member each year on construction site BMP's and SWPPP requirements	Each year by Dec 20 th
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Responsible Persons

The **City Building Official** has responsibility for implementation of Public Education BMP #1.5.

4. POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT/REDEVELOPMENT

A. Selected BMPs for Post Construction Storm Water Management for New Development/Redevelopment

BMP #4.1 – Evaluate and Update Ordinances and Design Criteria

The City will evaluate ordinances controlling development, the Zoning Ordinance and its Storm Drainage Design Criteria. These documents will be updated to address post-construction storm water management for new development and redevelopment for activities of one acre and greater and the larger common plan of development. The City will adopt or re-adopt/update the locally accepted criteria of existing permitted municipalities (i.e. City of Houston) for post-construction storm water quality management practices.

Measurable Goals

The measurable goal for implementation of BMP #4.1 is to evaluate the existing documents and identify needed updates in the second permit year and adopt the revised documents in the third permit year. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
4. Post Construction Storm Water Management for New Development	Evaluate and Update Ordinances and Requirements	1. Evaluate existing requirements and procedures and identify needed changes. Description of a program that will be developed, implemented and enforced, to control stormwater discharges from private and public new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more (and sites that disturb less than one acre that are part of a larger common plan of development or sale)	Year 2 by Dec 20th
		2. Update and adopt changes.	Year 3-5

		3. Implementation complete.	Year 3-5
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Responsible Persons

The **City Building Official** has responsibility for implementation of this BMP.

BMP #4.2 – Evaluate and Update Plan Review and Inspection Programs

The City will integrate post-construction storm water quality requirements into plan review and inspection programs. The City will evaluate existing procedures and identify needed changes and implement the revised programs. The City will develop an inspection and maintenance plan for all permanent structural BMP's within the MS4 boundaries. The City will establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. The City will develop procedures to document and maintain records of enforcement actions and procedures to ensure long-term operation and maintenance of post construction stormwater control measures. The City will document operation and maintenance of post construction stormwater control measures.

Measurable Goals

The measurable goal for implementation of BMP #4.2 is to evaluate existing procedures and identify needed changes in Permit Year 2 and to implement the revised programs in Permit Year 3. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
4. Post Construction Storm Water Management for New Development	Evaluate and Update Plan Review and Inspection Programs. Develop Long Term Inspection Plan for permanent BMP's.	1. Evaluate existing procedures and identify needed changes.	Year 2 by Dec 20th
		2. Implement the revised programs.	Year 3-5
		3. Implementation complete.	Year 3-5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

5. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

A. Current Programs

The City of Nassau Bay has several thousand linear feet of storm sewers in place. The Department of Public Works handles runoff management, street drainage system maintenance and street maintenance. The Department of Public Works also maintains the sanitary sewer system. These operations are housed at the Nassau Bay Public Works Facility, which also houses the maintenance activities for City vehicles and equipment. The Public Works Facility includes several buildings and storage facilities. Most vehicle and equipment maintenance activities take place inside buildings to prevent pollutants from entering storm sewers. Most of the outdoor area is paved in concrete or asphalt that prevents sediment from entering the storm water stream.

Employees are instructed to maintain the grounds, and the outdoor areas are cleaned of trash and debris as necessary. Employees involved in maintenance of the storm sewer system are trained to inspect facilities and to clean, maintain, and repair the parts of the system as necessary. Employees are instructed to pick up and dispose of all debris and waste properly. When replacement of any parts of the system are required, an outside contractor is hired. All Public Works operations, which include storm sewer, street and bridge, water, and wastewater operations, require training of employees which includes the containment of pollutants and prevention of pollutants from entering the environment and the storm sewer system. The Police and Fire Departments are trained in Spill Response and containment. The Building Inspection Department is trained to inspect for controls on housing and commercial construction, and enforces ordinances prohibiting migration of pollutants from construction sites.

The Public Works facility has walled bins for storage of stockpiled materials such as rock and asphalt that prevents these materials from entering the storm water stream. A vehicle and equipment wash facility has a sediment trap and is plumbed to the sanitary sewer. This trap is regularly checked and cleaned to prevent migration of solids.

B. Selected BMPs for Pollution Prevention/Good Housekeeping for Municipal Operations

BMP #5.1 – Street Sweeping

Currently, sweeping of City streets is performed on an as-needed basis. The City will evaluate the frequency of street sweeping for optimum sediment and litter control.

Measurable Goals

The measurable goal for implementation of BMP #5.1 is to continue to monitor the buildup of litter and sediment between sweepings and to continue the current street sweeping program. If a revised schedule is warranted, recommendations will be made for revisions.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Continue street sweeping operations	<ol style="list-style-type: none"> 1. Periodically monitor buildup of litter and sediment on City streets. 2. Continue to perform street sweeping operations 	Each Year

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #5.2 – Provide Spill Response Kits and Training

The City will provide training to applicable employees in spill response procedures and will maintain spill response kits at the Public Works Facility and at the Fire Station.

Measurable Goals

The measurable goal for implementation of BMP #5.2 is to provide spill response kits and training to applicable employees in each Permit Year. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Provide Spill Response Training	1. Provide spill response training to two (2) employees	Year 2 by Dec 20 and Year 4 by Dec 20.

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #5.3 – Hazardous Waste Collection

The City presently coordinates one hazardous waste collection per year. Also, the City picks up used motor oil from City residents on an on-call basis when requested. The City maintains a used oil collection facility at its Public Works facility, in which residents may discard their used motor oil.

Measurable Goals

The measurable goal for implementation of BMP #5.3 is to evaluate the current hazardous waste collection policy and make a recommendation in Permit year 1. The recommendation, if any, will be implemented in Permit Year 2. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Hazardous Waste Collection	1. Evaluate current hazardous waste collection policy and make recommendations for improvements.	Year 2 by Dec 20 th
		2. Implement recommendations.	Year 2-5
		3. Implementation complete.	Year 2-5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of BMP #5.3.

BMP #5.4 – Operation and Maintenance of Storm Sewer System

The City will continue to operate and maintain the storm sewer system to minimize migration of pollutants into the storm sewer system.

Measurable Goals

The measurable goal for implementation of BMP #5.4 is to continue to inspect storm sewer lines, manholes, drains, and gutters, and to repair, clean, or replace any parts of the system found to be deficient. Waste from cleaning of storm sewers is disposed of properly by bringing the waste to the City Wastewater Treatment Plant Facility yard for hauling away by truck to an approved landfill. A portion of the City's drainage infrastructure will be inspected each year to help control the accumulation of floatables and other waste materials.

- 5% (by length) of the City’s linear drainage infrastructure (pipes and channels) will be inspected each year to help control the accumulation of floatables and other waste materials.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Operation and Maintenance of Storm Sewer System	1. Evaluate storm sewer system and correct deficiencies when found.	Each Year
	Operation and Maintenance of Storm Sewer System	Inspection of storm sewers and channels	Each Year by Dec 20 th

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #5.5 – Spill Response

The Police and Fire Departments will continue to respond to spills. The Police are usually the first responders to an event. They will in turn alert the Fire Department to assist in spill identification, prevention of pollutant migration to storm sewers and waterways, and spill cleanup. They will also determine if the Public Works department or an outside agent should be brought in to assist in these efforts.

Measurable Goals

The measurable goal for implementation of BMP #5.5 is for the Police and Fire Departments to continue to respond to spill events. The number of and location of each spill will be documented.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Spill Response	1. Respond to a spill event to clean up the spill and prevent migration of pollutants. Document spills.	Each Year

Responsible Persons

The **Chief of Police, Fire Marshall, and Director of Public Works** have responsibility for implementation of this BMP.

BMP #5.6 Training Municipal Employees

The City of Nassau Bay will continue its program of training employees in its storm water O&M program.

Measurable Goals

- Educate the City Public Works and Maintenance Employees by performing at least one (1) training session per year focused on improving storm water quality management practices by the City.

Schedule

- Update appropriate media in Year 2 and begin training in Year 3; continue annual training in Years 4 and 5.

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Training Municipal Employees	1. Update appropriate media	Year 2 by Dec 20th
	Training Municipal Employees	1. Conduct one (1) group training session each year	Start in Year 3 by Dec 20 th ; Year 4 by Dec 20 th Year 5 by Dec 20th

BMP #5.7 – Storm Water Protection at City Facilities

The City operates several facilities within the boundaries of the City. In order to address the need for storm water protection for all facilities and operations, the Director of Public Works or his designee will conduct a self-audit of City-owned facilities to determine the nature of activities, identify appropriate BMP's, and provide for their implementation. The City will use the information to compile information regarding maintenance activities; maintenance schedules; and long-term inspection procedures for controls used to reduce floatables and other pollutants.

Measurable Goals

- The Director of Public Works will conduct an audit of the City’s facilities.
- The City will develop an inspection checklist developed and maintained by the City.
- Ensure that waste from the City’s facilities is removed and properly disposed of in accordance with 30 TAC 330.
- Ensure that contractors hired by the City are required to comply with the City’s required operation procedures, as they relate to storm water quality management and BMP’s.
- Develop contractor oversight procedures.
- The City will identify pollutants of concern that could potentially be discharged from the City’s Operation & Maintenance activities and will assess its facilities for their potential to discharge pollutants into stormwater.
- The City will identify high priority City facilities that have a high potential to generate stormwater pollutants. These will include all City maintenance yards, hazardous waste facilities, recycling centers, and fuel storage and refilling stations. The City will then develop standard operation procedures for these high priority facilities. The standard operating procedures will address:
 - Good housekeeping
 - Fueling operations and vehicle maintenance
 - Washing of equipment and vehicles
 - Inspection program procedures
- The City will document the results of the self-assessments

All City vehicles are maintained by the Public Works Department at the designated Fleet Maintenance Facility. Used motor oils are collected and recycled by the City. Heavily soiled vehicles will be washed at a commercial car wash.

Schedule

Program	BMP	Activity	Date Due
5. Pollution Prevention/Good Housekeeping for Municipal Operations	Stormwater Protection at City Facilities	1.Audit of the City’s facilities	Complete by Dec 20 th of Year 2
	Stormwater Protection at City Facilities	2. Develop inspection checklist	Complete by Dec 20 th of Year 2
	Stormwater Protection at City Facilities	3.Confirmation of compliance with 30 TAC 330	Complete by Dec 20 th of Year 2
	Stormwater Protection at City Facilities	4.Contractors hired by the City will be required to comply with the City’s operation procedures	Complete by Dec 20 th of Year 3

	Stormwater Protection at City Facilities	5. Contractor oversight procedures will be developed	Complete by Dec 20 th of Year 3
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Responsible Persons

The Directors of each of the City’s Department that possess any fleet vehicles have responsibility for implementation of this BMP.

6. INDUSTRIAL STORMWATER SOURCES

A. Selected BMPs for Industrial Stormwater Sources

The City of Nassau Bay does not contain within its jurisdictional boundaries any landfills, hazardous waste treatment, storage, or disposal, or facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA)

7. IMPAIRED BODIES OF WATER

Based on the 2020 Integrated Water Quality Report:

The City of Nassau Bay discharges directly into the following classified segments with impairments listed:

- 1101_04 (Clear Creek Tidal) (Cow Bayou confluence to confluence with Clear Lake)
 - Category 5a for dioxin in edible tissue
 - Category 5a for PCB's on edible tissue
- 1101C_01 (Cow Bayou) (From the Clear Creek Tidal confluence to SH 3 in Galveston County)
[Note: This segment is fully in Harris County]
 - Category 4a for bacteria (Recreation Use) – TMDL established at 720 bil. MPN/day (July 2016)
- 2425 (Clear Lake)
 - Category 5c for copper in water
 - Category 5a for dioxin in edible tissue
 - Category 5a for PCB's on edible tissue

For Segment 1101C_01 (Cow Bayou) with approved TMDLs for bacteria impairments, the City's Stormwater Management Program (SWMP) must include the following elements:

(1) Targeted Controls

The City's SWMP must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused effort or implementing additional Best Management Practices (BMPs) to reduce the pollutant(s) of concern in the impaired waters.

(2) Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term.

(3) Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant(s) of concern. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the maximum extent practicable. The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework.

(4) Annual Report

The annual report must include an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

A. Selected BMPs for Bacteria Pollution to Impaired Waters

BMP #7.1 – Sanitary Sewer Systems

The City currently has a TCEQ-approved SSO Action Plan in place to reduce the occurrence of Sanitary Sewer Overflows (SSO's). The requirements of the SSO Action Plan and this SWMP are in agreement. As part of both programs, the City shall: Perform repairs and improvements necessary to reduce sanitary sewer overflows; Address lift station inadequacies; Improve reporting of overflows; And strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.

Measurable Goals

The measurable goal for implementation of BMP #7.1 is to continue its current program of reducing sanitary sewer overflows in accordance with its TCEQ-approved SSO Action Plan.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Sanitary Sewer System	Perform repairs & maintenance needed to reduce sanitary sewer overflows	Each Year
7. Impaired Bodies of Water	Sanitary Sewer System	Address Lift Station Inadequacies as Found	Each Year
7. Impaired Bodies of Water	Sanitary Sewer System	Improve Reporting of Overflows by Continuing Operator Training Programs	Each Year
7. Impaired Bodies of Water	Sanitary Sewer System	Continue Grease Trap Inspections	Each Year

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #7.2 – On-Site Sewerage Facilities

As part of this SWMP, the City shall: Identify and address failing treatment systems; And address inadequate maintenance of On-Site Sewerage Facilities where found. These activities are currently performed by the City as required by its TCEQ-issued TPDES discharge permit.

Measurable Goals

The measurable goal for implementation of BMP #7.2 is to document any issues found with failing treatment systems and to identify and address any inadequate maintenance issues found.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	On-Site Sewerage Systems	Identify failing treatment systems	Continuous
7. Impaired Bodies of Water	On-Site Sewerage Systems	Address inadequate maintenance of treatment facility	Continuous

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #7.3 – Additional Controls on Illicit Discharge and Dumping

The purpose of this BMP is to target illicit discharge and dumping of materials that specifically impact bacteria levels in the receiving waters.

Measurable Goals

The measurable goal for implementation of BMP #7.3 is to continue enforcement of the City's ordinances relating to Grease Traps, Septic Tanks, Marine Vessel Wastewater Disposal, and any other item that illegally adds bacteria to the receiving stormwater system.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Illicit Discharge and Dumping	Continue to inspect Grease Traps	Each Year
7. Impaired Bodies of Water	Illicit Discharge and Dumping	Continue to monitor septic tanks	Each Year
7. Impaired Bodies of Water	Illicit Discharge and Dumping	Continue to enforce against illicit marine wastewater dumping	Each Year

Responsible Persons

The Director of Public Works has responsibility for implementation of this BMP.

BMP #7.4 – Animal Sources

As part of this BMP, the City shall evaluate existing management programs and update as required to identify and target animal sources such as zoos, pounds, pet waste, and horse stables.

Measurable Goals

The measurable goal for implementation of BMP #7.4 is to evaluate its current program in Year 1, and then to update and expand the program in Year 2. In Years 3 – 5 the program should be fully implemented.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Animal Sources	Evaluate current program	Year 1
7. Impaired Bodies of Water	Animal Sources	Update and expand current program	Year 2
7. Impaired Bodies of Water	Animal Sources	Program Implementation	Years 3 - 5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #7.5 – Residential Education

The purpose of this BMP is to augment the City’s current education programs to focus specifically on:

1. Bacteria discharging from a residential site either during runoff events or directly;
2. Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;
3. Decorative ponds; and
4. Pet waste.

Measurable Goals

The measurable goal for implementation of BMP #7.5 is to obtain a number of public information brochures as described above and distribute to each household or a portion of the City’s households per year, such that within the permit period each household receives education materials from the City.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Residential Education	Research and obtain appropriate brochures	Year 2
7. Impaired Bodies of Water	Residential Education	Distribute brochures to residences	Year 2-4
7. Impaired Bodies of Water	Residential Education	Confirm that brochures have been distributed to each household in City, perform additional distribution if required to achieve goal.	Year 5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #7.6 – Monitoring of Progress

As part of this SWMP, the City shall monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

The City may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality as follows:

Option 1: Evaluating Program Implementation Measures (Preferred)

The City may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals. The City may assess progress by using program implementation indicators such as:

- (1) number of sources identified or eliminated;
- (2) decrease in number of illegal dumping;
- (3) increase in illegal dumping reporting;
- (4) number of educational opportunities conducted;
- (5) reductions in sanitary sewer flows (SSOs); or,
- (6) increase in illegal discharge detection through dry screening, etc.;

- Or -

Option 2: Assessing Improvements in Water Quality

The City may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional instream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, and/or other local efforts as appropriate.

Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant of concern (bacteria). Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharges. The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of instream water quality standards. The benchmark must be determined based on one of the following options:

Preferred:

a. If the MS4 is subject to a TMDL that identifies a Waste Load Allocation(s) for permitted City stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part II.D.4(a)(6).

b. There is an established Waste Load Allocation for segment 1101C_01 Cow Bayou. The established TMDL for this this segment is 720 billion MPN/day.

b. Alternatively, if multiple small cities are discharging into the same impaired water body with an approved TMDL, with an aggregate Waste Load Allocation for all permitted cities, then the cities may combine or share efforts to determine an alternative sub-benchmark for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark would cumulatively support the aggregate Waste Load Allocation. Where an aggregate benchmark has been broken into sub-benchmarks for individual cities, each city is only responsible for progress in meeting its sub-benchmark.

Measurable Goals

The measurable goal for implementation of BMP #7.6 is to first determine program benchmarks and to determine program implementation indicators. In Years 2-5 , include these reporting parameters with the Annual Report.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Monitoring of Progress	Select program benchmark	Year 1
7. Impaired Bodies of Water	Monitoring of Progress	Prepare annual report, with program implementation indicators and progress toward benchmark goals.	Years 2-5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

BMP #7.7 – Discharging a Pollutant of Concern

The City of Nassau Bay discharges into classified segments 1101 (Clear Creek Tidal), and 2425 (Clear Lake) which are listed on the 2012 Texas Integrated Report Index of Water Quality Impairments for dioxin in edible tissue and PCBs in edible tissue.

Within the first year following the permit effective date, the City shall determine whether it may be a source of dioxin or PCB pollution by referring to the CWA §303(d) list and then determining if discharges from the City would be likely to contain the pollutants of concern at levels of concern.

If the City determines that it may discharge the pollutant(s) of concern to an impaired water body, the City shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the City will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.

In addition, no later than three years following the permit effective date, the City shall submit an NOC to amend the SWMP to include any additional BMPs to address the pollutant(s) of concern.

Measurable Goals

The measurable goal for implementation of BMP #7.7 is to first determine whether the City is a source of the pollutants (dioxin and PCB's). In Years 2-5, if the City is a source, then additional targeted BMP's shall be selected and implemented to reduce discharges of the pollutants.

Schedule

Program	BMP	Activity	Date Due
7. Impaired Bodies of Water	Discharge of a Pollutant of Concern	Determine if City is a source of dioxin or PCP pollution	Year 1
7. Impaired Bodies of Water	Discharge of a Pollutant of Concern	IF the City is a source, select and implement additional targeted BMP's	Years 2-5

Responsible Persons

The **Director of Public Works** has responsibility for implementation of this BMP.

8.0 ENDANGERED AND THREATENED SPECIES

There are no listed threatened species that have the potential to be impacted by stormwater discharges in the City of Nassau Bay. The City of Nassau Bay does not believe that the discharges from the MS4 will have an adverse impact on the habitats of threatened or endangered species.