

## **DEPARTMENT OF THE NAVY**

## NAVAL CONSTRUCTION BATTALION CENTER 4902 MARVIN SHIELDS BLVD GULFPORT MS 39501-5001

5090 N4 9 Jan 2019

Ms. Monti Hardaway Glenn Mississippi Department of Environmental Quality Office of Pollution Control P.O. Box 2261 Jackson, MS 39225-2261

Dear Ms. Glenn:

SUBJECT: NAVAL CONSTRUCTION BATTALION CENTER, HARRISON COUNTY,

MISSISSIPPI, SMALL MS4 GENERAL PERMIT RECOVERAGE NO.

MSRMS4036

In response to your subject letter of 1 November 2018, the base's Re-Coverage Form and Storm Water Management Program (SWMP) has been updated to reflect changes in contact and general information. Base on your comments regarding minimum control measures and best management practices (BMPs), our SWMP has been updated to incorporate your comments.

NCBC Gulfport point of contact is Ms. Lisa Noble. She may be reached at (228) 871-2026, DSN 868-2016 or lisa.noble@navy.mil.

W. R. Pitcairn IV By direction

Enclosures: 1. Re-coverage Form, Small Municipal Separate Storm Sewage System (MS4) General Permit, for NCBC Gulfport, dated 3 Jan 2019

2. Revised SWMP for Naval Construction Battalion Center (NCBC) Gulfport, Mississippi



# RE-COVERAGE FORM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) GENERAL PERMIT

GENERAL PERMIT: MSRMS4 0 3 6. This coverage number must be completed for the referenced MS4 or this form will be considered incomplete and will be returned. The coverage number can be found at the bottom left corner of your previous Certificate of Coverage.

#### INSTRUCTIONS

The submittal of this form is required to receive coverage under the reissued Small Municipal Separate Storm System (MS4) General Permit. This form, with an original signature, must be completed and returned to MDEQ at the address printed at the bottom of this form within 60 days of the date of the Letter of Instruction for Re-Coverage.

Submittals with this Re-Coverage Form must include:

- A Storm Water Management Program (SWMP) as required by ACT 5 of the General Permit
- Copies of current municipal storm water ordinances, or if not a city or county, copies of current regulatory mechanisms that address storm water management
- A location map must be attached, if location boundaries have changed since initial coverage issuance
- Copy of current Storm Water Pollution Prevention Plan (SWPPP) or Plans

Additional submittals may include:

Appendix A and associated Joint MS4 legal documents, if applicable

NOTE: 3-RING BINDERS WILL NOT BE ACCEPTED DUE TO LIMITED FILING SPACE AT MDEQ.

#### MS4 APPLICANT INFORMATION

THE PARTY OF THE P	
MS4 NAME: US Navy, Naval Construction Battalio	on Center
MS4 MAILING ADDRESS: 4902 Marvin Shields Blvd	
MS4 CITY: Gulfport	STATE: Mississippi ZIP: 39501
MS4 COUNTY: Harrison	
MS4 IS A: CITY/TOWN COUNTY	✓ <sub>OTHER:</sub> Military Installation
IS THIS A JOINT RE-COVERAGE FORM BEING SUBMITTED? (If yes, a completed Appendix A must accompany submittal)  MS4 POPULATION: 3500	□ YES □ NO
MS4 POPULATION:	
PRIMARY LOCAL CONTACT NAME (responsible for storm water p	orogram implementation): Lisa Noble
CONTACT'S TITLE: Environmental Director	OFFICE PHONE: (228) 871-2026
CELL PHONE: (228) 348-1058	FAX NUMBER: (228) 871-3116
E-MAIL ADDRESS (local contact): lisa.noble@navy.mil	
E-MAIL ADDRESS (legally responsible person): william.l.whitn	nire2@navy.mil
SECONDARY LOCAL CONTACT NAME (knowledgeable about prog	Kenten Lettinger
OFFICE PHONE: (228) 871-2373	CELL PHONE: () None
THE CONTRACT OF THE PARTY OF TH	

LOCAT	TION DESCRIPTION OF M	S4 (not required for cities and counties)	
		L LOCATION OF THE MS4 FOR FACILITI COMPLEXES (education, hospital, prison, etc.)	
Naval Construction Battalion Co	enter (NCBC) Gulfport er	ncompasses approx.1100 acres and	a population of 3500
located approx. 2 miles north of	Gulfport of Mexico in Ha	arrison County mostly within the City	limits of Gulfport, MS
	RECEIVING WA	TER INFORMATION	
IDENTIFY THE MAJOR RECEIVING THOSE THAT ARE 303(d) LISTED IMI waters may be found on MDEQ's web sit	PAIRED WATERBODIES WIT	und Map) WITHIN THE MS4 BOUNDARIES THIN THE PERMITTED AREA (a complete li	S. IN ADDITION, NOTE ist of 303(d) listed impaired
RECEIVING STREAM	CHECK IF 303(d) LISTED	RECEIVING STREAM	CHECK IF 303(d) LISTED
Long Beach Canal (Canal No.1)			
Turkey Creek	- <u>                                    </u>		- <b>H</b>
Brickyard Bayou			- <u> </u>
	<u> </u>		
			_
<u> </u>			
with a system designed to assure that inquiry of the person or persons wh information submitted is, to the best	t qualified personnel proper o manage the system, or th of my knowledge and belief,	ents were prepared under my direction or ly gathered and evaluated the information ose persons directly responsible for gathe true, accurate and complete. I am aware y of fine and imprisonment for knowing vi	i submitted. Based on my ering the information, the e that there are significant
11/1/10		SJAN 19	
Authorized Signature		Date	
W.L.WHITMIRE, CAPT,	пем		
Printed Name	ODN	Commanding Officer Title	
		•	
<ul> <li>For a corporation, by a responsib</li> <li>For a partnership, by a general p</li> <li>For a sole proprietorship, by the</li> </ul>	le corporate officer. artner. proprietor.	o: SIGNATORY REQUIREMENTS as follows	
Please submit this form to:	Chief, Environmenta MDEQ, Office of Pol P.O. Box 2261		

Jackson, Mississippi 39225

Revision: 3/03/2016



# **NAVFAC Southeast**

Public Works Department Environmental Division 2401 Upper Nixon Ave. Gulfport, MS 39501

# Storm Water Management Program (SWMP)

# Naval Construction Battalion Center Gulfport, Mississippi

Effective from 18 Mar 2016 to 28 Feb 2021

# **Executive Summary**

This Stormwater Management Program (SWMP) is required in accordance with the Mississippi Department of Environmental Quality (MDEQ) Small Municipal Separate Storm Sewer Systems (MS4) General Permit No. MSRMS4 issued 18 Mar 2016 in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

This SWMP documents the activities to meet the permit requirements. The SWMP describes actions to protect and minimize the pollution of stormwater discharging from the installation storm sewer system to state or federal waters. The permit requires six Minimum Control Measures (MCMs) to be implemented. The permit specifies the actions and documentation required to meet compliance with each MCM. These actions are listed as best management practices (BMPs). Each BMP clarifies the activity performed, identifies who is responsible for the action, briefly describes the process, indicates the schedule in relationship to the permit term and clarifies documentation kept on file.

# **Table of Contents**

Execut	tive Su	mmary	ii
Table	of Con	tents	iii
Acron			
1.0	Gener	al Information	1
	1.1	Background	1
	1.2	Area Included in the Program	
	1.3	Receiving Water Bodies	
	1.4	Targeted Controls and Measurable Goals to TMDL	4
	1.5	Recordkeeping	4
	1.6	SWMP Management: Updates and Annual Report	
	1.7	Best Management Practices Schedules	
2.0	Public	Education and Outreach	
	2.1	Public Education and Outreach	14
	2.2	Best Management Practices	
3.0	Public	c Involvement	18
	3.1	Best Management Practices	
4.0	Illicit	Discharge Detection and Elimination	
	4.1	Allowable Non-Stormwater Discharges	21
	4.2	Requirements for All Permittees	
	4.3.	Best Management Practices	21
5.0	Const	truction Site Stormwater Runoff Control	
	5.1	Requirements for All Permittees.	27
	5.2	Best Management Practices	
6.0	Post (	Construction Stormwater Management	
	6.1	Requirements for All Permittees	
	6.2	Best Management Practices	
7.0	Pollu	tion Prevention and Good Housekeeping	
	7.1	Requirements for All Permittees	
	7.2	Best Management Practices	

# List of Tables

Table 1-1: Water Quality Impaired Water Bodies	3
Table 1.2: Annual Report Schedule	5
Table 1.3: BMP Summary and Schedule	6
Table 2-1: BMP PE-1 Stormwater Pollution Prevention Brochure	15
Table 2-2: BMP PE-2 Base Newspaper Articles and Stickers	16
Table 2-3: BMP PE-3 Define Allowable Non-stormwater Discharges	17
Table 3-1: BMP PI-1 Storm Inlet Stenciling/Placarding	19
Table 3-2: BMP PI-2 Annual Base Clean-up	20
Table 4-1: BMP ID-1 MS4 Mapping	22
Table 4-2: BMP ID-2 Illicit Discharge Detection and Elimination Program	23
Table 4-3: BMP ID-3 Illicit Discharge Tracing and Removal	24
Table 4-4: BMP ID-4 Stormwater Outfall Inspections	25
Table 4-5: BMP ID-5 Include Household Hazardous Waste Education Material	26
Table 5-1: BMP CS-1 Erosion and Sediment Control Program	28
Table 5-2: BMP CS-2 Prohibited Discharge Identification	
Table 5-3: BMP CS-3 Construction Plan Reviews	30
Table 5-4: BMP CS-4 Construction Site Inspections	31
Table 6-1: BMP PC-1 Low Impact Development	34
Table 6-2: BMP PC-2 Long Term Monitoring and Inspection of BMPs Control Features	
Table 7-1: BMP GH-1 Staff Training	38
Table 7-2: BMP GH-2 Contractor Pollution Prevention Education	39
Table 7-3: BMP GH-3 Review and Update Standing Operational Procedures addressing	
Stormwater Quality	40
List of Figures	
Figure 1-1: Vicinity Map2	
Figure 1-2: NCBC Gulfport Base Map: Stormwater Outfalls and Inlets	
Figure 1-3: NCBC Gulfport Westside: Stormwater Outfalls and Inlets	11
Figure 1-4: NCBC Gulfport Center: Stormwater Outfalls and Inlets	12
Figure 1.5. MCRC Gulfnort Factside: Stormwater Outfolk and Inlet	12

# Acronyms

BMPs Best Management Practices

BOSC Base Operations and Services Contractor

CS Construction Site
DOD Department of Defense

ECATTS Environmental Compliance Assessment, Training, and Tracking System

EISA Energy Independence and Security Act of 2007

EPR Environmental Programs Requirement

FEAD Facilities Engineering and Acquisition Division

GH Good Housekeeping

GIS Geographic Information System

GRC GeoReadiness Center
ID Illicit Discharge

IDDE Illicit Discharge Detection Elimination

MCM Minimum Control Measure

MDEQ Mississippi Department of Environmental Quality

MS4 Municipal Separate Storm Sewer System

MSGP Multi Sector General Permit
MWR Moral Welfare and Recreation

NCBCGPT Naval Construction Battalion Center Gulfport

NAVFAC Naval Facilities Engineering Command

NFADS Naval Facilities Asset Data Store

NLT No Later Than
NOC Notice of Change
NOI Notice of Intent

NPDES National Pollution Discharge Elimination System

PAO Public Affairs Office
PE Public Education
PI Public Awareness

POC Pollutant of Concern

PWD EV Public Works Department, Environmental Division

SWMP Stormwater Management Program
SWPPP Stormwater Pollution Prevention Plan

TMDL Total Maximum Daily Load

# 1.0 General Information

# 1.1 Background

Ref: Permit, Cover (Title) page and page 1

Mississippi Department of Environmental Quality (MDEQ) under the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act requires military bases to apply and obtain stormwater system discharge coverage under the state's Small Municipal Separate Storm Sewer (MS4) Storm Water General Permit.

Naval Construction Battalion Center Gulfport (NCBCGPT) was previously issued a certificate of permit coverage under MDEQ MS4 Storm Water General National Pollution Discharge Elimination System (NPDES) Permit, Coverage No. MSRMS4036 on 6 November 2009 and which expired on 30 December 2013. Per previous notification given to MDEQ of the base's intent to be covered by the subsequently issued MS4, the base continued operating under the existing permit until MDEQ issued a new MS4 General Permit on 18 March 2016. Per MDEQ "Letter of Instruction for Re-coverage" to NCBCGPT, dated 31 March 2016, the base is required to apply for re-coverage and submit a revised Storm Water Management Program (SWMP) to MDEQ within 60 days from date of the letter.

NCBCGPT occupies 1100 acres. The base is located partly within the city limits of Gulfport and Long Beach, Mississippi. The largest part, as shown in Figure 1-1, is located within the City of Gulfport. Both cities have implemented a stormwater Phase II Program and are neighboring MS4s. The City of Gulfport has a land area of 41,088 acres (64.2 square miles). Stormwater drainage off the base is approximately 70% to north, 5% to east and 25% to the south into the neighboring City of Gulfport MS4. Stormwater from neighboring Long Beach MS4 flowing through Long Beach Canal (Canal No. 1) enters base through a west perimeter inlet and exits through North outfall #3. NCBCGPT is solely responsible for the implementation of its SWMP. NCBCGPT has not established MS4 partnering with the local city MS4s.



Figure 1-1: Vicinity Map

In 2013, an extensive Sanitary Sewer Evaluation Study costing approximately \$640,000 was conducted through all areas of the base. This study consisted of evaluation of all manholes by manual inspection and inspection of all gravity trunk lines via closed circuit television (CCTV). Based on the results from this study, recommendations were made to improve the integrity of the sanitary sewer collection system on base.

Improvement recommendation were applied in 2014, when the NCBCGPT sanitary sewer conveyance system composed of 75,000 linear feet of gravity main lines, 392 manholes and 18 lift stations were significantly upgraded and lined to reduce ground water infiltration and eliminate cross-connections between the sewage and storm sewer system. Repairs cost \$2.3 million and was completed in September 2014.

NCBCGPT has made a determination that it does not contribute pollutants of concerns, in particularly pathogens and pH. Approximately seventy percent of the base area drains through six northern outfalls covering all of the light industrial and approximately two thirds of residential and administrative areas of the base. Long Beach Canal (Canal No. 1) which passes through the base from neighboring MS4 is the major recipient of stormwater from this area. The canal drains through north outfall #3 into neighboring MS4 and approximately two miles north of the base into the impaired waterbody of Turkey Creek. Turkey Creek is listed on the 303(d) list of impaired water bodies for pathogens and pH. Approximately twenty-five percent of primarily residential and administrative area flows through five southern outfalls flowing into the neighboring MS4 drainage system and ultimately into the Gulf of Mexico. Approximately five percent flows east through four outfalls into neighboring MS4 system and subsequently into Brickyard Bayou.

NCBCGPT does not have a point source discharge for treated domestic wastewater as it does not perform any wastewater treatment. All domestic sewage and wastewater is discharged into the City of Gulfport wastewater collection system and subsequently into the county utility authority's Public Owned Treatment Works (POTW). The Navy has recently invested significant funding into ensuring the integrity of its wastewater collection system.

# 1.2 Area Included in the Program

This plan covers the entire installation located within the fence line. NCBC Gulfport light industrial activities (i.e. warehouses, public works maintenance shops, construction equipment maintenance and repair facilities, and military construction and equipment training facilities) are mostly located in the center portion of base north of Seventh Street and ending at Colby Ave to the west. Military and family housing areas are located in the eastern portion south of the Pass Road main gate, far northwestern portion near Seabee Lake and Park, and the southwestern portion along First St. and Colby Ave. Military Barracks and temporary quarters, recreational, and administrative buildings are located south of Seventh Street. NCBCGPT is excluded from NPDES storm water permitting under the Baseline Storm Water General Permit for Industrial Activities and received acknowledge from MDEQ of receipt of "No Exposure Certification" on 17 July 2015. Recertification of "No Exposure Certification" is required every 5 years or by 16 July 2020. NCBCGPT discharges its sanitary sewer into the City of Gulfport's sanitary sewer system.

# 1.3 Receiving Water Bodies

Ref: Permit, ACT2 (4), Page 2 and ACT4 A (5), Page 7

NCBCGPT stormwater flows into neighboring MS4s then subsequently into three separate receiving water bodies: To the north into Canal One which flows into the Turkey Creek Basin and ultimately into Turkey Creek; to the east into the neighboring MS4 to Brickyard bayou, and ultimately into Bernard Bayou; and to the south into neighbor MS4 and ultimately into Gulf of Mexico.

1	Γable 1-1: \	Water Quality Impai	red Water Bo	dies
Water Body	Category	Impaired Use	Pollution of Concern	TMDL
Turkey Creek (Segments 202211 and 202214)	4A*	Fish and Wildlife*	Biological*	pH** Fecal Coliform***

## Asterisks:

- \*Mississippi 2014 Section 303(d) List of Impaired Water Bodies, Assessment Categories 1 through 5. Page 7, "A stream with a TMDL, but still impaired, is assessed in category 4A.", dated 24 July 2014
- \*\* TMDL for Low pH in Turkey, Coastal Streams Basin, Harrison County, MS, Final TMDL dated 15 December 2000
- \*\*\*Fecal Coliform TMDL for Turkey Creek, Coastal Streams Basin, Harrison County, MS, Revised Report January 2015

# 1.4 Targeted Controls and Measurable Goals Due to TMDL

Ref: Permit, ACT2 (4), Page 2 and ACT4 A (5), Page 7

All residential and employment areas of the installation are included in the Public Education and Outreach minimal control measure. Throughout the developed area of the installation the most significant potential for bacteria contamination to the stormwater system and thus the impaired waters is a breakdown of the sanitary sewage system. There are 18 lift stations on the installation. All of the lift stations include visual alarms (lights) and three major ones have audible high level alarms triggering immediate response. Control and management of an illicit discharge is included under the Illicit Discharge, Detection and Elimination minimal control measure.

# 1.5 Recordkeeping

Ref: Permit, ACT7, Records Retention, Page 29

All records are kept in the Public Works Department, Environmental Division (PWD EV) office and preserved for at least three years from the date of the MS4 Re-coverage, inspection, or annual report. This SWMP, including a copy of the permit and supporting documentation, are kept in the PWD EV office located at 2401 Upper Nixon Ave., Room 103, on NCBCGPT. Records required by the permit, including the SWMP will be made available to the public by request, 228-871-2026.

# 1.6 SWMP Management: Updates and Annual Report

Ref: Permit ACT6 (3), pages 24-26, and ACT7 (Annual Reports), page 27-29

The PWD EV Stormwater Manager is responsible for the implementation and update to the SWMP. The Stormwater Manager coordinates, as applicable, with other NCBCGPT offices to reach all installation personnel.

The Stormwater Manager is responsible for reviewing and updating the SWMP and permit required written implementation procedures. MDEQ will be notified of all changes to SWMP and changes documented in the annual report, in accordance with the permit.

The Stormwater Manager is responsible for completing the annual report. The annual report addresses the previous reporting year. As noted on the Re-coverage Form, NCBCGPT is using the calendar year as the reporting year. Annual reports are submitted to MDEQ by 28 January for the preceding calendar year.

Year	Reporting Period	Due NLT
Year 1	18 Mar 2016 – 31 December 2016	28 Jan 2017
Year 2	1 January - 31 December 2017	28 Jan 2018
Year 3	1 January - 31 December 2018	28 Jan 2019
Year 4	1 January - 31 December 2019	28 Jan 2020
Year 5	1 January - 13 December 2020	28 Jan 2021
Year 6	1 January – 28 February 2021	28 Jan 2022

# 1.7 Best Management Practices (BMPs) Schedule

Ref: Permit, ACT5 (SWMP Development and Content), pages 9 - 23

The following table summarizes the schedule for BMP implementation per minimum control measure over the length of the permit.

Table 1-3: BMP Summary and Schedule

	Public Educat	tion and Outreach	each				
	2016-Year 1	2017-Year 2	2018-Year 3	2019-Year 4	2020-Year 5	2021-Year 6	Frequency
PE-1: Stormwater Pollution Prevention Brochure	Develop and Distribute	Update and Distribute	Update and Distribute	Update and Distribute	Update and Distribute	Update and Distribute	Ongoing
PE-2: Base Newspaper Annual Stormwater Article; Quarterly Illicit Discharge Reporting Sticker	Amually; Quarterly	Annually; Quarterly	Annually; Quarterly	Annually; Quarterly	Annually; Quarterly	Annually; Quarterly	Once/Year; Quarterly
PE-3: Define Allowable Non- Stormwater Discharges	Annually	Annually	Annually	Annually	Annually	Annually	Once/Year
	Public Involvement	ment			**************************************		
PI-1: Storm Inlet Stenciling/Placarding	Document & Inventory	Inspect 20%, stencil or re-stencil as needed	Inspect 20%, stencil or re-stencil as needed	Inspect 20%, stencil or restencil as needed	Inspect 20%, stencil or re-stencil as needed	Inspect 20%, stencil or restencil as needed	Once/Year
PI-2: Annual Base Clean-Up	Annually	Annually	Annually	Annually	Annually	Annually	Once/Year

	Illicit Discha	rge Detection a	Illicit Discharge Detection and Elimination (IDDE)	(IDDE)			
	2016-Year 1	2017.Year 2	2018-Year 3	2019-Year 4	2020-Year 5   2021-Year 6	2021-Year 6	Frequency
ID-1: MS4 Mapping	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
ID-2: Illicit Discharge Detection	Develop IDDE	Implement IDDE Program;	Inspect 20% of storm	Inspect 20% of storm	Inspect 20% of storm	Inspect 20% of	Annually
Elimination (IDDE) Program	Program	of storm outlets	outlets	oùtlets	outlets	Storing Cuticus	
ID-3: Illicit	2000	e e e e e e e e e e e e e e e e e e e	Oscilaç	Nation of	Ostonian	Owing	Owening
and Removal	Ougoing	Ougung	Sungano	Cingoing	Ongoing	Ougoing.	Ougoing
ID-4: Stormwater Outfall Inspections	Annual	Annual	Amnual	Annual	Annual	Annual	Annually
ID-5: Include							
Household	Oncoring	Ongoing	Oncoina	Ondoing	Openian	Operation	Opposit
Hazardous Waste	Ougomg	SunSun	Sunstano	Cirgonig	Simogino	Sunstrio	Smogno
Education Material							

	Construction Sit	ite Stormwater	e Stormwater Runoff Control	in the control of the			
	2016-Year 1	2017-Year 2	2018-Year 3	2019-Year 4	2020-Year 5	2021-Year 6	Frequency
CS-1 Erosion and Sediment Control Program	Update Program	Ongoing; Update as needed	Ongoing; Update as needed	Ongoing, Update as needed	Ongoing; Update as needed	Ongoing; Update as needed	Ongoing, Update as needed
CS-2: Prohibited Discharge Identification	Update & Distribute; as needed	Update & Distribute; as needed	Update & Distribute; as needed	Update & Distribute; as needed	Update & Distribute; as needed	Update & Distribute; as needed	Ongoing, as needed
CS-3: Construction Plan Review Procedures	Establish Procedure & Review SWP3	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
CS-4: Construction Site Inspections	Update Construction Site Inspection Report Form & Conduct annual Inspection	Conduct Annual Inspections	Conduct Annual Inspections	Conduct Annual Inspections	Conduct Annual Inspections	Conduct Annual Inspections	Annually

	Post Construc	ction Stormwate	Post Construction Stormwater Management in New Development and Redevelopment	n New Develor	oment and Rec	levelopment	
	2016-Year 1	2017-Year 2	2018-Year 3 2019-Year 4 2020-Year 5 2021-Year 6 Frequency	2019-Year 4	2020-Year 5	2021-Year 6	Frequency
BMP PC-1 Energy							
Independence	Implement	2000	Oscarios	Oncoing	Onionia	Ongoing	Oncorna
Security Act (EISA)	<b>EISA Policy</b>	Smogno	Surgano	Cugomg	Gugomg	Curgoing	Sungaro
Compliance							
BMP PC-2 Long	Establish	Establish	Monitor &	Monitor & Monitor & Monitor &	Monitor &	Monitor &	
Term Monitoring and	Long Term	Program &	Inspect 20% of   Inspect 20%	Inspect 20%	Inspect 20%	Inspect 20%	
Inspection of	Monitoring	Monitor &	installed	of installed	of installed	ofinstalled	Ongoing
Installed Structural	&Inspection	Inspect 20%	Stormwater	Stormwater	Stormwater	Stormwater	
	Program	of installed	BMPs	BMPs	BMPs	BMPs	

	Post Construction Stormwater Management in New Development and Redevelopment	
Stormwater BMPs	Stormwater	
Control Features	BMPs	

				4			
	Pollution Prevention and Good Housekeeping for Municipal Operations	ition and Good	Housekeepm	ig for Municip	al Operations		
	2016-Year 1	2017-Year 2	2018-Year 3	2019-Year 4	2020-Year 5 2021-Year 6	2021-Year 6	Frequency
GH-1: Staff Training	Communicate documentation for MS4 training & implement required MS4	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
GH-2: Contractor Pollution Prevention Education	Re-emphasize Environmental Compliance Assessment Training and Tracking System (ECATTS)	ECATTS Ongoing	ECATTS	ECATTS Ongoing	ECATTS	ECATTS	ECATTS
GH-3: Review and Update SOPs addressing Stormwater Quality	Review and Update existing SOP & Distribute	Ongoing, as needed	Ongoing, as needed	Ongoing, as needed	Ongoing, as needed	Ongoing, as: needed	Ongoing, as needed

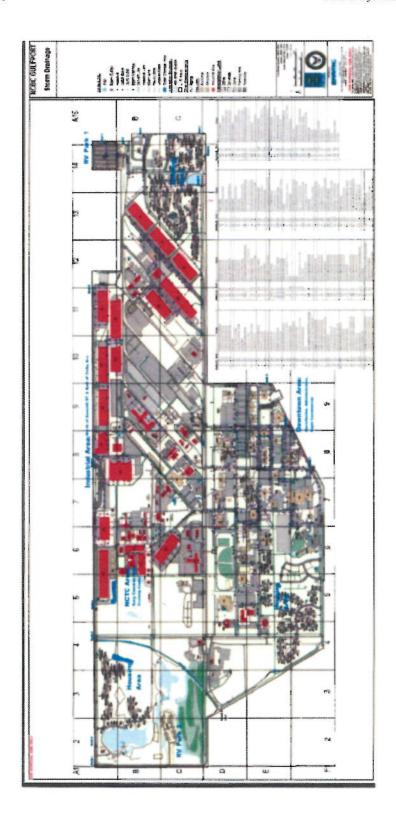


Figure 1-2: NCBC Gulfport Base Map: Stormwater Outfalls and Inlets

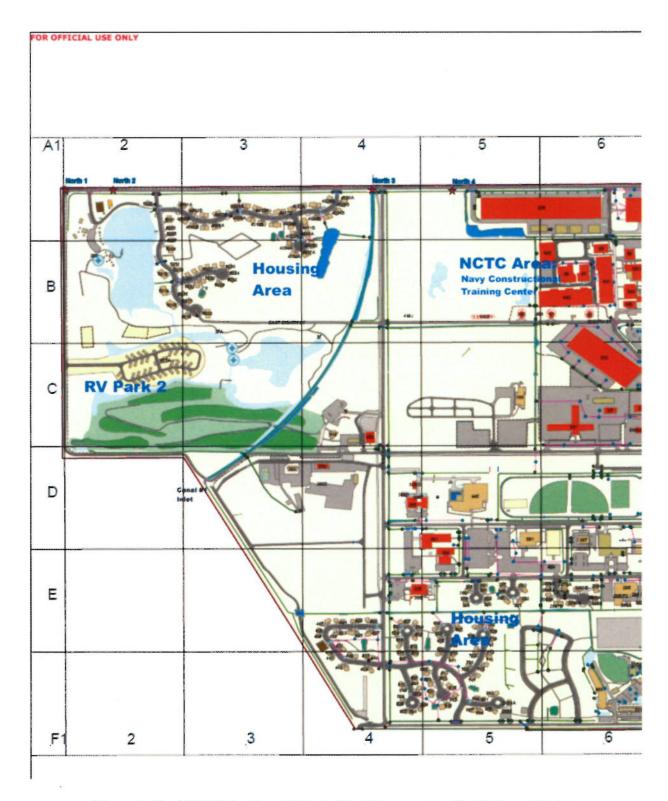


Figure 1-3: NCBC Gulfport West side: Stormwater Outfalls and Inlet

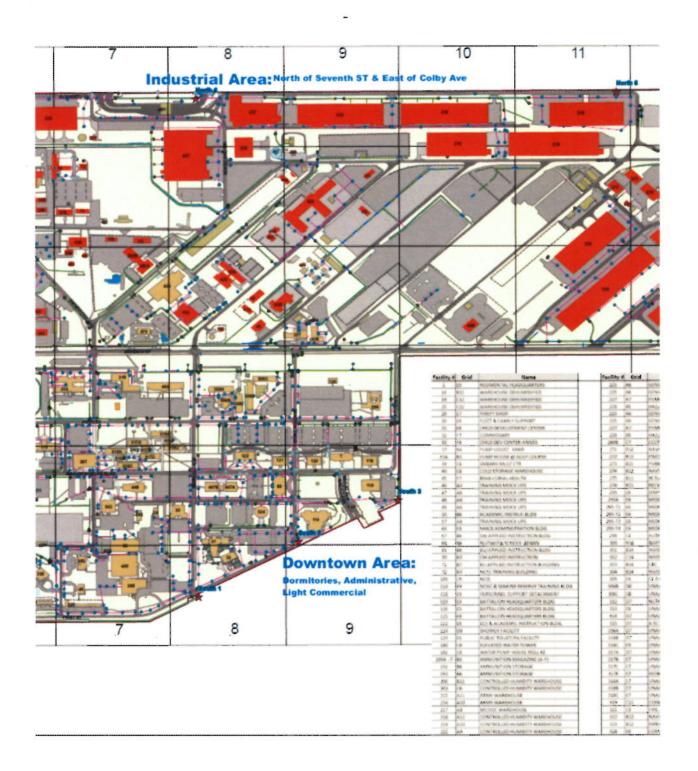


Figure 1-4: NCBC Gulfport Center: Stormwater Outfalls and Inlet

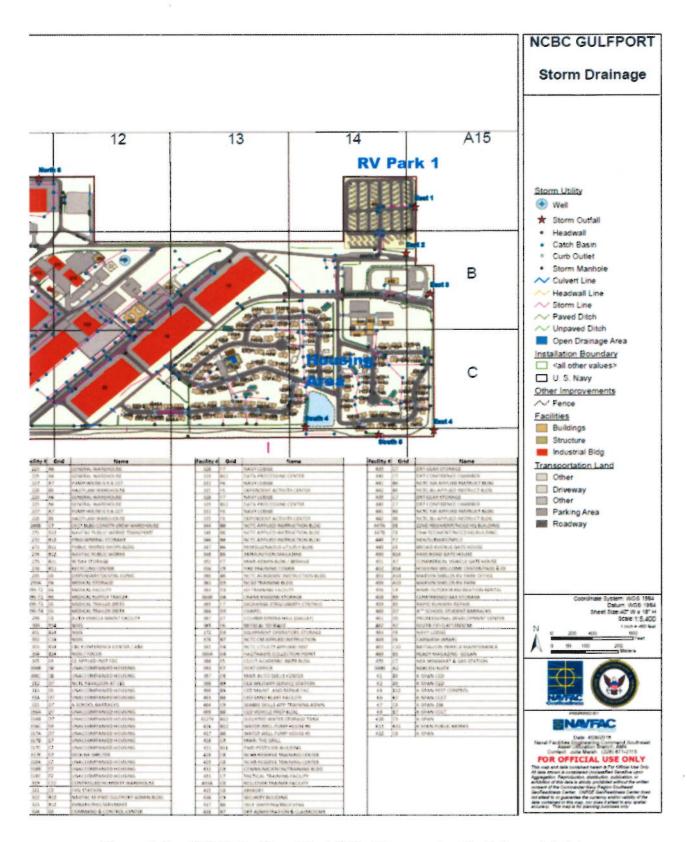


Figure 1-5: NCBC Gulfport East Side: Stormwater Outfalls and Inlet

# 2.0 Public Education, and Outreach

Ref: Permit, ACT5 (1), pages 11-12

This program has two Minimum Control Measures (MCMs): Public Education and Outreach (PE), and Public Involvement (PI). The BMPs for these control measures focus on developing, implementing and maintaining a comprehensive storm water education and outreach program for installation employees, residents and onsite contractors. Education covers the hazards and impact of illegal and harmful disposal of waste and debris that enters or has the potential to enter the stormwater conveyance system.

# 2.1 Public Education and Outreach (PE)

Ref: Permit, ACT5 (2), Pages 12-13

In accordance with the permit, the program must, at a minimum, address the following issues:

Goals and Objectives: Educate personnel living and working at the installation on the impact of non-stormwater and contaminated stormwater discharges to receiving waters as well as clarify options and opportunities to reduce stormwater pollution.

*Target Audience*: The target audiences are military, civilian and contractor employees that work at NCBCGPT on a daily bases, residents in the station housing and billeting, and transient students and visitors.

Method to educate the audience: Articles and self-training materials will be utilized to distribute stormwater protection education and awareness information. These actions are described in the BMPs for Public Education. Contractor training and staff training are covered under the MCM Pollution Prevention and Good Housekeeping.

The BMPs for Public Education and Outreach include stormwater awareness education for the various installation audiences.

# 2.2 Best Management Practices (BMPs)

- PE-1: Stormwater Pollution Prevention Brochure
- PE-2: Base Newspaper Articles and Stickers
- PE-3: Define Allowable Non-Stormwater Discharges

The BMPs for this MCM are tabulated on the following pages:

# Table 2-1: BMP PE-1 Stormwater Pollution Prevention Brochure(s)

#### BMP Rational and Goal

Develop, maintain and distribute various stormwater pollution prevention brochures that addresses what is stormwater pollution, identify common sources of pollution, impacts from improper disposal of waste or chemicals, construction ground disturbances activities, describe BMPs and ways individuals can prevent pollution, reporting of observed illicit discharges, and contact information for stormwater pollution issues.

The brochure(s) will be distributed to installation personnel through the departments (including Housing Office) and tenant commands represented on the base's Environmental Quality Board (EQB) and Subcommittee via handouts, emails, public events, postings on the base's Environmental Support webpage.

## Responsibility

The Stormwater Manager is responsible for creating the brochure, its publication and coordinating distribution.

## Targeted Pollutions:

Soil erosion & sediment control, illicit non-stormwater discharges, and household hazardous waste disposal

#### Process

Year 1: Stormwater Manager shall create brochure(s) that addresses pertinent stormwater pollution prevention issues and activities applicable to the installation, and provide reference sources and base contacts.

Year 2-5: Annually, the brochure(s) shall be reviewed and updated by the Stormwater Manager, as needed.

## Schedule

Year 1 – Develop, publish, and distribute the brochure(s).

Year 2-5 – Update brochure(s) and distribute as appropriate annually.

## Reporting, Record Keeping, and Measurable Goals

Include copy of brochure(s) in annual SWMP Binder, post brochure(s) on the base's environmental support webpage, and report number of brochures distributed annually.

# Table 2-2: BMP PE-2 Base Newspaper Articles and Stickers

## BMP Rational and Goal:

To outreach and educate base personnel, NCBCGPT will once or twice a year publish a stormwater pollution prevention article and quarterly an illicit non-stormwater discharge reporting sticker in either of the base's media outlets having an approximate monthly circulation of 500 to 1000 and an overall potential on-base circulation including department and tenant command personnel and housing residents of approximate 3500.

## Targeted Pollutions:

Stormwater pollutants from base operations (i.e. vehicle maintenance & repair facilities, construction activities, food service establishments, training areas, and facilities maintenance shops), illicit non-stormwater discharges, and household hazardous waste disposal

## Responsibility

The Stormwater Manager is responsible for submitting article(s) and sticker(s) for publication.

#### Process

Stormwater Manager prepares article(s) and Illicit Discharge Reporting Stickers and submits to Public Affairs Officer for publication. The article informs and educates base residents and personnel on storm water pollution prevention, requirement of MS4 permit, best management practices, construction storm water permitting requirement, authorized non-stormwater discharges, illicit discharges, and ways to minimize stormwater pollution and provides contact information.

#### Schedule

Year 1 - 5 Annually, publish one or two stormwater articles in base media outlets.

Year 1 - 5 Quarterly, publish an Illicit Discharge Reporting sticker in base media outlets.

## Reporting, Record Keeping and Measureable Goal

Include a copy of published media in the annual SWMP Binder including the distribution amount for each type.

# Table 2-3: BMP PE-3 Define Allowable Non-stormwater Discharges

## BMP Rationale and Goal:

To inform and educate base and contractor personnel on what non-stormwater discharges (i.e. water line & fire hydrant flushing, AC condensate and coil wash water with no additives, external building wash downs which do not use detergent, etc.) are authorized on base as cited in paragraph (5) of ACT2 under MDEQ's MS4 general permit and in Conditions T-5 and T-2 of ACT2 under MDEQ Small and Large Construction General Permits, respectively.

To inform and educate base personnel by publishing through base media outlets as to who to contact to report observed suspected illicit discharges on base. A non-stormwater discharge not authorized by the above cited permits is an illicit discharge.

## Responsibility:

The Stormwater Manager is responsible for putting together a list of allowable non-stormwater discharges on the base authorized under MDEQ's MS4 general permit and under MDEQ small/large construction general permits, for distributing the list to appropriate base departments and tenant commands personnel, and for posting of it on the base's environmental support webpage.

#### Process

The Stormwater Manager shall review and update listing of authorized non-stormwater discharges cited in above general permits annually, and distribute updated list to appropriate base personnel, and for posting on the base's environmental support webpage. SM shall review and update, as needed, illicit discharge reporting stickers for quarterly publishing in the base's newspaper, newsletter and/or plan of the week (POTW).

## Schedule

Year 1 - Post and distribute list of authorized non-stormwater discharges permitted by MS4 permit to base personnel.

Years 2-5 - Review, update as needed and distribute, "Illicit Discharge Reporting" poster and to 25 members of the base's environmental quality board subcommittee for distribution within their respective area of responsibility (AOR) on the base.

## Reporting, Record Keeping and Measurable Goals

Include in the annual SWMP binder, copy of email listing of non-stormwater discharges authorized, a copy of posting on the base's environmental support webpage, and a copy of quarterly publication of illicit discharge reporting sticker circulated on a base media outlet.

# 3.0 Public Involvement (PI)

Ref: Permit, ACT5 (3), pages 12-13

The permit requires the involvement of the public in the SWMP planning and implementation activities. Due to the operations and security at NCBCGPT, the target audience of this MS4 is not directly involved in the development of the program. In line with other compliance actions for the military base, all personnel authorized to be on the military base consent to comply with base requirements which includes this SWMP.

The BMPs for Public Involvement include the annual base clean up and debris removal.

# 3.1 Best Management Practices (BMPs)

- PI-1: Storm Inlet Stenciling/Placarding
- PI-2: Annual Base Clean-Up

The BMPs for this MCM are tabulated on the following pages:

# Table 3-1: BMP PI-1 Storm Inlet Stenciling/Placarding

## BMP Rational and Goal:

The targeted audience for this BMP was determined to be the base family housing residents. A survey of the base's stormwater conveyance system was conducted to locate potential storm inlets in the three housing areas located at the southeast, northwest and southwest corners of the base totaling 479 family housing units. Generally, the stenciling/placarding is limited to curbs, linear (trenched) and surface inlets which feed directly into the conveyance system. There are 125 existing stenciled/placarded stormwater inlets on base. Whenever a new housing storm inlets is constructed it will be stenciled and placarded and added to inventory for periodic inspection and re-stenciling/placarding as needed. Family Housing residents are notified of stenciling and placarding at street storm drains and reminded – DON'T POLLUTE – FLOWS TO WATERWAYS

## Responsibility

Stormwater Manager is responsible for inventorying base housing stormwater inlets, coordinating stenciling/placarding of inlets and performing annual inspection of 25 % of storm inlets inventory for needed re-stenciling or placarding.

## **Process**

The Stormwater Manager is responsible for:

- Identifying, inventorying and labelling stormwater inlets and outfalls.
- Determining which type of marking is best suited for each area and coordinate
  the accomplished of the marking. In some areas it may be more appropriate to
  spray point "stormwater only" or "drains to bay or gulf" adjacent to the inlet.
- Annually inspect for newly constructed inlets and inspect 125 family housing storm inlets for needed repair due to missing and/or fading of stenciling or placarding.
- Including location of family housing areas storm inlets on base stormwater map

## Schedule

Year 1 - Document the Storm Inlet Stenciling/Placarding Program - develop inventory of base Housing Area storm inlets

Year 2-5 - Annually, inspect all 125 existing inventoried housing storm inlets for restenciling or re-placarding, as needed.

## Reporting, Record Keeping and Measurable Goal

Include copy of the Storm Inlet Stenciling/Placarding Inventory in the SWMP showing the number of inlets stenciled/re-stenciled and/or placard/re-placarded in calendar year. Measurable Goal is for all 125 housing area storm inlets to be inventoried, stenciled/placarded, and annually inspected for needed re-stenciling/re-placarding.

# Table 3-2: BMP PI-2 Annual Base Clean-Up

## BMP Rational and Goal:

In coordination with the base's EQB and EQB subcommittee composed of departments and tenant commands on the base, it is important for the commands to monitor their area of responsibility (AOR) and to periodically collect ground litter and debris around their facilities. Each command will be responsible for their AOR as highlighted on the base's Clean-up Responsibility Map. The purpose of this BMP is to keep trash and debris from entering the stormwater conveyance system. The goal is to conduct an annual cleanup activity on the base once per year.

## Responsibility

Stormwater Manager coordinates base cleanup event activities with EQB departments and tenant commands and distributes AOR map and information.

## **Process**

Date of base cleanup is determined based on weather and other installation events.

## Schedule

Once a year for the term of the permit.

# Reporting, Record Keeping, and Measureable goal.

Keep copy of base media outlet notices and articles of the base clean-up activities in the annual SWMP binder. Measurable Goal is to hold a base-wide cleanup event once per year.

# 4.0 Illicit Discharge Detection and Elimination (IDDE)

Ref: Permit, ACT5 (3), pages 13-15

The objectives of the illicit discharge detection and elimination program are to:

- 1. Establish and carry out procedures to identify and remove illicit discharges,
- 2. Provide public education and encourage involvement in eliminating illicit discharges.
- 3. Maintain mapping that identifies the stormwater conveyance system and thus the potential pathway of pollutants to discharge to local waterways.

The installation sanitary sewage collection system discharges into the City of Gulfport system and pumped to a Harrison County Utility Authority's POTW. There are no septic systems within the installation footprint.

# 4.1 Allowable Non-Stormwater Discharges

Ref: Permit, ACT2 (5), pages 3-4

The permit includes a list of allowable non-stormwater discharges that are exempt from the IDDE program, unless they are a significant source of contamination to the stormwater conveyance system.

# 4.2 Requirements for All Permittees

Re: Permit, ACT5 (1) and (2), pages 11-13

Public Reporting of Illicit Discharges and Spills: This effort is covered under the Public Education and Outreach MCM. Part of the pollution prevention education includes clarifying what is an illicit discharge and who to call for reporting an incident.

Education and Training for field staff: The field staff who may come in contact with an illicit discharge or illicit connection as part of their normal job responsibilities include various station departments and tenant commands on the. Overall pollution prevention and spill response training is emphasized. The training BMP is covered under the *Pollution Prevention and Good Housekeeping* MCM.

# 4.3 Best Management Practices (BMPs)

- ID-1 MS4 Mapping
- ID-2 Illicit Discharge Detection Elimination (IDDE) Program
- ID-3 Illicit Discharge Tracing and Removal
- ID-4 Stormwater Outfall Inspections
- ID-5 Include Household Hazardous Waste Education Material

The BMPs for this MCM are tabulated on the following pages:

# Table 4-1: BMP ID-1 MS4 Mapping

## BMP Rational and Goal

The purpose for this BMP is to insure that the base's MS4 map is updated upon completion of new construction projects and that base personnel responsible for maintaining the stormwater conveyance system and those responsible for complying with the base's MDEQ MS4 General Permit and SWMP have the most current and accurate map of the system. The goal is for yearly updating of stormwater layer in the installation geodatabase.

# Responsibility

The Stormwater Manager is responsible for requesting and coordinating updates to the stormwater mapping from the Geo-readiness Center (GRC) representative.

# Targeted Audience

Base Industrial Areas where potential pollutants may enter stormwater conveyance system. Public Works Department personnel responsible for maintaining, managing and monitoring the stormwater conveyance system; and specifically the Stormwater Program Manager overseeing the base's compliance with the MDEQ MS4 General Permit and SWMP.

## Process

NCBCGPT has a stormwater layer within the installation Geographic Information System (GIS). The stormwater layer includes all key elements of the MS4 i.e. inlets, outlets, manholes, open ditches, culverts, holding ponds, flow direction, drainage basin lines and outfalls. The geodatabase is updated as necessary.

The Stormwater Manager notifies the GIS technician when it is necessary to update the stormwater conveyance system mapping. The Stormwater Manager coordinates field work with the data collector as necessary. Updates may be required due to new construction, change in operations, or reconfiguration of traffic structures and or to resolve unknown system issues.

## Schedule

Years 1-5 update stormwater layer in the installation geodatabase whenever changes occur to the stormwater conveyance system.

## Reporting, Record Keeping and Measureable Goal

Keep copy of annual changes to the base's MS4 Map and of latest updated map in the annual SWMP Binder. Measurable Goal: Base's MS4 map updated yearly.

# Table 4-2: BMP ID-2 Illicit Discharge Detection Elimination (IDDE) Program

## BMP Rationale and Goal

Rationale is to eliminate illicit discharges from high risk industrial type areas on base, versus from much lower risk administrative offices and military housing areas, having storm outlets to stormwater conveyance system. A dry-weather inspection and inventory of 91 various type industrial facilities with an estimated 182 storm outlets was conducted to identify whether or not any illicit discharges were entering the system. No illicit discharges were detected. The goal is to prevent illicit discharges from occurring and eliminate all that are discovered through the process. Should at any time a suspected illicit discharge or connection be identified, the issue will be managed under the Illicit Discharge Tracing and Removal BMP.

## Responsibility

The Stormwater Manager is responsible for developing and implementing an IDDE Program including initial inventorying and inspection schedule of all industrial facilities stormwater outlets.

# Targeted Audience

Department and Tenant Commands personnel performing operations with industrial type equipment, POL storage containers containing hazardous materials and substances that if spilled and/or accidentally released could potential result in a release into the base's stormwater conveyance system.

#### Process

The IDDE Program shall cover all industrial facilities stormwater outlets within the installation and insure that outlets are inspected during dry weather periods at least twice during the life of the permit.

## Schedule

Year 1 - Develop an IDDE Program including outlet inventory and conduct initial inspection of all industrial facilities stormwater outlets.

Year 2 - Implement the IDDE Program; including inspection of 20% of storm outlets annually.

Year 3-5 - Ongoing Implementation of IDDE Program including inspection of 20% of outlets each year.

## Reporting and Record Keeping

Include a copy of IDDE Program, industrial storm outlets inventory and a copy of the yearly outlet inspection report in the annual SWMP binder.

# Table 4-3: BMP ID-3 Illicit Discharge Tracing and Removal

## BMP Rationale and Goal

Table 4-2 IDDE Program identifies industrial facilities on base where dry weather inspections are to be conducted. During these inspections, if an illicit discharge is suspected or found, the form and process and procedure set forth in this BMP ID-3 is to be used to document illicit discharge (i.e. date, time, known or suspected cause, immediate action taken stop discharge upon discovery, photos of discharge, and follow-up corrective action taken to fix and prevent reoccurrence) event.

# Responsibility

Stormwater Manager is responsible for coordinating identification and resolution of illicit discharges.

## Target Audience

Leadership at respectively department and tenant command level have responsibility for knowing proper procedures to follow in stopping the illicit discharge and cleaning up released substance.

## Process

Establish and implement procedures for the identification of the source of non-stormwater discharges in the stormwater conveyance system. Establish and implement procedures for removal and elimination of unpermitted non-storm water discharges. Document measures taken to remove the discharge and prevent recurrences.

## Schedule

Year 1: Document the program to identify, remove and manage the source of an illicit discharge or connection. The program will include procedures for removing the illicit discharge, identifying how the incident occurred, clarifying reporting requirements and implementing procedure to eliminate recurrence.

Year 2: Develop forms to document each event and actions accomplished so that an organized record of the event is maintained.

Years 3-5 – Document the program and IDDEs Actions of the BMP, ongoing for the life of the permit.

# Reporting, Record Keeping, and Measurable Goal

Maintain in the yearly SWMP binder, a copy of the NCBC Gulfport "Illicit Discharge Reporting Form" and of any completed form(s) documenting a suspected illicit discharge and corrective action(s) taken to eliminate it.

# Table 4-4: BMP ID-4 Stormwater Outfall Inspections

## BMP Rationale and Goal

NCBCGPT stormwater outfalls flows into the neighboring MS4 (City of Gulfport). The Stormwater Manager conducts and documents semi-annual inspections of the 13 outfalls discharging into the neighboring MS4 and 2 Inlets flowing on to the base. The base is conducting these inspection as a BMP to insure unrestricted flow of stormwater off the base. The base has not observed nor have any record of the City of Gulfport performing identical inspections at these outfalls. Typical problems found at outfalls is debris accumulating at outfall grating restricting flow off base. When blockage is discovery at an outfall(s), notice is submitted to the base multi-service contractor to removed debris as soon as possible and tracked until work completed. These inspection differ from IDDE inspections in that it monitors for flow restriction and water parameters such as water color clarity, odor, floating or suspended solids, structural damage to outfall, and vegetation debris on grating; whereas dry weather inspections inspect for flow at storm outlet when there shouldn't be any.

# Responsibility

The Stormwater Manager is responsible for conducting the semi-annual inspection of outfalls.

#### Process

Conduct visual inspection of outfalls for signs of non-stormwater and illicit discharges and for blockage and of debris build up at outfall grates.

## Schedule

Years 1-5 - Annually inspect outfalls for term of the permit.

## Reporting and Record Keeping

Include copy of inspection reports and of corrective actions taken on any deficiencies noted in the SWMP.

## Table 4-5: BMP ID-5 Include Household Hazardous Waste Education Material

## BMP Rationale and Goal

This BMP is one of the seven components listed under IDDE in ACT5 of the MS4 General Permit which refers to informing the general public of hazards associated with illegal discharges and improper disposal of waste. The purpose of this BMP is to inform base housing residents, as well as military and civilian personnel living off base in Harrison County, about the proper disposal of household hazardous waste. All residents living in Harrison County including those on base are encouraged to take their household hazardous waste to the county's collection site at 10076 Lorraine Road in Gulfport the second Saturday of every month. Goal is to provide base residents information on where, when, what, and how to dispose of their household hazard waste. The measurable goal is to bi-monthly publish a notice in the base media outlets.

# Responsibility

The Stormwater Manager is responsible for informing and providing educational material to base residents in disposing of household hazardous waste through posting on base's Environmental Support Webpage, e-mails and/or base newspaper.

## Targeted Audience

The base's military family housing residences.

## **Process**

Educate and encourage base household residents on proper disposal of their residential household hazardous waste through notices via base media outlets.

#### Schedule

Beginning in 2016, ongoing

## Reporting, Record Keeping, and Measureable Goal

Retain copies of published notices in the annual SWMP binder, six per year.

# 5.0 Construction Site Stormwater Runoff Control

Ref: Permit, ACT5 (4), pages 16-18

The objectives of the Construction Site Stormwater Runoff Control program are:

- 1. Establish an erosion and sediment control program for construction sites;
- 2. Provide review and approval for construction SWPPPs;
- 3. Document the existing inspection and oversight program for stormwater at construction sites.

# 5.1 Requirements for All Permittees

Ref: Permit, ACT5 (4), pages 16-18

The permit identifies seven requirements that must be addressed for the Construction Site Stormwater Runoff Control MCM.

Requirement (1), regarding management and update of the content of the SWMP, is addressed within Section 1.6 (SWMP Management: Updates and Annual Report) of this SWMP.

Requirements (2,4,5), concerning erosion and sediment control at construction sites, construction plan review procedures, and construction site inspections are addressed in BMPs for this section.

Requirement (3) identifies prohibited discharges. These issues are addressed via several NCBCGPT Environmental Plans (i.e. Pollution Prevention (P2), Spill Control and Countermeasures Plan (SPCC), Hazardous Waste Management Plan (HWMP), Integrated Solid Waste Management Plan, and Integrated Pest Management Plan) and in NCBCGPT Environmental Requirements specifications included in all construction and maintenance contracts as well as by BMPs for this MCM.

Requirement (6) regarding public involvement is part of the informational brochure produced under MCM *Public Education and Outreach*.

Requirement (7) for MS4 staff training is addressed under the MCM *Pollution Prevention and Good Housekeeping*.

# 5.2 Best Management Practices (BMPs)

- BMP CS-1: Erosion and Sediment Control Program
- BMP CS-2: Prohibited Discharge Identification
- BMP CS-3: Construction Plan Review Procedures
- BMP CS-4: Construction Site Inspections
- The BMPs for this MCM are tabulated on the following pages:

# Table 5-1: BMP CS-1 Erosion and Sediment Control Program (E&SCP)

#### BMP Rationale and Goal

The purpose of this program is to insure ground disturbing activities occurring on the base comply with MDEQ small and large construction general permits, United States Army Corps of Engineer (USACOE) permitting requirements when applicable, as well as MDEQ's MS4 general permit requirements. The goal is to provide information and incorporate contract specification to have construction contractors and Naval Mobile Construction Battalions (NMCBs) compliant while performing ground disturbing activities on base.

## Responsibility

The Stormwater Manager is responsible for developing E&SCP, and when regulatory changes occur, updating the program.

## Targeted Audience

PWD-FEAD construction managers and engineering technicians, construction contractors and NMCBs personnel overseeing and/or performing grounding disturbing activities on the base.

#### Process

The written policy will be developed to complement and summarize existing inspections and construction site specification. The policy will clarify where existing standards are already documented (e.g. contract specs) and how they are enforced. The policy will clarify how Erosion and Sediment Control oversight is implemented. The E&SCP is applicable to all construction sites at NCBCGPT.

## Schedule

Year 1 – Develop E&SCP policy.

Year 2-5 – update E&SCP as needed

# Reporting, Record Keeping and Measureable Goal

Retain a copy of the current and any updated E&SCP in the annual SWMP binder.

# Table 5-2: BMP CS-2 Prohibited Discharge Identification

#### BMP Rational and Goal

The purpose of this BMP is to create a single document listing authorized, allowed and prohibited non-stormwater discharges on NCBC Gulfport under MDEQ MS) general permit, MDEQ Small/Large Construction General Permits, and distribute form to targeted audience. Sediment is pollutant of concern. Goal is to incorporate into all base construction contracts the authorized, allowed and prohibited non-stormwater discharges on base.

# Responsibility

The Stormwater Manager is responsible for developing a single document and for updating it when regulatory changes occur.

# Targeted Audience

PWD-FEAD construction managers and engineering technicians, construction contractors and NMCBs personnel overseeing construction with grounding disturbing activities on the base, and to the base environmental quality board's subcommittee members.

#### Process

NCBCGPT will develop base environmental specifications for all base construction projects incorporating prohibited discharge requirements addressing ground disturbing activities on base.

#### Schedule

Year 1 - Develop environmental requirements specification addressing construction and ground disturbance activities on the base.

Year 2-5 – Update environmental requirements specification when regulatory changes occur or deemed as needed.

# Reporting, Record Keeping and Measurable Goal

Retain a copy of the base's Environmental Requirements specifications incorporating prohibited discharge requirements into base contracts in the SWMP Binder. Measurable Goal is to develop and annually review the environmental requirements for 100% of base construction contracts awarded having stormwater compliance requirements.

### Table 5-3: BMP CS-3 Construction Plan Reviews

#### BMP Rationale

Construction projects are on-going on NCBCGPT year round. Project Plans and Specification are reviewed during various stages of planning, design, contracting, and construction for stormwater and other environmental compliance requirements

# Responsibility

The Stormwater Manager is responsible for reviewing project plans and specifications, contractor submittals such as USACOE permit applications when required, storm water pollution prevention plans (SWPPP) and notices of intent(NOI) required by small/large construction general permits in conjunction with the PWD, Facilities Engineering and Acquisition Division (FEAD), construction managers (CM), when requested. The FEAD-CM is responsible for contract administration and for insuring contract requirements including stormwater regulatory and USACOE permitting requirements are implemented and complied with.

#### **Process**

Document procedure for reviewing small and large construction projects requiring ground disturbing activities 1 acre or greater for compliance with ACT5 Construction Site Stormwater Runoff Control of MS4 general permit:

 Review and verification stormwater pollution prevention plans SWPPPs are developed in accordance with the MDEQ Small or Large Construction General Permit MSR15 and MSR10, respectively.

#### Schedule

Year 1 - Document procedure and review SWPPPs.

Year 2-5 - Review SWPPPs.

## Reporting, Record Keeping, and Measureable Goal

Retain in the annual SWMP binder a copy of the SWPPP, NOI, Request for Termination, and permit close-out on each active small and large construction project.

# Table 5-4: BMP CS-4 Construction Site Inspections

#### BMP Rationale and Goal

This BMP for Stormwater Manager to conducts periodic BMP inspections at small and large construction permitted sites on base. The PWD-FEAD- construction managers and engineering technicians perform periodic inspections. Base contractors inspect and maintain installed BMPs at project sites. The contractor performs weekly BMP inspections per their small/large construction general permit.

# Responsibility

The Stormwater Manager will conduct periodic visual inspections of small and large construction site BMPs and report observed deficiencies to FEAD construction manager for corrective action.

# Targeted Audience (TA)

TA are construction site storm water manager.

#### Process

All base small and large construction sites above 1 acre must follow MDEQ permitting requirements. Each site must perform weekly site inspections. The primary responsibility for all onsite stormwater general permit compliance at a construction site belongs to the contractor. Periodically, Stormwater Manager will conduct a construction site storm water inspection and report findings to the FEAD for corrective action.

Documentation of each inspection will include inspection date, inspector, site conditions, follow up actions, and evaluation of compliance with existing site permit.

#### Schedule

Year 1 – Update Construction Site Stormwater Inspection Report Form and conduct visual periodic stormwater BMP inspections at small/large permitted construction sites.

Year 2-5 - Conduct visual periodic visual stormwater BMP inspections at small/large permitted construction sites

# Reporting, Record Keeping and Measureable Goal

Retain inspection reports in annual SWMP Binder of periodic semi-annual BMP inspections at active small and large construction permitted sites on base. Measureable goal is one periodic stormwater BMP inspection reports completed per active project per year.

# 6.0 Post Construction Stormwater Management

Ref: Permit, ACT5 (5), Pages 18-21

NCBCGPT follows requirements for federal facilities established by Section 438 of the Energy Independence and Security Act of 2007 (EISA) and the January 2010 Department of Defense (DOD) policy for implementing Section 438 of EISA.

The EPA website (<a href="http://water.epa.gov/polwaste/nps/section438.cfm">http://water.epa.gov/polwaste/nps/section438.cfm</a>) summarizes the reasoning and goal of EISA as follows:

"Stormwater runoff in urban areas is one of the leading sources of water pollution in the United States. Traditional urban areas typically include large areas of impervious surfaces such as roads, sidewalks and buildings. These impervious surfaces prevent rainwater from infiltrating into the ground, and as a result, stormwater runs off these urban areas at higher rates and volumes. These higher stormwater rates and volumes can cause increased flooding and erosion, and more pollution to surface waters, among other impacts.

Under Section 438 of EISA, federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. Federal agencies can comply using a variety of stormwater management practices often referred to as "green infrastructure" or "low impact development" practices, including reducing impervious surfaces and using vegetative practices, porous pavements, cisterns and green roofs."

The DOD Policy on implementing Section 438 of EISA further clarifies the criteria and how to comply with the federal requirement. The DOD policy is applicable to facility construction with a footprint great than 5,000 gross square feet.

# 6.1 Requirements for All Permittees

Ref: Permit, ACT5 (5), pages 18-21

The permit identifies three requirements that must be addressed for the Post Construction Stormwater Management in New Development and Redevelopment MCM.

Requirement (1), regarding management and update of the content of the SWMP, is addressed within Section 1.0 of this SWMP.

Requirement (2) requires documentation and records of enforcement actions. For issues addressed from internal oversight, e.g. at construction sites on the installation, this issue is covered under the MCM *Construction Site Stormwater Runoff Control*. For outside agency actions e.g. EPA or MDEO records are maintained at the PWD EV office.

Requirement (3) regarding Long-Term Maintenance of Post Construction Stormwater Control Measures is addressed via a BMP.

# 6.2 Best Management Practices (BMPs)

- BMP PC-1 Low Impact Development (LID)
- BMP PC-2 Long Term Monitoring and Inspection of BMPs Control Features

The BMPs for this MCM are tabulated on the following page:

# Table 6-1: BMP PC-1 Low Impact Development (LID)

### BMP Rationale and Goal

The purpose of the BMP is to demonstrate base commitment to LID compliance per MDEQ MS4 general permit and in accordance with Section 438 (Storm Water Runoff Requirements for Federal Development Projects) of the Energy Independence and Security Act (EISA) as stated in the January 2010 DOD policy for implementing Section 438 of EISA. Goal is to incorporate LID techniques into all Military Construction (MILCON) projects over 5000 square feet (SF). 5000 SF is the trigger for incorporating LID techniques into a MILCON project.

## Responsibility

The FEAD and Naval Facilities Engineering Command Southeast (NAVFACSE) Capital Improvement (CI) are responsible for incorporating Section 438 stormwater requirements into Federal facility projects over 5,000 square feet.

#### Process

The FEAD and NAVFACSE CI are required to ensure that LID requirements are addressed in applicable DOD military construction projects.

#### Schedule

Ongoing for the term of the permit.

# Reporting, Record Keeping, and Measureable Goal

Retain in annual SWMP Binder, a copy of the January 2010 policy regards to Section 438 of EISA implementing LID initiatives. Measureable Goal: Maintain list of projects incorporating Section 438 of EISA LID requirements.

# Table 6-2: BMP PC-2 Long Term Monitoring and Inspection of BMPs Control Features

#### BMP Rationale and Goal

The purpose of the BMP is to establish a long term monitoring program to insure installed BMP control structures on base are inspected and maintained after installation. Goal is to maintain an inventory and a map of installed structural control structures on base and to establish schedule for periodic inspections of these structures over the 5-year period of the MDEQ MS4 general permit and initiate Deficiency Report (TF-1) on structures requiring repair and/or corrective action when needed.

# Responsibility

The Stormwater Manager is responsible for inventorying, and establishing a long term monitoring (LTM) schedule for inspection of installed structural control features on base. Stormwater Manager submits Deficiency Report (TF-1) to PWD Facilities Management Division to initiating repairs to structures to insure they are maintained for their intended purpose as part of the base's stormwater conveyance system.

#### Process

Stormwater Manager monitors and inspects condition of installed long term structural stormwater BMPs (i.e. gabion crates, rip-rap structures, retention ponds, swales, erosion control structures, headwalls, inlet and outfall structures, catch basins, etc.) and prepares a report identifying location and description of observed BMP deficiencies requiring maintenance, repair and/or upgrading.

Annually the Storm Water Manager initiates a TF-1 (Deficiency Document) requesting maintenance and repair of the deficient feature(s) and submits to the PWD, FMD for appropriate action. FMD, based on funding priorities, will develop project(s) for accomplishing repairs either in-house or by contract.

# Schedule

Year 1 – Establish a LTM schedule for inspection of installed structural BMPs control features on base.

Year 2-5 – Conduct inspection of installed structural control features on base per LTM schedule.

# Reporting, Record Keeping and Measureable Goal

Goal is to maintain in yearly SWMP Binder, a map of installed structural control features and a copy of the LTM inspection schedule. Also, retain a copy of all TF-1 (Deficiency Document) initiated and submitted to FMD for repair of installed structural control features as well as status on TF-1 until repairs completed.

# 7.0 Pollution Prevention and Good Housekeeping

Ref: Permit, ACT5 (6), pages 22-23 and ACT9, page 31

# 7.1 Requirements for All Permittees

The permit identifies six requirements that must be addressed for the Pollution Prevention and Good Housekeeping for Municipal Operations minimum control measure (MCM).

Requirement (1) is for a *Permittee-owned Facilities and Control Inventory*: NCBCGPT maintains a comprehensive facilities inventory managed by PWD via the Naval Facilities Asset Data Store (NFADS) system. NFADS assigns a unique identification code to every facility and structural asset at the installation. Additionally, the GRC maintains current mapping that complements the NFADS database.

Requirement (2) for Training and Education is addressed via a BMP for this MCM.

Requirement (3) addresses management for *Disposal of Waste Material*. All waste disposal removed from NCBCGPT is accomplished in accordance with state and federal requirements.

Requirement (4) relates to *Contractor Requirements and Oversight*, which is managed via the FEAD and discussed within the MCM Construction Site Stormwater Runoff Control. Contractor training is addressed via a BMP for this MCM.

Requirement (5) refers to Municipal Operation and Maintenance Activities and the assessment of permittee-owned operations. PWD is responsible for all operation and maintenance of structures at NCBCGPT. Large projects such as road work, pavement, repaving are accomplished by contract, and would be considered as a construction project and thus fall under the requirements as noted in MCM Construction Site Stormwater Runoff Control. Small maintenance projects such as filling in a pothole, minor concrete work, headwall repair, paint touch up are completed inhouse. Pollutants of concern, include paints, metals, sediment, and petroleum products (fuel and oils). Reduction and use of environmental friendly products is covered by the P2 program, and Supply offices. Other environmental plans include training for staff that participate in activities that could pollute any environmental media (air, water, natural resources, etc.). Staff training is covered as a BMP for this MCM. Review and inspection of the maintenance actions performed in-house, P2 measures and verification of P2 activities in support of stormwater protection is covered as a BMP for this MCM.

Requirement (6) is for the oversight of BMPs that require *Structural Control Maintenance*. Maintenance of the stormwater conveyance system and related BMPs is covered under the Post Construction Stormwater Management MCM.

# 7.2 Best Management Practices (BMPs)

- GH-1 Staff Training
- GH-2 Contractor Pollution Prevention Education
- GH-3 Create Standing Operational Procedures (SOP) addressing Stormwater Quality Issues

The BMPs for this MCM are tabulated on the following pages:

# Table 7-1: BMP GH-1 Staff Training

### BMP Rationale and Goal

The purpose of this BMP is to insure appropriate base personnel engaged in a variety of facility and equipment maintenance/repair, hazardous material and POL tank management, and construction ground disturbance activities on base, annually receive appropriate stormwater pollution prevention and good housekeeping training, by way of either web-based training resources, and/or base DVDs. Training roster must contain title/description of training, date training completed, printed name and signature of trainee.

# Responsibility

Stormwater Manager is responsible for identifying available training resources and communicating the accessibility and availability to them to base personnel in receiving, coordinating and informing all applicable employees of training opportunities.

# Targeted Audience

Base personnel performing facility and equipment maintenance/repair operations and construction grounding disturbing activities.

#### Process

The Stormwater Manager informs all applicable personnel of stormwater training requirements.

The Stormwater Manager is responsible for organizing and providing stormwater training. This could be via an onsite hosted instructor, in-house training, off site organized event, or use of established training material (e.g. DVDs).

### Schedule

Year 1 – Review/Update Stormwater Training requirement in Base Environmental Training Matrix. Ongoing Implementation of MS4 required training.

Year 2-5 - Ongoing Implementation of MS4 required training.

# Reporting, Record Keeping, and Measureable Goal

Goal is to maintain copy of training rosters containing title/description of training, printed name and signature of trainees, and completion date in the yearly SWMP Binder of base personnel completing annual stormwater pollution prevention and good housekeeping training.

## Table 7-2: BMP GH-2 Contractor Pollution Prevention Education

### BMP Rationale and Goal

The purpose of this BMP is to insure significant base construction and support services contracts include requirements requiring contractors to complete stormwater pollution prevention training utilizing the Navy's environmental compliance assessment training and tracking system (ECATTS). ECATTS provides a variety of stormwater training courses covering regulations, soil erosion, sedimentation, control practices, stabilization, runoff, BMPs, construction site pollution prevention, and erosion & SWPP planning. Goal is for contractors that could have a significant impact on stormwater to use ECATTS for taking and documenting their stormwater training compliance.

# Responsibility

The PWD-FEAD CMs are responsible for insuring contractors complete ECATTS stormwater pollution prevention training prior to the start of field work.

## Process

Contracting specifications for NCBCGPT include language regarding the requirement to complete environmental compliance training via the ECATTS. The modules required are dependent on the type of contract work. Alternatively, a contractor may submit proof of equivalent training, but must ensure they are familiar with NCBCGPT stormwater pollution prevention requirements.

PWD EV considers a contractor to be current with ECATTS or other equivalent training as long as it was completed within the current permit cycle or within 5 years.

The contractor submits proof of equivalent training to the FEAD, who provides it to the Stormwater Manager.

The Stormwater Manager maintains administrative rights for ECATTS so that training records can be pulled quarterly.

#### Schedule

Year 1 thru 5 - Contractors complete Stormwater Pollution Prevention Training in ECATTS

# Reporting, Record Keeping, and Measureable Goal

Retain in annual SWMP binder, a copy of the NCBC Gulfport Environmental Requirements section included in all base contracts, and an annual ECATTS printout of contractors completed stormwater pollution prevention training. Measureable Goal is for 90% of base construction contractors with a significant impact on stormwater completed ECATTS training.

# Table 7-3: BMP GH-3 Create Standing Operational Procedure (SOP) addressing Stormwater Quality Issues

# BMP Rationale and Goal

The purpose of this BMP is to establish procedures to address operational issues and concerns that impact stormwater quality on the base. Existing base SOPs address: Stormwater Conveyance System Responsibilities (Discharging, Monitoring, Inspection, Maintenance, and Repair); Facility—Waste and Garbage Storage & Floor Drains; Facility General Housekeeping; Cleaning and Repair of area Catch Basins, Storm Drains & Outfalls; Lawn Care; and Vehicle & Equipment Storage-Washing-Fueling & Maintenance. Goal is to insure existing SOPs are annually reviewed, updated and distributed and incorporated into staff training.

## Responsibility

The Stormwater Manager is responsible for creating new SOPs when necessary to address ongoing stormwater issues, and to review/update existing SOPs.

#### Process

Stormwater Manager will review and evaluate existing stormwater SOPs and update and/or create new SOPs to address stormwater quality on base.

#### Schedule

Year 1 – Annually, Review and update existing Stormwater Quality SOPs and distribute.

Year 2-5 - Annually, review update existing and create new SOP, as needed

### Reporting, Record Keeping and Measureable Goal:

Retain copy of SOPs in the annual SWMP Binder. Measureable Goal: all existing BMPs are reviewed, update (if needed) and distributed annually through base's environmental support website.