

U.S. NAVAL BASE GUAM



Year 2 MS4 Annual Report

MS4 Permit No.: GUS040000

April 2021

PREPARED BY:

SUNDANCE - EA Associates II

Naval Base Guam

Municipal Separate Storm Sewer System (MS4) Permit No.: GUS040000

Reporting Period: February 1, 2020 – January 31, 2021

Certification Statement

"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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,



E.E. Moon

Installation Environmental Program Director

By Direction of the Commanding Officer

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TABLE OF CONTENTS

SECTION 1 INTRODUCTION.....	9
1.1 COMPLIANCE HISTORY	9
1.2 PERMIT AND INSTALLATION INFORMATION.....	9
1.3 REPORT CONTENTS AND ORGANIZATION	10
1.4 SCHEDULES, DEADLINES AND PERMIT MODIFICATION REQUEST	10
1.5 NBG MS4 PROGRAM CONTACT INFORMATION	11
SECTION 2 MS4 MANAGEMENT PROGRAM	12
2.1 GENERAL REQUIREMENTS	12
2.2 STORMWATER MANAGEMENT PLAN DEVELOPMENT PROJECT.....	12
2.2.1 <i>Adequate Legal Authority Requirement</i>	13
2.2.2 <i>Enforcement Response Plan</i>	13
2.2.3 <i>Fiscal Analysis</i>	13
SECTION 3 MINIMUM CONTROL MEASURES.....	16
3.1 PUBLIC EDUCATION AND OUTREACH	16
3.1.1 <i>Electronic Media Outreach</i>	16
3.1.2 <i>Stormwater Pollution Prevention Training</i>	17
3.1.3 <i>Informational Materials</i>	19
3.1.4 <i>Survey</i>	20
3.2 PUBLIC PARTICIPATION / INVOLVEMENT	21
3.2.1 <i>Public Review of NBG SWMP</i>	21
3.2.2 <i>Public Participation Campaign</i>	22
3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)	23
3.3.1 <i>NBG MS4 Map</i>	23
3.3.2 <i>Identification of Priority Outfall</i>	23
3.3.3 <i>Dry Weather Field Screening</i>	24
3.3.4 <i>Illicit Discharge Public Reporting</i>	25
3.3.5 <i>IDDE Source Investigation and Elimination</i>	26
3.4 CONSTRUCTION SITE RUNOFF CONTROL.....	28
3.4.1 <i>Construction Stormwater Management Policy</i>	28
3.4.2 <i>Construction Site Inventory</i>	29
3.4.3 <i>Construction Plan Review Procedure</i>	29
3.4.4 <i>Construction Site Inspection</i>	30
3.4.5 <i>Permittee Staff Training</i>	31
3.4.6 <i>Construction Site Operator Education & Public Involvement</i>	31
3.5 POST-CONSTRUCTION STORMWATER MANAGEMENT.....	32
3.5.1 <i>Post-Construction Stormwater Management Policy</i>	32
3.5.2 <i>Site Plan Review</i>	33
3.5.3 <i>Long-Term Maintenance of Post-Construction BMPs</i>	33
3.5.4 <i>Post-Construction Stormwater Control Measures Inventory and Maintenance</i>	33
3.5.5 <i>Inspection and Enforcement</i>	34
3.6 POLLUTION PREVENTION / GOOD HOUSEKEEPING PROGRAM.....	35
3.6.1 <i>Facility Assessment and "High Priority" Facilities Stormwater Controls Program</i> ...	35

3.6.2 Storm Sewer and Catch Basin Maintenance	38
3.6.3 Street Sweeping and Cleaning.....	39
3.6.4 Pesticide, Herbicide and Fertilizer Application Management	40
3.6.5 Contract Management	42
3.6.6 Debris Control Program	42
3.6.7 Industrial / Commercial Stormwater Sources	43
SECTION 4 MONITORING REQUIREMENTS	47
4.1 CONSOLIDATED INFORMATION TRACKING SYSTEM	47
4.2 SAMPLING AND MONITORING PROGRAM.....	47
4.3 PROGRAM EVALUATION	48
4.4 NBG MS4 ANNUAL REPORT	49
4.4.1 Annual Monitoring Reports.....	49
4.4.2 Year 2 Annual Report	49
4.4.3 Fiscal Analysis.....	49
SECTION 5 REFERENCES.....	51

LIST OF TABLES

Table 1: CY2020 NBG SWP2 Training.....	18
Table 2: Dry Weather Field Screening Benchmark	24
Table 3: Summary of NBG CY2020 Spill Response Activities	27
Table 4: Summary of Construction Site Inspections	30
Table 5: CY 2020 MSGP Facility Inventory and Routine Inspection	36
Table 6: CY2020 Inspection Summary.....	37
Table 7: NBG Permitted Area Storm Drainage System Maintenance	38
Table 8: NBG Permitted Area Street Sweeping Schedule.....	39
Table 9: CY 2020 Industrial / Commercial Facility Inventory and Inspection	43
Table 10: CY 2020 Hazardous Waste Facilities Inspection.....	45

LIST OF APPENDICES

Appendix A NBG MS4 Permitted Facilities Overview-----	53
Appendix B NBG MS4 General Permit Schedule Summary -----	54
Appendix C NBG MS4 Year 2 Interim Compliance Tracker-----	55
Appendix D NBG Environmental Policy Statement -----	71
Appendix E: PWD Memorandum to FEAD-----	73
Appendix F NBG MS4 Construction Site Inventory-----	75
Appendix G NBG MS4 Fiscal Analysis -----	76

LIST OF FIGURE(S)

Figure 1: NAVFAC General Stormwater Management Flowchart ----- 34

Section 1 INTRODUCTION

The following “Naval Base Guam (NBG) Year 1 MS4 Annual Report,” fulfills the annual reporting requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit No. GUS040000. According to the compliance schedule specified in Table 4, Part 5.5 of the permit, NBG must submit its MS4 annual reports on or before every April 30th following each respective permit year. The report should account for all permit compliance activities of the previous permit year.

This report is submitted to:

NPDES Permit Section
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Guam EPA - Water Pollution Control Program
P.O. Box 22439
Barrigada, GU 96921

1.1 Compliance History

The United States Environmental Protection Agency (USEPA) issued the NBG MS4 permit on December 20, 2018 and became effective on February 1, 2019. This permit authorized NBG to discharge stormwater and other non-prohibited discharges from all outfalls of NBG's MS4. This permit also requires NBG to effectively prohibit all type of non-storm water discharges into its MS4 unless such discharges are either authorized under a separate NPDES permit or listed as allowable non-stormwater discharge in Part 1.3.2 of the MS4 permit.

1.2 Permit and Installation Information

The Department of the Navy NPDES permit GUS040000 applies to Naval Base Guam (NBG) owned and operated MS4 which includes the following existing facilities:

- NBG at Apra Harbor (NBGAH).
- Family housing / community support areas at Apra Heights.
- Family housing / community support areas at Nimitz Hill.
- NBG Munition Site (NBGMS) Naval Hospital and Guam High School

Appendix A provides an overview and relative locations of each existing facilities covered under the MS4 permit. A more detailed map of NBG's storm water conveyance system will be provided in the completed Storm Water Management Plan (SWMP) document.

1.3 Report Contents and Organization

This report follows the organization and requirements outline of the MS4 permit. This will aid Program Managers, Regulators and other stakeholder in the performance of the review process and tracking of multiple compliance activities. Future permit year reports will follow the presentation and organization of the approved SWMP document.

This annual report includes details of NBG compliance efforts, from February 1, 2020 to January 31, 2021, to meet permit conditions and requirements including the development of the SWMP; existing inspection, reporting, and record keeping requirements for program activities to meet minimum control measures; current good-housekeeping contracts that provide street sweeping and stormwater conveyance maintenance activities.

A description of SWMP and permit compliance related activities planned for the future year program implementation is also included in this report. *However, these planned activities are based on the MS4 permit minimum requirements and may be changed, updated or replaced depending on the specific required activities in the completed SWMP.* Past compliance activities are also provided, where applicable.

This 2nd annual report does not provide a comprehensive information regarding the MS4 program effectiveness evaluation. The effectiveness evaluation requires data derived from actual stormwater management program implementation and MS4 outfall sampling and analytical results. The NBG stormwater program effectiveness evaluation will be included in future MS4 annual reports.

1.4 Schedules, Deadlines and Permit Modification Request

Requirements due dates (Appendix B) referenced in this report are based on the original summary of deadlines describe in Table 4, Part 5.5 of the MS4 permit. NBG submitted a permit modification request to US EPA regarding permit implementation schedule citing difficulty in securing funding for emergent compliance program, logistic challenges in the acquisition of a MS4 SWMP development project and MS4 compliance program implementation contract acquisition. All NBG MS4 compliance activity schedules and deadlines may change pending approval of the permit modification request.

1.5 NBG MS4 Program Contact Information

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Section 2 MS4 MANAGEMENT PROGRAM

2.1 General Requirements

The MS4 permit requires NBG to develop and implement a Stormwater Management Plan (SWMP) that outlines how the Installation will comply with the MS4 permit conditions. The SWMP document will aim to address the following requirements:

- Identify and implement Best Management Practices (BMPs) for all appropriate minimum control measures (MCMs) designed to reduce the discharge of pollutants from MS4 to the maximum extent possible (MEP), to protect water quality and to satisfy water quality requirements of the CWA and the Guam water quality standards.
- Identify measurable goals and milestones for BMPs, MCMs and other control measures.
- Provide planning and guidance document to be used by military personnel, civilian staff, contractors and members of the general public at NBG facilities who have the authority to access the base and outlying areas.
- Develop an implementation schedule and monitoring program to determine effectiveness of the control measures.
- Identify and assess existing policies for adequacy in the implementation of the MS4 permit conditions and SWMP document requirements.
- Develop and implement an enforcement response plan.

2.2 Stormwater Management Plan Development Project

The SWMP development project was not completed during this reporting period. The document will be submitted in accordance with the schedule and deadline provide in Appendix B.

The contract to develop the SWMP document, Contract Number N40192-16-D-0002, was awarded on September 24, 2019. Based on the SWMP development contractor's POAMs, the project is scheduled for completion before the July 2021 deadline. A timeline for the SWMP project development is provided in Appendix C (Interim NBG MS4 Consolidated Information System).

Upon completion of the SWMP development project, NBG MS4 Program Managers will identify all SWMP-based compliance activity requirements and will develop a list of deliverables for future MS4 program implementation contract. An Independent Government Estimate (IGE) will be developed for each deliverable and a funding request will be submitted through channels.

2.2.1 Adequate Legal Authority Requirement

The Department of Navy (DON) environmental readiness program OPNAVISNT 5090.1E, the NBG Environmental Policy Statement (Appendix D), Executive Order 13514, and other DoD environmental policies such as the Low Impact Development (LID) are already in place in lieu of ordinances and other regulatory mechanisms required to implement an effective stormwater management program. As a non-traditional MS4, NBG's Installation Commanding Officer (ICO) has the authority to issues additional polices and memoranda to implement the SWMP requirements and to require all base tenants to comply with general provisions of the MS4 permit.

Upon completion of the SWMP document, NBG MS4 Program Managers will identify the SWMP-based compliance activity requirements and will review existing policies to verify if the Installation meet the "adequate legal authority" requirements to control pollutant discharges as specified in Section 2.3 of the permit.

A statement from the Installation's Legal Counsel certifying the adequacy of NBG's legal authority to implement permit requirements will be included as part of the SWMP document and in accordance with the schedule provided in Appendix B.

2.2.2 Enforcement Response Plan

The Enforcement Response Plan (ERP) document was not completed during this reporting period. The plan will be provided in accordance with the NBG MS4 general permit schedule.

The ERP development was included in the SWMP document contract to ensure compliance with the MS4 general permit requirements. The plan will outline the potential response to violation and will address repeat and continuing violations through progressively stricter responses.

Due to the nature and operational structure of NBG, the most effective means for enforcement is escalation of unaddressed violations to the next higher authority. All violations and corrective measures will be tracked and recorded in a manner consistent with the procedure that will be described in the completed ERP / SWMP and the MS4 permit requirements.

2.2.3 Fiscal Analysis

Conventional annual fiscal analysis is not applicable to NBG as it is unique from most traditional MS4s in that it owns the property and almost all of the facilities. The Installation also provides funding for majority of work on grounds and facilities located within its boundaries. Program implementation funding will be requested based on the IGE for each compliance activity deliverables specified in the SWMP document and the MS4 asset maintenance cost.

Chapter 2 of the OPNAVINST 5090.1E provides implementing policy guidance identifying and programming resources for environmental shore compliance. NBG SWMP / MS4 Program Managers are responsible for identifying requirements and request for necessary funding to comply with the MS4 permit and the SWMP requirements. Funding may come from one or all three appropriations (O&M, OPN, RDT&E) as describe in section 2-3.4 of OPNAVINST 5090.1E.

MS4 Program Management Past Year Activities:

- NBG requested and secured funding for the development of the SWMP document.
- NFM completed the development of an IGE and the scope of work for the SWMP development project.
- NFM completed the source selection / contract mechanism process and have identified a contractor for the SWMP development project.
- NFM awarded an Indefinite Delivery / Indefinite Quantity (IDIQ) SWMP development contract.
- Development of an ERP was included and part of the SWMP document contract.
- NBG / NFM identified permit-based compliance activity requirements and begun consolidating for the 2nd NBG MS4 Annual report.

MS4 Program Management Future Year Activities:

- Accept completed program plan from the SWMP development project contractor.
- Review and submit completed SWMP document to U.S. and Guam EPA for approval.
- Identify SWMP-based compliance activity requirement and review existing Installation policy to determine adequacy to implement stormwater pollution control measure. Develop and implement additional stormwater pollution control policies if necessary.
- Review and identify SWMP-based list of requirements and contract deliverable for future Environmental Compliance or an alternative MS4 compliance contract.

- Develop a SWMP-based IGE for each contract deliverables and submit a request for funding for MS4 compliance program implementation based on the IGE.
- Identify interested parties who has the capability to run a MS4 compliance implementation contract.
- Modify Environmental Compliance IDIQ Contract, N40192-20-R1820, or any alternate Environmental Compliance contract requirements to include NBG MS4 program implementation or solicit other forms of contract mechanisms (i.e. stand- alone MS4 compliance contract).

Section 3 MINIMUM CONTROL MEASURES

The NBG MS4 permit requires the Installation to provide a SWMP that will describe the six (6) Minimum Control Measures (MCMs) and details on the development and implementation of these measures required to qualify the Installation for permit coverage. The six MCMs are:

- MCM 1 - Public Education and Outreach,
- MCM 2 - Public Involvement / Participation,
- MCM 3 - Illicit Discharge Detection and Elimination (IDDE),
- MCM 4 - Construction Stormwater Run-off Control,
- MCM 5 - Post-Construction Stormwater Management and,
- MCM 6 - Pollution Prevention / Good Housekeeping for Base Operation.

3.1 Public Education and Outreach

The development of the NBG Public Education and Outreach program was not completed during this reporting period. Program development is part of the SWMP document project that will be submitted in accordance with the schedule provided in Appendix B. Proposed and existing BMPs are describe in the succeeding subsections.

Pursuant to Section 3.1 of the MS4 general permit requirements, NBG will focus on the development and implementation of base-wide awareness program designed to inform the base tenants about the impacts that stormwater discharges could have on local waterbodies. The program will involve development and distribution of informational materials and conducting outreach activities aimed at enhancement of awareness and providing knowledge to NBG's target audiences about their activities that may have potential adverse effect(s) to water quality so that they can avoid these activities and thereby improve overall water quality.

Knowledge of the program will garner greater public support, as well as a more willingness to change their attitudes and comply with the BMPs set forth in the program.

3.1.1 Electronic Media Outreach

No electronic media outreach activity performed during this reporting period. This BMP is dependent upon the completion of the SWMP development project. Detailed outreach procedure description will be included in the SWMP document. The Installation plans to utilize one or combination of the following NBG and Joint Region Marianas (JRM) webpages as an additional platform for reaching out to key audiences:

- <https://www.cnic.navy.mil/Guam/>
- http://www.cnic.navy.mil/regions/jrm/installations/navbase_guam/
- <https://www.facebook.com/USNavalBaseGuam/>
- <https://www.facebook.com/jrmguam/>

These webpages are accessible to the public making them also accessible to tenants that may have trouble accessing websites that are restricted by the Navy for operational security (OPSEC) reasons.

Pertinent MS4 documents such as educational materials aimed at residents and commercial tenants, such as good housekeeping practices, disposal of household hazardous wastes, and NBG policies addressing stormwater pollution prevention will be posted on these websites.

Past Year Activities:

- Not applicable / required during this reporting period.

Future Year Activities:

- Post the completed SWMP document on one or combination of NBG and JRM websites.
- Provide mechanism for public to view the NBG MS4 annual reports online.
- Inform the public on the location and availability of SWMP document and how to access additional information.
- Distribute informational materials via electronic mail, Facebook pages and NBG / JRM websites.
- Identify additional approach and materials that can be circulated by electronical means.
- Evaluate effectiveness of the electronic outreach program.

3.1.2 Stormwater Pollution Prevention Training

NBG has an existing Spill Prevention Control and Countermeasure (SPCC) and Stormwater Pollution Prevention (SWP2) annual training and refresher program in compliance with the Multi-Sector General Permit (MSGP) requirements. The Installation's SPCC and SWP2 training programs was previously being implemented as part of the Base Operating Support (BOS) Contract, N62742-20-C-3603 and now by the new Environmental Compliance IDIQ Contract, N40192-20-R1820. Training is afforded at least annually to all personnel stationed in the industrial / commercial facilities within the NBG MS4 permit area.

The following quantities were taken from the BOS Contractor 2020 Annual SWP2 Training report. Trainings provided to facilities and personnel outside the NBG MS4 permit area are excluded from Table 1 below:

Table 1: CY2020 NBG SWP2 Training

Facility / Building No.:	Date	Number of Attendees
DLA Bldg. 631 Disposition Facility	10/9/2020	5
Transportation Maintenance Shop Bldg. 372	*	*
Material Handling, Bldg. 372	*	*
Transportation, Filling Station, Bldg. 374		
Alpha Compound Maintenance (Camp Covington)	9/25/2020	22
Seal Compound (Bldg. 3000-3008)	10/30/2020	*
Port Operations, Bldg. 3169	*	*
Marina Facilities, Bldg. 5406	10/6/2020	10
PACSEA Bldg. 3169	*	*
Navy Berthing Facilities		
Emergent Repair Facilities, Bldg. 4430	*	*
AHWWTP, Bldg. 1794	*	*
Utilities and Machine Shop, Bldg. 1793	11/2/2020	29
US Navy Sanitary Landfill	*	*
Naval Hospital Compound	*	*
U.S. Navy Water Treatment Plant	11/8/2020	19
U.S. Navy Laboratory	9/24/2020	9
Hazardous Waste Conforming Storage Facility, B1790	9/21/2020	9
Cold Storage Facility, Bldg. 780	*	*
Total Number of Personnel Trained:		103

Source: BOS Contractor Annual SWP2 Training Report (CDRL-CV)

Note:

- Some facility names are redacted for OPSEC reason.
- * Training was not conducted due to COVID-19 restrictions.

The NBG BOS contractor also offers orientation program to their newly acquired personnel. Part of the orientation is to provide basic summary of NBG's environmental policies including stormwater pollution prevention. However, the BOS contractor new hire orientation activities are not currently being tracked and not part of the contractor's deliverables. The number of sessions and the quantity of attendees are currently not recorded for the purpose of complying with the MCM1. This program could be enhanced

and tracked to meet the MS4 MCM1 requirements and each session can be used as a venue for MS4 informational material distribution.

Past Year Activities:

- NBG implemented existing annual SPCC and SWP2 training programs to educate base personnel, tenants, and contractors regarding stormwater pollution prevention.
- NBG conducted seven (7) training sessions via training videos and trained one hundred three (103) personnel stationed within MS4 permitted area on SPCC and SWP2.

Future Year Activities:

- Continue implementation of existing SPCC and SWP2 training programs and identify additional facilities / personnel that requires training under the MS4 program.
- Modify / improve existing SPCC and SWP2 training materials to include MS4 permit and SWMP requirements.
- Modify / improve the Government and Contractor new-hire orientation and personnel indoctrination programs to include MS4 permit and SWMP requirements. Document the number of orientations provided during each compliance year.
- Modify existing Environmental Compliance contract or provide an alternate contract mechanism to include MS4 training program.
- Evaluate effectiveness of the SPCC and SWP2 training programs. Previous evaluations were performed in accordance with MSGP requirements.

3.1.3 Informational Materials

The development and production of NBG MS4 informational materials is part of the SWMP document contract. Informational materials has been created and program implementation will commence upon completion of the SWMP.

Upon availability of the informational materials, the Installation will work with offices of Personnel Management (OPM) and NBG Housing to include MS4 topics and informational materials distribution during the mandatory indoctrination briefing for NBG new arrivals (military and civilian). Newcomers will also be informed of the illicit discharge reporting procedures and will be encouraged to participate in a MS4 related activities (storm drains clean-up, labelling).

Environmental Compliance IDIQ and other contractors will also be asked to distribute MS4 informational materials and to review and update their environmental presentation materials during the Contractor's new-hire orientation.

Past Year Activities:

- Developed and produced five (5) general stormwater pollution prevention educational materials (brochure formats). Informational brochure topics includes, “Getting to Know Stormwater, Getting to Know your Drainage System, Trash Reduction, Illicit Discharge, and Water Quality Information. Five hundred (500 copies each), are ready for distribution upon completion of the SWMP document.

Future Year Activities:

- Continue production of informational materials and develop new ones that target specific sectors such as housing tenants and school children.
- Identify additional venues and events (e.g. World Earth Day) for the distribution of informational materials. Identify additional means of materials dissemination.
- Modify existing Environmental Compliance contract or provide an alternate contract mechanism to include MS4 distribution and tracking of MS4 informational materials.

3.1.4 Survey

The design of a statistically valid survey is part of the SWMP development contract and is not required during this reporting period. Surveys to assess changes in public awareness and behavior resulting from implementation of the public outreach program within four (4) years from the effective date of the permit (EDOP). Overall program implementation will be conducted in accordance with the schedules and deadlines outlined in Appendix B.

Past Year Activities:

- Not applicable / required during this reporting period. Design and development of a statistically valid survey was included in the SWMP document contract.

Future Year Activities:

- Depending on the survey design, NBG may conduct an initial survey to establish a baseline.
- Perform surveys to assess changes in public awareness and behavior.
- Modify SWMP implementation program based on survey results.
- Modify existing Environmental Compliance contract or provide an alternate contract mechanism to include MS4 survey program

3.2 Public Participation / Involvement

The NBG MS4 Public Participation / Involvement program is not due for implementation during this reporting period. Detailed description of this program is part of the SWMP development contract which will become available during Year 2 of the permit compliance period.

NBG will develop steps and procedures that will allow and encourage public participation in the overall compliance with the MS4 permit requirements. NBG will implement additional compliance measures that will encourage base tenant's participation in the development and implementation of this BMP, solicits tenants reporting of suspected illicit discharges and promotes active involvement in increasing stormwater pollution control awareness.

Proposed and interim BMPs for this MCM are describe below:

3.2.1 Public Review of NBG SWMP

Upon completion of SWMP document, NBG plans to make a redacted copy of the document available on these following webpages:

- <http://www.cnic.navy.mil/guam/>
- http://www.cnic.navy.mil/regions/jrm/installations/navbase_guam/

NBG recognizes the importance in allowing the public to play an active role in the development and implementation of the SWMP. An active and involved community will help develop a large public support base for the program including a broader base of expertise and allow for shorter implementation schedules due to fewer obstacles in the form of public challenges.

Implementation of this BMP is not required during this reporting period.

Past Year Activities:

- Not applicable / required during this reporting period.

Future Year Activities:

- Provide a mechanism for the public to review and provide comments on the SWMP document and MS4 annual reports.
- NBG MS4 program managers will review public input and apply changes to the SWMP where applicable or include in the scope of work of the annual

SWMP update to the MS4Environmental Compliance contract.

3.2.2 Public Participation Campaign

Due to COVID-19 restrictions on movement, formal implementation of the program was not feasible during this reporting period. However, NBG personnel have been participating in various community clean-up events, working with members of the community to clean up trash, green waste, and debris to help keep pollutants from entering the receiving waters. The following is a short list of example activities that will be encourage, promoted, and tracked during the next reporting period:

- *Naval Base Beautification Project (Gab Gab Beach and areas surrounding Orote Commissary), October 28, 2020*
- *SROC Storm Drainage Cleaning, June 8, 2020*

NBG plans to coordinate and improve existing programs by working with Community Relation (COMREL) personnel of various NBG tenants / units in promoting public awareness about the impacts of trash and illicit discharges on storm water runoff quality. COMREL activities may include but not limited to trash pick-up, beach clean-ups, and storm drain marking.

Past Year Activities:

- Identified units and POCs for possible COMREL activities.
- Identified possible venues and opportunities for public involvement and participation.

Future Year Activities:

- Provide mechanism for various NBG units to perform COMREL activities which may include beach clean-ups and storm drain markings.
- Participate in World Earth Day and / or other similar events.
- Provide a mechanism for public input in the design and development of NBG MS4 slogan / logo.

3.3 Illicit Discharge Detection and Elimination (IDDE)

The NBG IDDE program is part of the SWMP development contract. Formal implementation of the BMPs describe below are not required during this reporting period.

NBG will identify and eliminate sources of illicit discharges by developing and implementing a program to investigate and eliminate non-stormwater discharges, including illegal dumping. This program will include developing BMPs and establishing measurable goals to eliminate illicit discharges into its MS4 in accordance with the general permit requirements. The following are interim BMPs that outlines NBG's procedures in addressing illicit discharges. Additional BMPs may be added during the course of the SWMP development project.

3.3.1 NBG MS4 Map

NBG will develop an accurate and up-to-date Geographic Information System (GIS)-based storm sewer system map of the MS4 permitted areas. These maps will include and identify all key elements of NBG MS4 system including storm drain system, open drainage system, impounding basins, flow direction and outfalls. Field inspectors and laboratory sampling personnel will reference these elements during field screening and sampling.

Past Year Activities:

- NBG MS4 conveyance system mapping was included and part of the SWMP development project.

Future Year Activities:

- Update the MS4 map when necessary. Consolidate updates during the annual SWMP review.

3.3.2 Identification of Priority Outfall

Based on the information collected from the MS4 mapping activities, NBG will generate an inventory of all outfalls within the permit area. NBG will conduct an evaluation and develop a list of priority area identified as having a higher potential of illicit discharges / connections and illegal dumping based on the following criteria:

- Areas with older infrastructure
- Industrial, commercial or mixed use areas
- Location's history of previous illicit discharges / connections
- Location's history of sewer overflows
- Areas upstream of sensitive waterbodies Locations that may discharge pollutants is significant quantities to the waters of the U.S.

A list of proposed priority outfalls has been submitted to Guam EPA for review and approval.

Past Year Activities:

- NBG MS4 mapping, evaluation and identification of priority stormwater outfalls was completed as part of the SWMP development contract.
- A total of one hundred twenty-five (125) outfalls were identified with 26 possible representative sampling points. Out of the 26 representative sampling locations identified, seven were selected as priority outfalls for the MS4 program. The list of priority outfalls has been submitted to Guam Environmental Protection Agency (GEPA) for review and approval.

Future Year Activities:

- Secure approval for the list of proposed priority outfalls from Guam EPA.
- Review and update the priority outfall list when necessary to reflect changes in the MS4.
- Consolidate update requirements in the annual SWMP review.

3.3.3 Dry Weather Field Screening

NBG will develop a dry weather field screening / Outfall Reconnaissance Inventory (ORI) program to ensure that outfalls identified as priority outfalls will be visited at least annually for dry weather field screening. Samples will be collected and analyzed when flow or ponded runoff is observed and there has been at least seventy-two (72) hours of dry weather. Sample collected will be tested for indicators listed on Table 2 below. Samples will be submitted to the Installation's in-house U.S. Navy Laboratory (USNL) or other laboratory with DMRQA program for analyses except for pH which can be measured in-situ by trained personnel.

Table 2: Dry Weather Field Screening Benchmark

Indicator	Benchmark
Ammonia	> 50 mg/L
Conductivity	> 2000 uS/cm
Surfactants	> 0.25 mg/L
pH	< 6 or > 9 s.u.
Enterococcus (Geometric Mean)	35 MPN/100 mL

In addition, a minimum of 20% of the total outfall will also be subjected to dry weather screening on an annual basis. This is to ensure that all non-priority outfalls will be screened at least once during the permit term.

No ORI and dry weather field screening activities were performed during this reporting period. Initial field screening will be conducted upon completion of the NBG MS4 mapping and outfall identification programs in accordance with the schedule provided in Appendix B.

Past Year Activities:

- Description of the NBG dry weather field screening program was included and part of the SWMP development project.
- Purchased and received field sampling and testing equipment for Contract N40192-16-D-0002

Future Year Activities:

- Perform dry weather field screening and outfall reconnaissance inventory inspections base on the SWMP schedule.
- Provide training for dry weather field screening personnel.
- Perform corrective actions and / or propose preventative measures if necessary for dry weather field screening /ORI findings.

3.3.4 Illicit Discharge Public Reporting

The Illicit Discharge Reporting program development is part of the SWMP document contract. Implementation of this program is not due to begin during this reporting period.

NBG have an existing hazardous substance and sewer spill reporting and response program as part of the BOS Contract and Hazardous Waste IDIQ Contracts. A 24-hour emergency phone numbers are already available for the following responsible contractors to respond:

- *Hazardous Substance Spill Response - N40192-20-R-1800*
- *Sewage Spill Response – N62742-20-C-1199*

In addition to the BOS and HW IDIQ contractors spill response procedures, NBG have a standing instruction for oil and hazardous substance spill contingency and response that provide a flowchart for spill reporting and clean-up including points of contact and contact numbers:

- NAVBASEGUAMINST 5090.3 Series

These spill response programs and instructions may be enhanced to include reporting of illicit discharges to the Installation's MS4 conveyance system.

NBG recently completed the update of its Spill Prevention, Control and Countermeasure (SPCC) Plan and the accompanying Facility Response Plan. These plans help ensure that oil storage facilities are equipped with proper spill prevention and spill response tools, and a standing procedure for reporting spills is maintained. These plans help prevent petroleum-based pollutants from reaching NBG's storm sewer system.

NBG plans to build around and refine these programs to meet MS4 permit requirements. NBG will encourage base tenants to report the presence of illicit discharges, or water quality impacts associated with discharges from the MS4 including accidental spills.

Past Year Activities:

- NBG implemented existing reporting program for hazardous substances and sewage spills response. These programs help prevent pollutants from coming in contact with the stormwater conveyance system.

Future Year Activities:

- Update existing Hazardous Substance Spill Response and Sewage Spill Response procedures for the new Environmental Compliance contract.
- Develop a stand-alone procedure for MS4 illicit discharge reporting and/or;
- Expand existing spill reporting programs and procedures to include storm sewer illicit discharge reporting.
- Evaluate effectiveness of the existing spill reporting programs and instructions in preventing pollutants from reaching the MS4 conveyance system.

3.3.5 IDDE Source Investigation and Elimination

The NBG IDDE source investigation and elimination program development are part of the SWMP document contract. This program will outline the procedures for detection of illicit discharges, conducting investigation for confirmed illicit discharges as well as the implementation of corrective actions to eliminate such discharges.

NBG currently implements a reporting program for non-stormwater discharges and spills as mentioned in Section 3.3.4 of this report. NBG plans to build around and implement this program in combination with the dry weather field screening/ORI BMP to meet the IDDE requirements of the permit.

The spill response procedures and instructions mentioned in the previous section requires the BOS contractor to mitigate and remove spilled media and prevent these contaminants from reaching the storm conveyance system. The following are quantities of shore-based spill and sewer overflow responses and mitigation performed during this reporting period:

- *Seventeen (17) Used oil and hazardous substances spill response and clean-up.*

- *Four (4) Sanitary Sewer Overflow / Spill clean-up and response.*

Table 3: Summary of NBG CY2019 Spill Response Activities

Type of Response	Permit Area / Quantity				
	NBGAH	Apra View / Palms	Nimitz Hill	NBGMS	Naval Hospital
HW/HS Spill	17	0	0	0	0
Sewer Spill	4	0	0	0	0

*Sources: BOS Contractor Reports CDRL-GF and CDRL-AY.

These shore-based spills and sewer overflow responses and clean-ups are proven method in water pollution prevention by not allowing contaminants to reach NBG's MS4 system and nearby navigable waters.

NBG and NFM has implemented an inter-departmental review program for the development and redevelopment of facilities. This review process comes standard to all projects and includes the review and approval of sewer line connections, thus ensuring separation of sewer line from the MS4 system.

Past Year Activities:

- Revision 2 of the NAVFACSYSCOM for the Public Works Utilities Criteria (PWUC) was revised to ensure that cross connections between sewer lines and MS4 systems are prevented.
- Implemented existing spill response and clean-up program for hazardous substances and sewage spills response.
- Development of the NBG IDDE program was included and part of Contract N40192-16-D-0002 deliverables.
- Implemented inter-departmental sewer connections review and approval process.

Future Year Activities:

- Expand existing spill reporting program to include illicit discharge reporting.
- Continued implementation of inter-departmental review process for the development and redevelopment of NBG facilities.
- Evaluate effectiveness of the existing spill response procedures and instructions preventing pollutants from reaching the MS4 conveyance system.

3.4 Construction Site Runoff Control

The MS4 permit requires NBG to develop a Construction Site Storm Water Runoff Control program that will address how NBG will reduce pollutants in storm water runoff from construction activities that result from a land disturbance of greater than or equal to one acre. This program aims to:

- standardized BMP implementation and erosion and sediments controls requirements
- develop and maintain inventory of NBG's construction sites
- standardize construction plan review and approval process and promote incorporation of BMPs as part of the early planning stage of the project design
- establish routine construction site inspection procedures
- identify training requirements
- promotes construction operators awareness and encourage public involvement

3.4.1 Construction Stormwater Management Policy

NBG will adapt the 2014 NPDES Comprehensive Construction Stormwater Pollution Prevention Plan for the Guam Military Relocation DPRI Construction Program. A memorandum was issued by the NBG Public Works Director (PWD) to the Director of the Facilities Engineering and Acquisition Division (FEAD) to ensure that the construction requirements of the MS4 permit are met (Appendix F) and will require contractors to select, install, implement and maintain stormwater control measures.

NBG will apply this program to all construction projects within the permitted area, which include both public and private maintenance contract and construction projects with total land disturbance of 1 acre or more.

Past Year Activities:

- NBG develop a draft memorandum for the Installation Commanding Officer to sign, instructing FEAD to adopt the 2014 DPRI Comprehensive SWPPP.

Future Year Activities:

- Implement construction site SWPPP review process and storm water runoff control measures in accordance with the 2014 DPRI CSWPPP.
- Conduct regular meeting / communication with FEAD and Marine CORPS Activity Guam (MCAG) regarding implementation and inspection of storm water runoff control measures.

3.4.2 Construction Site Inventory

NBG has an existing electronic tracking system that includes a list of all active private and public construction sites. An interim tracking system for site that are at least an acre in total disturbed land is currently in use and is provided in Appendix G. Final format of the construction site tracker will be developed based on the specific description of the completed SWMP document.

There are currently three (3) construction site projects that disturbs lands greater than 1 acre in total area. These projects broke grounds prior to the issuance of NBG MS4 permit. All pertinent information is provided in Appendix G.

Past Year Activities:

- NBG developed an interim construction site inventory spreadsheet to track storm water runoff control measure for development / redevelopment projects with 1 acre or more total land disturbance.

Future Year Activities:

- Update the interim construction site inventory spreadsheet based on the specific description provided on the completed SWMP development project.
- Continue updating the inventory spreadsheet base on the completion of on-going projects and breaking grounds of new ones.

3.4.3 Construction Plan Review Procedure

Development of the NBG construction plan review procedure is part of the SWMP document project. Formal written procedure will be available upon completion of the SWMP project.

There are currently three (3) construction site projects that disturbs lands greater than 1 acre in total area. These projects broke ground prior to the MS4 permit issuance. Construction plan review process were conducted consistent with the Construction General Permit (CGP) requirements. The review process documentation may not be consistent with all 2014 DPRI CSWPPP requirements. All pertinent construction plan review information are provided in Appendix F. Project progress will continue to be documented and will be included in the next reporting period annual report.

Past Year Activities:

- Performed EV and Utilities stormwater compliance inspections on three future construction projects within NBG with >1 acre of total land disturbance.
- Conducted construction plan review based on the CGP requirements and existing inter-departmental review process.

Future Year Activities:

- NBG will implement construction plan and SWPPP review process for development / redevelopment project with 1 acre or more total land

disturbance in accordance with the 2014 DPRI CSWPPP / NBG MS4 SWMP.

- Continue implementation of inter-departmental review process to ensure compliance with site runoff control and Section 401 certification requirements as describe in the special condition section of the MS4 permit.
- Distribution of the 2014 DPRI CSWPPP and the NBG MS4 Permit to FEAD construction plan reviewers.

3.4.4 Construction Site Inspection

Development of the NBG construction site inspection procedure is part of the SWMP document project. Formal written procedure will be available upon completion of the SWMP.

There are currently three (3) construction site projects that disturbs lands greater than 1 acre in total area. These projects broke ground prior to the MS4 permit issuance. Initial inspection conducted were consistent with the CGP requirements, however, it may not be consistent with the MS4 permit / 2014 DPRI CSWPPP requirements. All pertinent construction inspection information is provided in Appendix F. A summary of CY-2020 constructionsite inspections is provided in Table 4 below:

Table 4: Summary of Construction Site Inspections

Project Site	Inspection Date CY2020			
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Water Front HQ Building*	***	06/26/2020	07/29/2020	12/21/2020
Sanitary Sewer System Recapitalization**	***	06/10/2020	09/08/2020	12/17/2020
Apra Medical / Dental Clinic*	***	6/26/2020	7/29/2020	12/21/2020

Notes: * On-going DPRI projects. ** FEAD Project. *** Due to COVID 19 restrictions, Construction Site Inspections were not conducted in the 1st quarter of 2020

- Total number of CY 2020 quarterly inspection conducted = 9

Project inspections will continue to be documented and will be included in the next reporting period annual report.

Past Year Activities:

- NBG requested FEAD and MCAG Construction Management Engineers (CMEs) / Engineering Technicians (ETs) to provide construction sites stormwater runoff control measures inspection dates.
- A total of nine (9) Construction Site inspections were conducted in CY2020. Findings and non-conformances were forwarded to NBG and ROICC for corrective action enforcement. Site operator's corrective measures were tracked via email correspondence and photographic evidence.

Future Year Activities:

- NBG will continue to collect stormwater runoff control measures inspection data from applicable project sites and update the construction site inventory / inspection tracker when new data becomes available.
- Develop a regular scheduled meeting / engagement between NBG MS4 Program Management team, FEAD and MCAG MDEs / ETs.
- Evaluate effectiveness of the construction site inspections program in preventing construction related pollutants from reaching the MS4 conveyance system.

3.4.5 Permittee Staff Training

NBG will implement a training program for its staff whose primary duties are related to the implementing the construction stormwater program. Below is an initial on-line training received during this reporting period and is part of the effort to survey readily available training opportunities. Full training program implementation is planned beginning Year 3 reporting period in accordance with the permit requirement timeline. Training opportunities during the Year 2 of MS4 program implementation was severely limited due to COVID-19 travel / movement restrictions.

Past Year Activities:

- Surveyed training opportunities that are readily available for CMEs and ETs.
- Three (3) construction site inspectors successfully completed the AFIT WESS031 Construction Site Stormwater Seminar.

Future Year Activities:

- NBG will coordinate with FEAD and MCAG CME Supervisor to ensure CMEs and ETs are provided training required to perform stormwater runoff control measures inspection and review.
- Survey FEAD for construction site stormwater runoff control measure inspection and SWPPP review training and,
- Assist CME Supervisors identify training opportunity for CMEs and ETs.
- Evaluate effectiveness of the construction site inspections training program in preventing construction related pollutants from reaching the MS4 conveyance system.

3.4.6 Construction Site Operator Education & Public Involvement

The NBG construction site operator education and public involvement program will be implemented in conjunction with the MCM 1 and MCM 2. MS4 permit compliance activities for this BMP requirements are described under MCM 1 and MCM 2 of this report.

Past Year Activities:

- Developed and printed five hundred (500) copies of construction site educational brochure, "Importance of Erosion and Sediment Control on Construction Sites". One hundred fifty (150) copies were distributed to construction site operators.

Future Year Activities:

- Future year compliance activities for this BMP requirement are described under MCM 1 and MCM 2 of this report.

3.5 Post-Construction Stormwater Management

NBG will develop, implement, and enforce a program to address post-construction storm water runoff from new development and redevelopment projects IAW the 2006 CNMI and Guam Stormwater Management Manual and 2010 Guam Transportation Stormwater Drainage Manual.

In addition to the BMP measures required during construction, the CGP conditions requires owners, operators and contractors to provide post-construction BMP measures in areas undergoing new development or redevelopment. This program involves multiple components for reporting and describe in the following subsections.

3.5.1 Post-Construction Stormwater Management Policy

This BMP is not required during this reporting period. Implementation will begin during Year 2 permit compliance period and upon completion of the SWMP document. NBG will adopt the 2014 DPRI CSWPPP acceptable post construction BMPs. A draft memorandum was developed and will be issued by the NBG PWD to the FEAD Director to ensure that the post-construction requirements of the MS4 permit are met (Appendix F). As a non-traditional MS4, this memorandum, once finalized, will suffice the requirement of developing an ordinance / regulation for post construction stormwater management.

NBG will apply this program to ensure that site performance standards are met in all Installation's construction projects, which include both public and private maintenance contract and construction projects.

Past Year Activities:

- NBG develop a draft memorandum for the Installation Commanding Officer (ICO) to sign, instructing FEAD to adopt the 2014 DPRI Comprehensive SWPPP including the specified acceptable post-construction BMPs.

Future Year Activities:

- Finalized NBG ICO memorandum and continue program implementation to ensure to ensure compliance with the site performance standard requirements.

3.5.2 Site Plan Review

Written procedures for this BMP was included in the SWMP development contract. Full implementation will begin during Year of the permit compliance period in accordance with the permit schedule. NBG may adopt the 2014 DPRI CSWPPP inter-departmental consultation for site plan review and approval procedure.

An as-built certification submittals are already required for all NBG construction projects.

Past Year Activities:

- Implemented standard inter-departmental review process and as-built certification for three (3) future construction site projects

Future Year Activities:

- Continue program implementation of inter-departmental review and as-built submittal requirements.
- Implement the review of plans for post-construction BMP procedure that will be described in the complement SWMP document.

3.5.3 Long-Term Maintenance of Post-Construction BMPs

Development of the NBG long-term post-construction BMPs maintenance program is included in the SWMP document project. Formal written procedure will be available upon completion of the SWMP project which is due on Year 2 of the permit compliance period.

NBG may adopt and implement the requirements describe on Section 3.6.7 of the permit where the Installation is required to conduct a minimum of annual inspection on all structural storm water controls. Maintenance will be provided based on the inspection report recommendations.

Past Year Activities:

- Post-construction BMP operation and maintenance program description was included in the SWMP development contract.

Future Year Activities:

- Implement the post-construction BMP operations and maintenance program as describe in the completed SWMP document.

3.5.4 Post-Construction Stormwater Control Measures Inventory and Maintenance

An inventory of all post-construction stormwater control measure has not been developed. Establishment of this database is part of the on-going effort and will be available upon completion of the SWMP development project which is due on Year 2 of the permit compliance period.

An Asset Management System (AMS) or an equivalent program will be implemented to track inspections and maintenance of permanent post-construction BMPs. It is important that plans be made for long-term operation and maintenance of permanent post-construction BMPs because if maintenance is inadequate or ceases the BMPs not work as

originally intended. BMP's that are not working as designed may become a source of pollution.

Past Year Activities:

- Post-construction BMP operation and maintenance and inspection database program description was included in the SWMP development contract.

Future Year Activities:

- Implement the post-construction BMP operations and maintenance program as describe in the completed SWMP document.

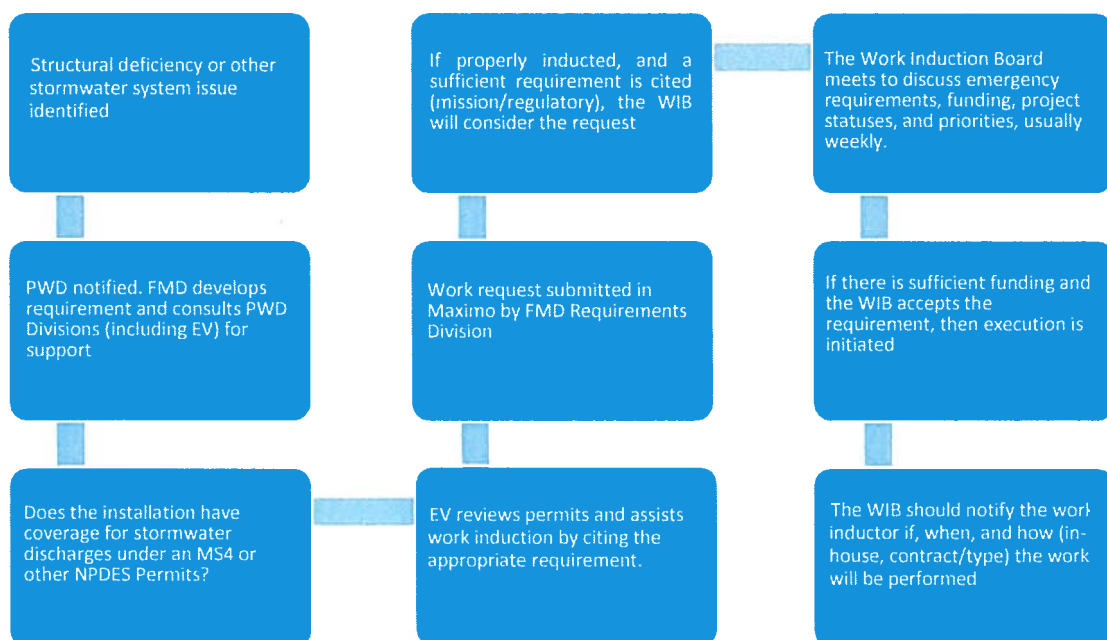
3.5.5 Inspection and Enforcement

Formal implementation of the post-construction stormwater control measures inspection program is not required this reporting period. A description of the inspection procedure is part of the ongoing SWMP development project which is due on the next reporting period.

NBG may adopt the inspection schedule provided in Section 3.6.7 of the permit or based on the inspection program description that will be provided in the completed SWMP document. Inspection report will include recommendations for improvements and/or repairs to ensure compliance with regulatory requirements and conformance with Navy and DoD policies.

NBG will may also adopt the draft Naval Facilities (NAVFAC) general stormwater management inspection and maintenance flowchart (Figure 1) to ensure the physical integrity of NBG's storm sewer system and compliance with the MS4 permit requirements.

Figure 1: NAVFAC General Stormwater Management Flowchart



Past Year Activities:

- Post-construction BMP operation and maintenance and inspection database program description was included in the SWMP development contract.

Future Year Activities:

- Implement the post-construction BMP operations and maintenance program as described in the completed SWMP document in conjunction with existing NAVFAC processes related to stormwater management (see Figure 1).

3.6 Pollution Prevention / Good Housekeeping Program

NBG will develop and implement an operation and maintenance program that aims to prevent and reduce pollutant run-off into the storm drainage system in accordance with the MS4 permit requirements. Written procedures for the program implementation is part of the SWMP development project.

3.6.1 Facility Assessment and "High Priority" Facilities Stormwater Controls Program

Development and mapping of facility stormwater control inventory will be included in the SWMP document. At a minimum, stormwater control inspections will be conducted based on the schedule specified in Section 3.7.4 of the permit.

Assessment and inspection procedures for "High Priority" facilities will also be incorporated in the SWMP document including identification of facilities that will be subjected to weekly visual and quarterly comprehensive inspections.

Although the facility inspection program will officially begin implementation during Year 2 of the MS4 permit compliance period, NBG has an established inspection program that meets or exceeds the MS4 permit requirements.

Routine facility inspections are currently conducted by the Installation's HAZWASTE and EC Compliance IDIQ contractor in accordance with the RCRA and MSGP SPCC/SWPPP requirements. NBG plans to build upon and refine these procedures to meet the MS4 permit requirements. Inspections conducted during this reporting period is provided in Table 5 below:

Table 5: CY 2020 MSGP Facility Inventory and Routine Inspection

Facility ID	Date Inspected			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
DLA (Formerly DRMO) Bldg. 631 Disposition Services Guam	2/4/2020	4/30/2020	8/5/2020	10/22/2020
Transportation Maintenance Shop, Bldg 372	2/19/2020	4/22/2020	7/1/2020	10/6/2020
Material Handling Equipment, Bldg 364	2/19/2020	4/22/2020	7/1/2020	10/6/2020
Filling Station, Bldg 374	2/19/2020	4/22/2020	7/1/2020	10/6/2020
Bldg 557 A-C, 561, 562, 563, 571, & 578	3/13/2020	*	7/23/2020	10/9/2020
3000-3002,3008	3/11/2020	5/20/2020	7/22/2020	10/6/2020
Port Operations, Bldg 3169	3/12/2020	6/9/2020	7/31/2020	11/5/2020
1802-1803	2/21/2020	5/28/2020	7/21/2020	10/9/2020
Marina Facilities, Bldg 5406	2/24/2020	4/30/2020	7/1/2020	10/9/2020
PACSEA Bldg 3169	3/12/2020	6/9/2020	7/31/2020	11/5/2020
Navy Berthing Facilities: Bravo, Echo, Romeo, Sierra, Victor)	3/12/2020	6/9/2020	7/23/2020	11/6/2020
US Coast Guard Station, Apra Harbor	3/9/2020	5/14/2020	8/6/2020	10/6/2020
US Coast Guard, Guam Sector Bldg. 3, 3A * K-Span	3/9/2020	5/14/2020	8/6/2020	10/6/2020
Bldg 4430, Site III	3/16/2020	*	*	*
Apra Harbor Wastewater Treatment Plant, Bldg 1794- 1809	2/8/2020	5/20/2020	8/6/2020	10/6/2020
Bldg 1793 A/B Utilities & Machine Shop	3/6/2020	5/7/2020	7/24/2020	10/6/2020
US Navy Sanitary Landfill	3/11/2020	5/5/2020	8/5/2020	10/06/2020

Source: BOS Contractor MSGP Facility Inspection Report (CDRL-CV).

Notes:

- Italicized inspection date(s) conducted outside reporting period. Some facility names are redacted for OPSEC reason.
- * Routine Facility Inspection was not conducted due to COVID-19 restrictions.

Seventeen (17) facilities located within the MS4 permitted area were visited at least once every quarter for good housekeeping and industrial outfall inspection. A total of sixty- five (65) inspections conducted during this reporting period. Table 6 below provides a summary of the CY2020 inspection findings:

Table 6: CY2020 Inspection Summary

Inspection Period	Findings / Deficiency	Inspection Comments
1 st Quarter	Thirteen (13) Housekeeping	Inspection report provided to facility POCs and NBG
2 nd Quarter	Thirteen (13) Housekeeping	IEPD for immediate action. Corrective measure documented in the original BOS Contractor reports.
3 rd Quarter	Thirteen (13) Housekeeping	
4 th Quarter	Thirteen (13) Housekeeping	

Source: BOS Contractor Facility Inspection Report (CDRL-CV).

Additional storm water conveyance system inspections are conducted at the Guam High School facility within the Naval Hospital area. This sub-section of the Naval Hospital complex is covered under a Guam EPA SDWA Class V UIC permit. Regular storm drainage system maintenance and inspection is conducted on a monthly basis to ensure compliance with the UIC permit conditions.

Plans to abandon the UIC chambers in favor of a percolating ponding basin are in place. Stormwater conveyance inspections in accordance with the UIC permit conditions will continue until the conversion project is completed. A total of twelve (12) inspections and corrective action reports were provided by the BOS contractor (CDRL-CV) during this reporting period.

Past Year Activities:

- Facility assessment and high priority facilities inspection program was included and part of Contract N40192-16-D-0002 deliverables.
- Implemented existing stormwater routine facility inspection and corrective action program.
- Performed monthly stormwater conveyance inspections at Guam High School facility within the Naval Hospital compound in accordance with the Guam UIC regulation.

Future Year Activities:

- Develop a comprehensive facility inspection checklist to meet MS4 permit requirements through the SWMP document.
- Incorporate existing corrective action program in the MS4 enforcement response plan.
- Maintain the NBG facility inspection requirements in the new BOS, HAZWASTE and EC Compliance IDIQ contracts.
- Perform assessment on Guam High School facility once the ponding basin conversion project is completed and incorporate in the SWMP inspection program where applicable.

3.6.2 Storm Sewer and Catch Basin Maintenance

The description of NBG's storm sewer and catch basin maintenance program is part of the SWMP development contract. Full maintenance program implementation based on the MS4 permit requirements is required during Year 2 permit compliance period and upon completion of the SWMP project. Prioritization and inspection procedure will be included in the SWMP document.

NBG maintains a performance-based ground maintenance contract which incorporate the management of the storm drain systems. Maintenance contract includes removal of trash, debris, and vegetation from curb gutters, inlets, brow ditches, drainage channels, swales, catch basin, yard drains and other devices used to direct flow of run-off. Table 7 below provide the scope of the storm drainage system maintenance contract:

Table 7: NBG Permitted Area Storm Drainage System Maintenance

Location	Annual Requirements	Performance Standard /
NBG (including Naval Magazine Area)	31,307 LF	No evidence of obstructions in the visible area of the drainage systems. All accumulated obstructions and debris shall be removed from the work site and disposed of at the end of each work day.
NBG Housing: Lockwood Terrace Nimitz Hill Apra View Apra Palm Harbor View North Tipalao	6,452 LF	
Naval Hospital* (including Ocean Ridge Housing)	2,491 LF	
Note: The Guam High School facility within the Naval Hospital area is covered under a Class V UIC permit. Regular storm drainage system maintenance and inspection is conducted on a monthly basis to ensure compliance with the UIC permit conditions.		

Source: NAVFAC Marianas Contract No.: N40192-20-D9000

Contractors are also obligated to notify NBG of damages or other stormwater conveyances system issue outside the scope of their contract within 24 hours of discovery.

Past Year Activities:

- The storm sewer and catch basin maintenance program description was included and part of Contract N40192-16-D-0002 deliverables.
- Implemented existing storm sewer cleaning and trash removal in accordance with NAVFAC Marianas Facility Services Contract No.: N40192-20-D9000.
- Required storm sewer maintenance contractor to report storm sewer conveyance damages / issues within 24 hours of discovery.

Future Year Activities:

- Modify and / or expand Facility Services Contract No.: N40192-20-D9000 to meet the MS4 SWMP storm sewer maintenance and inspection requirements.
- Incorporate storm sewer inspection program to the new BOS or alternate environmental compliance contract.
- Evaluate effectiveness of the storm sewer inspection and maintenance program in preventing debris and other pollutants from reaching any navigable water.

3.6.3 Street Sweeping and Cleaning

Evaluation of streets, roads and parking lots within NBG's permitted area has not been conducted and is not required within this reporting. Procedures for street sweeping prioritization is part of the SWMP development contract.

Street sweeping has proven to be an effective method of removing sediment and debris from roadways before it reaches the drainage system. NBG maintains a performance-based street sweeping contract for cleared pavement, residential and non-residential areas. Contract include roads and other paved areas such as parking lots an open storage area. Table 8 below provide the scope of the storm drainage system maintenance contract:

Table 8: NBG Permitted Area Street Sweeping Schedule

Location	Requirements	Performance Standard /
EODMU-5	325 MSF Quarterly	Contractor shall sweep roads and other paved surfaces to ensure they are clear in accordance with the specified Common Output Level.
NBG Housing:	2,500 MSF Monthly	
Lockwood Terrace		
Nimitz Hill		
Apra View		
Apra Palm		
Harbor View		
North Tipalao		
Naval Hospital	650 MSF Monthly	

Source: NAVFAC Marianas ISWM Contract No.: N40192-16-R-7000

Note: Some facility names are redacted for OPSEC reason.

Past Year Activities:

- The streets, roads and parking lot evaluation were included and part of Contract N40192-16-D-0002 deliverables.
- Implemented existing street sweeping and trash removal in accordance with NAVFAC Marianas Facility Services Contract No.: N40192-20-D9000.

Future Year Activities:

- Modify and / or expand Facility Services Contract No.: N40192-20-D9000 to meet the MS4 SWMP streets, roads and parking lots sweeping and trash removal.
- Incorporate street, roads and parking lots inspection and cleaning to the new environmental compliance contract.

3.6.4 Pesticide, Herbicide and Fertilizer Application Management

Written procedure for chemical application management will be included in the NBG MS4 SWMP. Control measures for this BMP will be identified in the SWMP document.

Although formal BMP implementation in accordance with the SWMP is not required for this reporting period, NBG has an ongoing program with existing control measures designed to ensure that pesticides and herbicides are safely and properly applied, and the application process does not affect or enter U.S. waters to the MEP. NBG uses an integrated pest management approach and conducts pesticide / herbicide application only when no other non-chemical approaches are practical.

NBG maintains a grounds maintenance contract (NAVFAC Marianas Contract No.: N40192-20-D9000) that includes restrictions, procedures, and reporting requirements to minimize landscaping-related pollution:

- The contract requires that herbicide spraying shall be performed only on still days and will be stopped when unfavorable weather or other conditions exist. Application of herbicides on NBG grounds needs prior approval of the Contracting Officer and contractors are required to submit an Herbicide Use Sheet.
- Only organic fertilizer is allowed in NBG grounds and applied at rates in accordance with the manufacturer recommendations. Contractors are required to submit a soil test analysis to determine the fertilizer type to be use.

- Extraneous vegetation, such as grass, weeds, and tree sprout shall be removed through weeding. Weeding shall include but is not limited; to pulling out of weeds, grass, vines, roots, and removing dried leaves and debris. To keep it away from waterways, contractor is required to remove weeding debris and dispose of from the work site at the end of each workday.
- Contractors are required to recycle all organic debris including grass clippings, brush, tree limbs, hedge clippings, etc. Organic debris shall be delivered to an approved recycling facility. Green waste collected from NBG grounds are tracked and recorded through a monthly compost report and annual green waste report.

All contractors involved in pesticide application within NBG facilities are required to have a Guam EPA certified pesticide applicator. This requirement ensures that contractor personnel involved in pesticide application have received training in the proper handling of chemicals. The brand, type, quantity, and locations of applied pesticides are monitored under the N40192-20-R-1820 contract

Past Year Activities:

- The NBG chemical application program description was included and part of Contract N40192-16-D-0002 deliverables.
- Implemented contract restrictions and reporting requirements to minimize pollution from landscaping activities.
- Restricted pesticide application to Guam EPA certified pesticide applicators under the Installations Facility Service Contract.

Future Year Activities:

- Modify and / or expand the Facility Services Contract No.: N40192-20-D9000 to meet the NBG MS4 SWMP chemical application program requirements.
- Continued implementation of contract restriction that minimized pollution generation through landscaping activities including the use of Guam EPA certified pesticide applicator only.
- Maintain chemical application tracking requirements in the EV IDIQ Contract N40192-20-R-1820.

3.6.5 Contract Management

All NBG contracts comes standard with Spec Item 2.10 (Environmental Management and Sustainability) requiring contractors to perform work consistent with the Installation's Environmental Management System (EMS) and comply with all applicable Federal, State, and local laws, regulations, executive orders, and with base-wide instructions, standards and permit requirements. Inspection of any of the facilities operated by the Contractor may be accomplished by the Installation Environmental Protection Coordinator, or authorized officials on a no-notice basis during Government regular working hours.

All contractors and their sub-contractor, performing tasks that have the potential to cause a significant environmental impact, are required to provide competent personnel on the basis of appropriate education, training or experience. In the event an EMS non-conformance or environmental non-compliance associated with the contracted services, tasks, or actions occurs, the Contractors are required to take corrective and/or preventative actions, assume legal and financial liability for the non-compliance and take corrective action immediately to remedy the noncompliance.

Past Year Activities:

- Implemented standard contract format that includes Spec Item 2.10 in all NBG contracts.
- Required contractors to implement corrective and preventative actions for not conforming to the base's EMS program and/or other environmental regulations.

Future Year Activities:

- Continued implementation of contract management procedure of Spec Item 2.10 inclusion on all NBG contract solicitation.
- Incorporate contract Spec Item 2.10 into the MS4 SWMP ERP.

3.6.6 Debris Control Program

This is a multi-faceted program aimed at reducing discharge of pollutants into the MS4 system and may include all BMPs describe under Section 3.6 of this report. Crucial component of this program is the development of a Trash Reduction Plan and Asset Management System (AMS).

A written Trash Reduction Plan is part of the ongoing SWMP development project which is due this reporting period. It will outline the procedure for implementation of trash reduction activities, and monitor reductions of trash loads from the MS4.

The AMS will serve as an inventory of asset such as the storm drainage system, structural controls, and equipment and will be used to prioritize inspections / maintenance activities, such that resources are focused on areas that pose the greatest risk to water quality.

Past Year Activities:

- Description of the NBG's trash reduction plan and asset management system, including inspection program, was included and part of Contract N40192-16-D-0002 deliverables.

Future Year Activities:

- Modify and / or expand the new EV Compliance IDIQ contract to include implementation and monitoring of the trash reduction plan and asset management system.

3.6.7 Industrial / Commercial Stormwater Sources

NBG has an on-going program to minimize pollutants discharges from industrial / commercial sources through the MSGP and AHWWTNP NPDES permits. Formal implementation in compliance with the MS4 requirements is pending completion of written procedures which is part of the SWMP development contract.

Stormwater pollution prevention activities under the MSGP is provided in Section 3.6.1 of this report. In addition, NBG has an existing inventory and inspection schedule for all industrial / commercial facilities located within the MS4 permitted area. Although inspections are geared towards compliance with the Industrial Waste Discharge Certification Program (IWDCP) requirements of the AHWWTNP NPDES permit, provisions are included in the inspection checklist to include other environmental concerns such as stormwater pollution. Additionally, the BOS Contractor IWDCP Program Manager also handles the MSGP program and very keen to call-out possible industrial / commercial facility-related stormwater quality issues. Table 9 below provides an inventory of industrial / commercial facilities and their inspection schedule:

Table 9: CY 2020 Industrial / Commercial Facility Inventory and Inspection

Facility ID		Date Inspected			
Building Name	Bldg. No.	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
X-ray BOWTS	791XR	2/6/2020	4/17/2020	8/7/2020	10/15/2020
Guam	1, 2, 3, and 5	3/9/2020	5/14/2020	NA	NA
Branch Health Clinic	6	2/12/2020	4/13/2020	7/17/2020	NA
Central Utilities Plant	23	2/26/2020	5/18/2020	NA	NA
MWR Typhoon Complex	75	1/17/2020	4/14/2020	7/14/2020	10/15/2020
NEX Car Care Center	257	1/27/2020	4/16/2020	7/2/2020	10/15/2020
NEX Food Court	258	1/15/2020	4/10/2020	7/2/2020	10/15/2020

Naval Base Guam MS4 2nd Annual
ReportGUS040000

Orote Commissary	275	1/22/2020	4/28/2020	7/2/2020	12/16/2020
Wendy's	282	1/15/2020	4/10/2020	7/20/2020	10/16/2020
Top o' the Mar	295	1/17/2020	4/14/2020	NA	NA
McCool Elementary/Middle School	311	1/10/2020	*6/11/2020	7/28/2020	12/16/2020
Forklift Maintenance Shop	364	2/19/2020	4/22/2020	7/1/2020	12/15/2020
Transportation Vehicle Wash Rack	364A	2/19	4/22/2020	7/1/2020	12/15/2020
NBG	368	2/7/2020/	4/23/2020	NA	NA
Transportation Car Wash Station	375	2/19/2020	4/22/2020	7/1/2020	12/15/2020
Guam High School	401	2/18/2020	*6/11/2020	NA	NA
Camp Covington Dining Facility	503	3/18/2020	5/18/2020	NA	NA
NMCB/MWR Chiefs' Club	521	*3/18/2020	5/18/2020	MA	NA
Seabees' Officer's Wardroom	529	3/18/2020	*5/18/2020	8/7/2020	10/16/2020
	557A-C	3/13/2020	*5/18/2020	8/7/2020	10/16/2020
Shop Alpha Coy Vehicle Wash Rack	563	3/13/2020	*5/18/2020	8/7/2020	10/16/2020
Navy Water Treatment Plant	576, 580, 597	3/11/2020	6/15/2020	NA	NA
US Navy Laboratory	585, 585A	3/11/2020	6/15/2020	NA	10/16/2020
Camp Covington Enlisted Dining Facility (Galley)	586	3/18/2020	*5/18/2020	8/7/2020	10/16/2020
Camp Covington Boiler	586A	2/26/2020	*5/18/2020	7/29/2020	10/16/2020
Orote Point Lanes	600	1/17/2020	5/8/2020	7/14/2020	10/16/2020
USDA Dog Kennel	641	2/7/2020	6/30/2020	NA	NA
DeCA Guam Central Distribution	780, 3201, 3202	3/19/2020	6/30/2020	NA	NA
US Navy Dental Clinic	1	2/5/2020	4/13/2020	7/17/2020	12/16/2020
Infusion Coffee and Tea	1658	1/15/2020	4/2/2020	NA	NA
NEX Minimart and Subway	1760	2/7/2020	4/13/2020	NA	NA
MWR Auto Hobby Shop	1982A	2/7/2020	5/8/2020	7/24/2020	12/15/2020
Child Development Center	1983	1/13/2020	4/22/2020	7/15/2020	12/15/2020
NEX Laundromat	1988	1/17/2020	4/9/2020	7/2/2020	12/15/2020
Sierra Wharf BOWTS	1999	2/6/2020	6/18/2020	7/22/2020	12/15/2020
	2105, 2108, 2109, 2112, and 2113	1/27/2020	4/6/2020	7/28/2020	12/15/2020
U AH	3268	3/9/2020	5/14/2020	NA	NA
	4430/4430PP	3/9/2020	*6/18/2020	NA	NA
P	4451	2/26/2020	5/18/2020	7/29/2020	12/15/2020
Demineralization Plant	4907	2/26/2020	6/18/2020	8/10/2020	12/15/2020
Steam Air Water Plant (Victor Wharf Boiler)	6025	*2/26/2020	*6/18/2020	*7/22/2020	12/16/2020
Polaris Point BOWTS	CNRAF	*2/6/2020	*6/18/2020	*7/22/2020	12/15/2020

Victor Wharf BOWTS	CNRVW	*2/6/2020	*6/16/2020	*7/22/2020	12/16/2020
Sierra Wharf Package Boiler	PB-4	2/26/2021	*6/18/2020	*7/22/2020	12/16/2020
Uniform Wharf Package Boiler	PB-5	*2/26/2020	*6/18/2020	*7/22/2020	12/16/2020
MWR Facilities Maintenance Warehouse	SP1	2/7/2020	5/8/2020	na	NA
Veteran's Affairs Clinic	22	2/19/2020	6/11/2020	N/A	NA
Child Development Center NH	10	2/18/2020	6/11/2020	na	1NA
	3000, 3001, 3008	3/11/2020	5/20/2020	N/A	NA

Source: BOS Contractor IWDCP Quarterly Report (CDRL-CV).

Note: N/A means listed facilities were removed.

Italicized inspection date(s) conducted outside reporting period

Some facility names are redacted for OPSEC reason.

* Facilities are either secured or not accessible due to COVID-19 restrictions.

Fifty-one (51) industrial / commercial facilities located within the MS4 permitted area were visited at least once every quarter for good housekeeping inspection. A total of one hundred thirty-six (136) inspections were conducted during this reporting period. All possible stormwater quality issues noted during the inspections are documented and forwarded to NBG Environmental program coordinator for corrective action.

NBG also maintains an inventory of various hazardous waste accumulation points. There are currently thirty (30) satellite accumulation sites (SAS), three (3) less than 90-day and one (1) Conforming Storage Facility (CSF) for hazardous waste located within the MS4 permit area. Regular inspections are afforded to each of these facility in accordance with 40 CFR 264. This inspection also checks for the facility good housekeeping practices to prevent and reduce discharge of pollutants into the environment particularly the MS4 system from these sites. Table 10 below provides a summary of NBG hazardous waste accumulation sites inspection activities:

Table 10: CY 2020 Hazardous Waste Facilities Inspection

HW Facility	No. of Facility	Inspection Frequency	Total Facility Inspections
SAS	30	Weekly	1560
90-Day Facility	3	Weekly	156
CSF	1	Weekly	52

Sources: Hazardous Waste SAS Weekly Inspection Report – HAZWASTE IDIQ N40192-20-R-1800
Multiple SAS's are located within some facility / compound.

A total of one thousand seven hundred sixty-eight (1768) hazardous waste facility inspection were conducted during this monitoring period.

Past Year Activities:

- The NBG industrial / commercial facilities inspection program description was included and part of Contract N40192-16-D-0002 deliverables.

- Implemented industrial facility inspection through the HAZWASTE IDIQ contractor's reports.
- Implemented good housekeeping inspections to various hazardous waste facilities through HAZWASTE IDIQ contractor's deliverables.

Future Year Activities:

- Modify and / or expand the environmental compliance contract to meet the NBG MS4 SWMP industrial / commercial facilities inspection requirements.
- Continued implementation of hazardous waste facilities inspection program.
- Update existing inspection procedures and checklist language to meet the NBG MS4 SWMP requirements.

Section 4 Monitoring Requirements

The development of the NBG MS4 comprehensive monitoring and assessment program is part of the SWMP development contract. This program will outline the technical and management procedures that will be implemented to meet the monitoring requirement of the MS4 permit.

4.1 Consolidated Information Tracking System

The permit requires NBG to develop an electronic tracking system to monitor compliance activities and facilitate data collection process that will be included in the annual reports. This required consolidated information tracking system is dependent on the MCM BMPs and other requirements that will be specified in the final SWMP.

An interim information tracking spreadsheet was created for the purpose of submitting the 2nd annual report.

Past Year Activities:

- Description of the NBG's MS4 comprehensive monitoring and assessment program was included in the SWMP development contract.
- Developed an interim consolidated information spreadsheet to track and monitor the 2nd annual report MS4 permit requirements.

Future Year Activities:

- Develop a consolidated information tracking system based on the NBG SWMP document requirements.
- Develop and implement compliance activity schedule based on the information tracking system.

4.2 Sampling and Monitoring Program

The NBG SWMP development project will include a sampling and monitoring program that will identify NBG's stormwater outfalls subject for monitoring. The program will also describe the outfall sample collection, dry weather field inspection and their respective reporting schedules to Guam and U.S. EPA. This program is required and will be implemented during the next reporting period.

Included in the SWMP development contract is the procurement of programmable portable auto-samplers, manual field sampling and portable testing instruments. This is to ensure that the dry weather field inspection / ORI and the sampling and monitoring program can be implemented as early as possible.

NBG will implement the wasteload allocation (WLA)-based effluent limitations describe in Part 4.1.1 of the permit.

NBG plans to utilize the services of the EV Compliance IDIQ contractor to comply with the sampling and analytical requirements of the permit. The contractor is required to use laboratory's that are accredited to perform DMR sample analysis.

Past Year Activities:

- Description of the NBG MS4 sampling and monitoring program was included and part of the SWMP development contract deliverables.
- Identified a contract mechanism to implement the NBG MS4 monitoring program.
- Purchase of appropriate field sampling and testing equipment was included in the SWMP development contract to ensure early implementation of the MS4 sampling and monitoring programs

Future Year Activities:

- Review of the completed SWMP sampling and monitoring requirements and assess existing resources. Program managers to submit request for funding if applicable.
- Modify and / or expand the environmental compliance contract to meet the NBG SWMP sampling, monitoring, recordkeeping and reporting requirements.

4.3 Program Evaluation

This requirement is pending completion of the SWMP development project and the availability of sampling and analytical results. NBG plans to adopt a three-tiered approach for future evaluation of its MS4 program implementation. Program effectiveness assessment will include the following step:

- Assessment of program operations
- Evaluation of social indicators through surveys
- Outfall / Effluent quality monitoring.

These steps will be used to document progress towards water quality goals and reduction of pollutants in the MS4 system. Evaluation of NBG's overall MS4 program effectiveness will be included during the next reporting period.

Past Year Activities:

- Not applicable / required during this reporting period. Written strategy for the determination of NBG SWMP effectiveness is part of N40192-16-D-002 contract deliverables.

Future Year Activities:

- Implement a multi-tiered approach to evaluate the NBG MS4 program effectiveness, a written description of which will be provided in the completed SWMP document.

4.4 NBG MS4 Annual Report

NBG's annual reports will be completed and submitted in accordance with the MS4 permit and the completed SWMP requirements. Reports will include a summary of collected data and the required assessment of the results.

4.4.1 Annual Monitoring Reports

No stormwater quality monitoring conducted during this reporting period. NBG will begin conducting scheduled sampling and monitoring upon identification of priority outfalls.

Annual analytical reports will be submitted in a format and schedule consistent with the requirements specified in Part 5.2.3.7 of the permit.

Past Year Activities:

- Not applicable / required during this reporting period. Identification of sampling points and priority outfalls is part of N40192-16-D-002 contract deliverables.

Future Year Activities:

- Implement sampling and monitoring based on the program that will be described in the completed SWMP document.
- Develop list of pollutants of concern (POC), in addition to POC's listed in Table 3 of the permit, which may be observed from stormwater discharges specific to a particular outfall where applicable.
- Submit annual monitoring report based on the requirements specified in Part 5.2.3.7 of the permit.

4.4.2 Year 1 Annual Report

This Year 2 reporting period annual report will be submitted to US EPA Region 9 NPDES Permit Section and Guam EPA's Water Pollution Control Program Manager upon review and approval of the IEPD. This annual report, with some redacted information for operational security reasons, will be made available online next to the NBG completed SWMP document:

- http://www.cnic.navy.mil/regions/jrm/installations/navbase_guam/

4.4.3 Fiscal Analysis

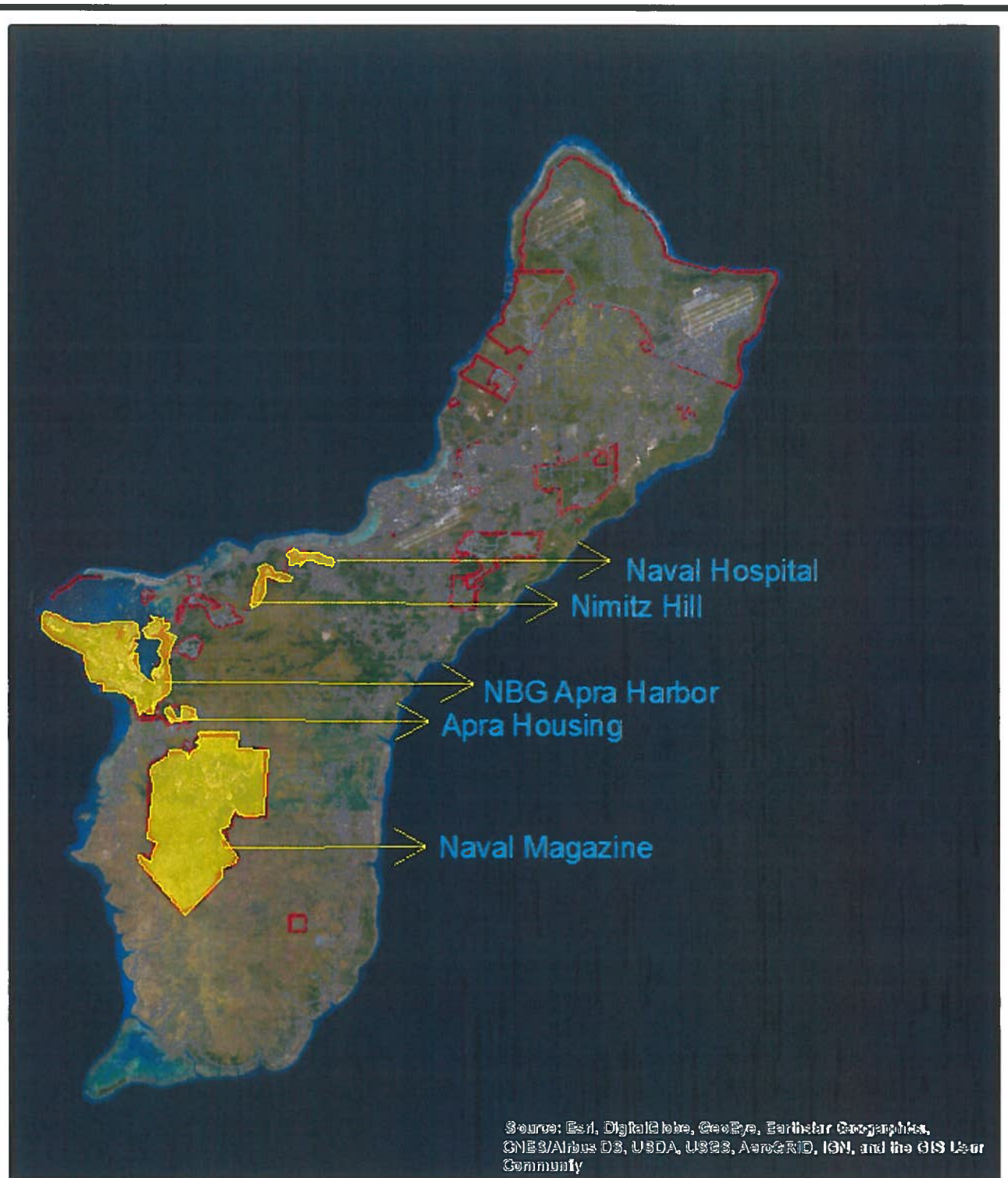
See Appendix G: NBG MS4 Year 2 Fiscal Analysis

Section 5 REFERENCES

- Naval Base Guam Municipal Separate Storm Sewer System (MS4) NPDES Permit GUS040000
- Storm Water Management Plan (SWMP) development Contract - Contract Number N40192-16-D-002
- OPNAVINST 5090.1E
- NAVBASEGUAMINST 5090.3 Series
- Naval Base Guam Base Operations Support Contract (BOSC) - Contract N62742-19-C-1175
- HAZWASTE IDIQ Contract N40912-20-R-1800
- EV Compliance IDIQ Contract N40192-20-R-1820
- NAVFAC Marianas Grounds Maintenance and Tree Trimming Service Contract - Contract N40192-20-D-9000
- NAVFAC Marianas Integrated Solid Waste Management and Pavement Clearance Services Contract - Contract N40192-16-R-7000
- 2014 DPRI Construction Program Comprehensive Construction Stormwater Pollution Prevention Plan (CSWPPP)
- Naval Base Guam Multi-Sectoral General Permit Stormwater Pollution Prevention Plan (MSGP SWPPP)

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Appendix A: NBG MS4 Permitted Facilities Overview



Map of:
**NBG MS4 Permitted
Facilities Overview**

Prepared For:
NFM Environmental

Document Generated from GeoReadiness Explorer



NOT TO SCALE
FOR OFFICIAL USE ONLY

Appendix B: Naval Base Guam MS4 General Permit Schedule Summary
Permit Effective Date: February 1, 2019

Permit Citation	Description of Requirement	Permit Language	Due Date	Permit Year
Part 2 1, 3 4 1 and 3 5 1	Begin implementation of permit requirements, including existing local construction and post-construction requirements	Effective date of permit (EDOP)	01-Feb-2019	1
Part 4 1 1	Develop TMDL compliance plan and implementation schedule (if appropriate), otherwise TMDL requirements take effect 18 months after permit effective date	12 months after EDOP	01-Feb-2020	2
Part 2 2	Develop SWMP consistent with permit requirements for first 18 months	18 months after EDOP	01-Aug-2020	2
Part 2 3 1	Ensure adequate legal authority			
Part 2 4 1	Develop enforcement response plan			
Part 3 1 1	Develop public education program			
Part 3 2 1	Develop public participation program			
Part 3 4 1	Update existing construction site controls program to be consistent with permit			
Part 3 5 1	Update existing new development/redevelopment controls program to be consistent with permit			
Part 3 6 1	Develop municipal operations plan			
Part 5 1	Develop information tracking system			
Part 5 2 1	Develop monitoring plan			
Part 3 3 1	Develop IDDE program	Two years after EDOP	01-Feb-2021	3
Parts 3 4 5 1 1 1 and 3 4 5 1 3 1	Training for construction inspectors and plan reviewers			
Part 3 6 5 2 1 4	Implement pollution prevention plan for municipal operations			
Part 3 6 12	Develop trash reduction plan			
Part 3 6 13	Develop asset management plan			
Part 3 7 1	Develop program for industrial/commercial sources			
Part 3 3 7 2	Training for general field staff regarding IDDE program	Three years after EDOP	01-Feb-2022	4
Part 3 5 7	Develop retrofit plan			
Part 3 7 3 2	Notification of industrial/commercial of program requirements	Four years after EDOP	01-Feb-2023	5
Part 3 1 3	Assess effectiveness of public education program			
Part 5 4 1	Submit annual report	90 days after each reporting period		
Appendix B, Section 1	Permit reapplication	Within 6 months of permit expiration		
Parts 3 6 12 1 6 and 3 6 12 3	Compliance with trash reduction requirements	As soon as practicable but not to exceed 15 years from development of plan		
Parts 4 1 1	Compliance with TMDL requirements	As soon as practicable (if permit is modified to add a compliance schedule)		

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
MS4 PM	Program Management: NBG to develop a stormwater management plan (SWMP) that outline how the installation will comply with the permit requirements	n.a	Develop a SOW / GE / RFP for the SWMP Development	One-time / As required	Completed 7/25/2019	N/A	N/A	N/A	N/A
		n.a	Award the SWMP Development through A/E/IDIQ	One-time / As required	Completed 9/24/2019	N/A	N/A	N/A	N/A
		n.a	Review and accept SWMP	One-time / As required	Pending completion of the SWMP development project Tentative Date 05/10/20	SWMP Completion July 2021	N/A	N/A	N/A
		n.a	Submit SWMP to USEPA	One-time / As required	Pending completion of the SWMP development project	Pending completion of the SWMP development project	N/A	N/A	N/A
		n.a	Adequate legal authority	One-time / As required	Included in the SWMP document project - pending completion of the SWMP development	Included in the SWMP document project - pending completion of the SWMP development	N/A	N/A	N/A
		n.a	Enforcement and tracking	One-time / As required	Included in the SWMP document project - pending completion of the SWMP development	Included in the SWMP document project - pending completion of the SWMP development	N/A	N/A	N/A
		n.a	Fiscal analysis	Annual	Fiscal analysis / request for funding to follow CNIC POM schedule	Fiscal analysis / request for funding to follow CNIC POM schedule. Reassess upon availability of MCMs	N/A	N/A	N/A
		n.a	NBG MS4 SWMP Annual Update	As required	N/A	N/A	As Required	As Required	As Required
		1A	Electronic Media Outreach	Continuous / As required	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
		1B	Stormwater P2 Education Program	Continuous / As required	Pending completion of the SWMP development project. On going program - NBG provided SWP1 / SPCC to 23 industrial / commercial facilities as part of the NBG existing SWPPP, SPCC and new-hire orientation program	Pending completion of the SWMP development project. On going program - NBG provided SWP1 / SPCC to 23 industrial / commercial facilities as part of the NBG existing SWPPP, SPCC and new-hire orientation program.			

**Appendix C: Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System**

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
MCM 1	Public Education and Outreach	1C	Informational Materials	Continuous / As required	Pending completion of the SWMP development project Project include development of stormwater pollution prevention informational materials	Received 500 copies each of the following informational brochures (7.17.20): 1. Getting to Know Stormwater 2. Getting to Know Your Drainage System 3. Trash Reduction 4. Illicit Discharge 5. Why is Water Quality Important?			
		1D	Surveys	Continuous / As required	N/A	Pending completion of the SWMP development project			
MCM 2	Public Involvement / Participation	2A	Public Review of NRG MS4 SWMP	Continuous / As required	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
		2C	Public Participation Campaign	Continuous / As required	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
MCM 3	Illicit Discharge Detection and Elimination	3A	MS4 Mapping	One-time / Update as required	Pending completion of the SWMP development project	Pending completion of the SWMP development project Initial MS4 submitted to GRX for posting pending approval process			
		3B	Priority Outfall Identification	One-time / Update as required	Pending identification of outfalls SWMP development project	7/24/20: Submit proposal for 7 priority outfalls to Guam EPA Pending GLEPA's evaluation and approval			
		3C	Dry Weather Field Screening	Annual	Pending identification of outfalls SWMP development project	Pending identification of outfalls SWMP development project completion			
		3D	Illicit Discharge Reporting	Continuous / As required	Pending completion of the SWMP development project NRG implemented existing reporting and response procedures for hazardous material and sewer overflow / spills	Pending completion of the SWMP development project NRG implemented existing reporting and response procedures for hazardous material and sewer overflow / spills			
		3E	IDDE Source Investigation and Elimination	As required	Pending implementation procedure / SWMP development project	Pending implementation procedure / SWMP development project			

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
MCM 4	Construction Site Run-off Control Program	4A	Issue a policy/memo to adopt the 2014 DRRP CSWPPP and other SWMP Requirements	One-time / As required	Developed a draft memorandum for FEAD to adopt the 2014 DRRP CSWPPP for future construction projects that is >1 acre of land disturbance.	2/24/20 Memo issued to FEAD to inform and clarify Public Works Department construction management staff on the requirements and expectations of monitoring contractor's stormwater control measures and use of Best Management Practices (BMPs) as U.S. Naval Base Guam (NBG) transitions to a Municipal Separate Storm Sewer System (MS4) permit	N/A	N/A	N/A
		4B	Construction site inventory electronic tracking system to include a list of active construction sites, C/GP coverage, Site-Specific SWPPP	Annual	Interim tracking system created. May need modification upon completion of the SWMP document.	NBG maintains inventory of all construction activities via e-projects website. Interim tracking system for construction with > 1 acre land disturbance was created for inspection purposes.			
		4C	Documented site-specific SWPPP review process	As required	Qualified construction activity NOI coverage approval prior to issuance of MS4 permit. Standard project SWPPP review conducted.	Qualified construction activity NOI coverage approval prior to issuance of MS4 permit. Standard project SWPPP review conducted on 1 upcoming projects >1 acre. Performed inter-departmental review on stormwater requirements for 3 future construction sites with >1 Acre of land disturbance.			
		4D	Construction site inspection and enforcement, including pre-land disturbance	Quarterly	Qualified on-going construction activities broke grounds prior to MS4 issuance. Implemented standard contract project SWPPP inspections.	Qualified on-going construction activities broke grounds prior to MS4 issuance. Implemented standard contract project SWPPP inspections.			
			Document and report the number of sites with active ERP and/or C/GP as applicable	Quarterly / As required	In most cases, contractors were required to perform corrective action on site.	In most cases, contractors were required to perform corrective action on site.			

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
			Secure copies of construction site inspector training records	As required	On-going	3 inspectors completed BMP inspection training			
	Permittee Staff training	4E	Maintain copies of the initial and renewal construction site inspector training records	Annually	N/A	Pending completion of SWMP and formal program implementation			
			Maintain copies of the initial and renewal construction plan reviewers training records	Annually	N/A	Pending completion of SWMP and formal program implementation			
	Construction Site Operator Education and Public Involvement	4F	Construction site operator education program will be implemented in conjunction with MCM 1	Annually	N/A	150 copies of construction site erosion and sediment control educational brochure distributed			
			Public involvement regarding construction sites will be implemented in conjunction with MCM 2	Annually	N/A	Public involvement regarding construction sites will be implemented in conjunction with MCM 2			
MCM 5	Post Construction Stormwater Management Program	5A	Issue a policy memo to adopt the 2014 DPR/C SWPPP and other SWMP Requirements	One-time / As required	Developed a draft memorandum for FEAD to adopt the 2014 DPR/C SWPPP for future construction projects that is >1 acre of land disturbance	2/24/20 Memo issued to FEAD to inform and clarify Public Works Department construction management staff on the requirements and expectations of monitoring contractor's stormwater control measures and use of Best Management Practices (BMPs) as U.S. Naval Base Guam (NBG) transitions to a Municipal Separate Storm Sewer System (MS4) permit	N/A	N/A	N/A
		5B	Develop and implement a Command Policy to require appropriate management of post-construction site storm water runoff. Adopt 2014 DPR/C SWPPP	Annual	Pending completion of the SWMP development project				

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
		5C	Describe the long-term maintenance program in the SWMP document. Document and report the number and description of maintenance, repairs and retrofit performed.	As required	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
		5D	Post-Construction Stormwater Control Measures Inventory	Annual	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
		5E	Inspection and Enforcement	Quarterly	Pending completion of the SWMP development project	Pending completion of the SWMP development project			
		6A	ITC and Good Housekeeping Program	One-time / As required	Pending completion of the SWMP development project. Implemented existing P2 and goodhousekeeping program to prevent and reduce discharge of pollutants in the MS4 system.	Update as required	Update as required	Update as required	Update as required
		6B	Storm Sewer and Catch Basin Maintenance and Inspection	Annual	Pending program description in the SWMP document. NHBG implemented existing grounds maintenance contract that includes cleaning of stormwater conveyances.	Pending program description in the SWMP document. NHBG implemented existing grounds maintenance contract that includes cleaning of stormwater conveyances.			
		6C	Street Sweeping and Cleaning	Annual	Pending program description in the SWMP document. NHBG implemented existing grounds maintenance contract that includes street sweeping and cleaning.	Pending program description in the SWMP document. NHBG implemented existing grounds maintenance contract that includes street sweeping and cleaning.			

**Appendix C: Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System**

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
MCM 6	Pollution Prevention / Good Housekeeping Program	6D	Pesticide, Herbicide and Fertilizer Application Management	Annual	Pending completion of the SWMP project. NHG implemented existing grounds maintenance contract that includes provisions, including implementation of integrated pest management measures, in minimization of landscaping-related pollutant generation	Pending completion of the SWMP project. NHG implemented existing grounds maintenance contract that includes provisions, including implementation of integrated pest management measures, in minimization of landscaping-related pollutant generation			
		6E	Employee Training Program	Annual	Training program implementation covered under MCM 1	Training program implementation covered under MCM 2			
		6F	Contractor Management	Continuous / As required	All Navy Contracts comes standards with Spec Item 2.10 requiring Contractors to comply with the Installation's environmental compliance programs that includes stormwater management	All Navy Contracts comes standards with Spec Item 2.10 requiring Contractors to comply with the Installation's environmental compliance programs that includes stormwater management			
		6G	Debris Control Program	As required	Program description pending completion of the SWMP development project	Program description pending completion of the SWMP development project			
		6H	Industrial / Commercial Sources	Continuous / As required	Program description pending completion of the SWMP development project. NHG implemented on-going program to minimize pollutant discharge. Formal implementation for MS4 compliance pending completion of written procedures	Program description pending completion of the SWMP development project. NHG implemented on-going program to minimize pollutant discharge. Formal implementation for MS4 compliance pending completion of written procedures			
		7A	Consolidated Information Tracking System	One-time / As required	Interim tracking system created. Final format pending completion of the SWMP development project	Interim tracking system created. Final format pending completion of the SWMP development project			
		7B	Monitoring and Assessment Program	Annual	Pending completion of the SWMP development project / implementation of monitoring program	Pending completion of the SWMP development project / implementation of monitoring program			

Compliance Tracking Summary

Appendix C: Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

MCM ID	Description of BMP / Requirements	Element ID	Best Management Practice (BMP)	Frequency	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)
7 MR	Monitoring Requirements	7C	Program Evaluation	Annual	Pending full implementation of the completed SWMP. Incorporate in future MS4 annual report in accordance with Section 5.4.2 of the permit.	Pending full implementation of the completed SWMP. Incorporate in future MS4 annual report in accordance with Section 5.4.2 of the permit.			
		7C	Annual Report	Annual	Prepare and submit NBG MS4 annual report in accordance with Section 5.4.2 of the permit.	Prepare and submit NBG MS4 annual report in accordance with Section 5.4.2 of the permit.			

MCM 1

Appendix C. Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
1A	Stormwater Education/Outreach Program: NBG to provide a comprehensive program	Electronic media outreach: SWMP document will be submitted to PAO and posted on CNIC website and NBG's Facebook page. Provide support / mechanism to allow viewers to navigate links MS4 documents including annual MS4 Annual Report	Year 2 - Year 5	Annual	JRM PAO NFM/NBG EV MS4 Compliance Contractor
		Review/Assess program effectiveness	Year 2 - Year 5	Annual	
1B	Provide stormwater pollution prevention education to base tenants: NBG to provide annual SPCC and SWPP training to groups that may be critical in complying with the MS4 permit requirements including IDDE identification and reporting procedure.	Track and report the number of annual training sessions performed and facilities trained.	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor
		Track and report the number of educational materials distributed to existing personnel / facilities	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor
		Update new-hire / indoctrination presentation to include MS4 requirements	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor
1C	Informational Materials: Provide stormwater pollution prevention brochures to existing base tenants. Distribute brochure to new personnel via housing office and/or during employee orientation / indoctrination.	Track and report the number of stormwater brochures that were provided to NBG personnel including housing, schools and commercial tenants	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor
		Create new materials if needed and update existing informational materials based on the effectiveness assessment	Year 2 - Year 5		NFM/NBG EV MS4 Compliance Contractor
		Create new materials designed specifically for construction site operators	Year 2 - Year 5		NFM/NBG EV MS4 Compliance Contractor
1D	Surveys: Design a statistically valid survey program to assess changes in public awareness and behavior resulting from implementation of the public outreach program	1. Track and assess MCM1 BMPs effectiveness through statistically valid survey	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor

MCM 2

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
2A	Public Review of NBG MS4 SWMP: Post a public draft of the SWMP on NBG CNIC website and allow Base tenants to review the document and encourages them to comment and propose revision.	Posting of redacted copy on CNIC website / NBG Facebook page.	Year 2 - Year 5	Continuous	JRM PAO NFM/NBG EV MS4 Compliance Contractor
		Provide a point of contact for receiving proposed changes and revisions	Year 2 - Year 5	Continuous	JRM PAO NFM/NBG EV MS4 Compliance Contractor
2B	Illicit Discharge Public Reporting Hotline: NBG will assign a hotline to facilitate tenant's reporting of illicit discharge to MS4	Update existing procedure hazardous material and sewer spill reporting to include other forms of illicit discharges such as construction site discharges	Year 2 - Year 5	As required	Service Support Center NFM/NBG EV MS4 Compliance Contractor
		Advertise Hotline in GOV and Contractor's vehicle	Year 2 - Year 5	Continuous	Service Support Center NFM/NBG EV MS4 Compliance Contractor
2C	Public Participation Campaign: Partnering with interested Base organizations and provide opportunities to these groups to participate in the SWMP BMPs implementation	Track and report number of clean-up events	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor Participating Unit
		Track and report number of stenciled storm drains	Year 2 - Year 5	Annual	NFM/NBG EV MS4 Compliance Contractor Participating Unit

MCM 3

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
3A	MS4 Mapping¹: Develop and maintain a geo-database MS4 map of NBG. Identify outfall locations and generate information using GIS/GPS data sources. This map is updated to note any changes, if any.	Document and report the number of outfalls mapped in the SWMP document	Year 2	As Required	Environmental Department, MS4 SWMP Development contractor
		Document and report the number of inlets/catch basins and other stormwater conveyances in the SWMP document	Year 2	As Required	
3B	Priority Outfall Identification¹: Conduct outfall reconnaissance inventory to gather outfall pertinent information. Perform desktop evaluation of all permit area to identify priority outfalls.	Identify priority outfalls in the SWMP document	Year 2	As Required	Environmental Department, MS4 SWMP Development contractor, Guam EPA
		Secure approval from Guam EPA for the proposed priority outfalls	Year 2		
3C	Dry Weather Field Screening: conduct dry weather field inspections to detect illicit discharges and perform follow-up investigation if indicator benchmark levels are exceeded.	Document and report the number of dry weather outfall inspections (annually for the priority outfall + 20% of remaining outfall)	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP BOS Contractor
		Document and report the number of outfalls with dry weather discharges	Year 2 - Year 5	Annual	
		Document and report field screening results and other pertinent information	Year 2 - Year 5	Annual	
		Document and report follow-up investigation for benchmark exceedance	Year 2- Year 5		
3D	IDDE Source Investigation and Elimination: develop a program and implement a variety of tools to trace illicit discharge problems back up the pipe to isolate the specific source or improper connection that generates the discharge	Document and report the number of proactive inspections and response to reported spills	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP BOS Contractor
		2. Document and report the number of illicit discharges identified	Year 2 - Year 5	Annual	
		3. Document and report the number of illicit discharges eliminated	Year 2 - Year 5	Annual	
		4. Illicit discharge education and training	Year 3		

1 - Will be included in the SWMP Document

MCM 4

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion					Frequency	Responsible Entity/Department
			Y1	Y2	Y3	Y4	Y5		
4A	Construction SW Management Policy: NBG to adopt the 2014 Comprehensive SWPPP for the Guam Military Relocation DPRJ Construction Program for erosion and sediment control on new construction and redevelopment projects greater than or equal to one acre.	Document issuance of CSWPPP adoption policy / memorandum	✓	✓				As Required	Installation
		Document and report any changes with the policy.	N/A	N/A*				As Required	
4B	Construction Site Inventory: Electronic tracking system to include a list of active construction sites and other pertinent information i.e. CGP coverage, Site-Specific SWPPP.	Document and report the number of active construction sites operating under the erosion and sedimentation control requirements of the 2014 DPRJ CSWPPP	✓	✓				Continuous / As-required	Installation, FEAD, MCAG
4C	Site-specific SWPPP Review Process: Document the Operator's site-specific SWPPP review process and approval.	Document and report the number of construction site plans reviewed and approved.	N/A*	N/A*				Continuous / As-required	Installation, FEAD, MCAG
		Maintain copies of site-specific SWPPP review checklist and approval document	N/A*	N/A*				Continuous / As-required	
4D	Construction site inspection and enforcement, including pre-land disturbance: Government construction representatives inspect all construction projects and enforce erosion, sedimentation, and waste controls.	Document and report the number of construction site inspections.	✓	✓				Continuous / As-required	Installation, FEAD, MCAG
		Document and report the number of sites with active ERP and/or CGP as applicable.	✓	✓				Continuous / As-required	
		Maintain copies of construction site inspector training records.	✓	✓				Continuous / As-required	

Notes: * Projects broke ground prior to issuance of MS4 permit

MCM 4

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion				Frequency	Responsible Entity/Department
4E	Permittee Staff training: Implement a training program for NBG staff whose primary duties are related to the construction stormwater program.	Maintain copies of the initial and renewal construction site inspector training records.	✓	✓			Continuous / As-required	Installation, FEAD, MCAG
		Maintain copies of the initial and renewal construction plan reviewers training records.	N/A	N/A			Continuous / As-required	
4F	Construction Site Operator Education & Public Involvement: Implement a program for distribution of educational materials for construction site operators, and provide a mechanism for public to report stormwater issues regarding construction site operation.	Construction site education program will be incorporated in MCM1.	N/A	N/A			Continuous / As-required	Installation, FEAD, MCAG
		Construction site public involvement program will be incorporated in MCM2	N/A	N/A			Continuous / As-required	

Notes * Projects broke ground prior to issuance of MS4 permit.

MCM 5

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
	Post-Construction Stormwater Management Program¹ . Develop, implement, and enforce a program to address post-construction storm water runoff from new development and redevelopment projects IAW the 2006 CNMI and Guam Stormwater Management Manual and 2010 Guam Transportation Stormwater Drainage Manual	Adopt DPRI CSWPPP Acceptable post construction BMPs	Year 2 - Year 5	As Required	
		Describe a retrofit plan for existing developed sites in the SWMP document	Year 2 - Year 5	As Required	
5B	Site-Plan Review¹ . Implement a strategy for evaluating LID projects.	Adopt DPRI CSWPPP Acceptable post construction BMPs and LID	Year 2 - Year 5	As Required	Installation, FEAD, MCAG
		As-built drawings and certifications	Year 2 - Year		
5C	Long-Term Maintenance: Develop and implement a maintenance and inspection program that ensures long-term effectiveness of stormwater retention / detention systems	Describe the long-term maintenance program in the SWMP document	Year 2 - Year 5	Annual	Environmental Department, SWMP Development Contractor, MS4 Compliance Contractor
		Document and report the number and description of maintenance, repairs and retrofit performed	Year 2 - Year 5	Annual	
5D	Post-Construction Stormwater Control Measures Inventory: Maintain an inventory of structural post-construction stormwater control measures.	Develop an inventory of structural control measures (Electronic track system)	Year 2 - Year 5	Annual	SWMP Development Contractor, MS4 Compliance Contractor, FEAD, MCAG
5E	Inspection and Enforcement: Describe inspection procedure in the SWMP Document	Conduct and document inspection at least once during the permit term	Year 2 - Year 5	As required	Environmental Department, SWMP Development Contractor, MS4 Compliance Contractor, FEAD, MCAG
		Conduct performance standard inspection within 1 week after of project completion	Year 2 - Year 5	As required	

1 - Will be included in the SWMP Document

MCM 6

Appendix C: Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
6A	P2 and Good Housekeeping Program¹: Develop and implement an operation and maintenance program that aims to prevent and reduce pollutant runoff into the storm drainage system.	Inventory of stormwater control inventory / mapping	Year 2 - Year 5	One-time / As required	Environmental Department, SWMP Contractor
		Facility assessment	Year 2 - Year 5	One-time / As required	
		Implementing procedures	Year 2 - Year 5	One-time / As required	
		Inspection and visual monitoring including industrial/commercial stormwater sources.	Year 2 - Year 5	Weekly / Quarterly	
6B	Storm Sewer and Catch Basin Maintenance: NBG to implement a maintenance and repair program for the stormwater system.	Document and report inspections of storm drainage system system.	Year 2 - Year 5	Annual	Environmental Department, MS4 EV1 Contractor, MS4 SWMP Contractor PWD
		P2 Installation operations assessment	Year 2 - Year 5	Annual	
		P2 measures inspection	Year 2 - Year 5	Quarterly	
6C	Street Sweeping and Cleaning: Implement sweeping program for roads, streets and parking lots.	Prioritization and scheduling	Year 1 - Year 5	Annual	Environmental Department, MS4 EV1 Contractor, PWD
		Document and report the number of sweeping performed	Year 1 - Year 5	Annual	
6D	Pesticide, Herbicide and Fertilizer Application management: Evaluation of material use for grounds maintenance activities.	Included herbicide restriction procedure and reporting in the grounds maintenance contract	Year 2 - Year 5	Annual	Environmental Department, FSC and Contractors
		Included integrated pest management measures in the grounds maintenance contract	Year 2 - Year 5	Annual	
6E	Employee Training Program: All appropriate employees are required to attend annual stormwater P2 training. The training includes topics such as illicit discharge identification, good housekeeping, spill prevention, and construction site inspections.	To be covered under MCM1.	Year 2 - Year 5	Annual	Environmental Department, EV1 Contractor

MCM 6

Appendix C Interim NAVAL BASE GUAM
MS4 Consolidated Information Tracking System

6F	Contractor Management: Requires Contractors to comply with MS4 requirements	Contracts includes language to comply with the Installation's environmental compliance program	Year 2 - Year 5	Annual	Environmental Department, NFM ACQ
6G	Debris Control Program: Installation to develop a debris control program aimed at reducing discharge of pollutants into the MS4 system	Include a trash reduction plan in the SWMP document	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP Contractor
		Include an asset management plan in the SWMP document	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP Contractor
6H	Industrial / Commercial Stormwater Sources: Installation to develop and implement a program aimed reducing pollutant discharge from Industrial / Commercial sources	Develop an inventory of industrial / commercial facilities	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP Contractor
		Develop an inspection and enforcement procedures	Year 2 - Year 5	Annual	Environmental Department, MS4 SWMP Contractor

Note(s): 1 - Will be included in the SWMP Document

Appendix C: Interim NAVAL BASE GUAM
MS4 Consolidated Information System

Monitoring Requirements

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation / Completion	Frequency	Responsible Entity/Department
7A	Consolidated Information Tracking System: Develop an electronic tracking system to monitor information required of the permit	Develop and maintain an excel-based requirements tracking system	Year 2 - Year 5	Annual	Environmental Department, MS4 Compliance Contractor
7B	Monitoring and Assessment Program: NBG to develop a comprehensive monitoring plan	Develop a sampling program that identifies the locations and frequency of monitoring	Year 2 - Year 5	Annual	Environmental Department, Contracted Laboratory, MS4 Compliance Contractor
		Track and report investigation TRE Plan where applicable	Year 2 - Year 5	Annual	
		Quality Assurance Manual	Year 3 - Year 5	Annual	
7C	Program Evaluation: NBG to assess the effectiveness of BMP's describe in the SWMP	Use monitoring results to assess effectiveness of BMPs	Year 2 - Year 5	Annual	Environmental Department, Contracted Laboratory, MS4 Compliance Contractor
		Document NBG compliance with the permit conditions	Year 2 - Year 5	Annual	
		Review SWMP and BMPs to maximize program implementation effectiveness	Year 3 - Year 5	Annual	
7D	Annual Report: Refers to permit requirements, provide description in quantifiable terms, and status of activities under taken	Track and report past year's activities	Year 2 - Year 5	Annual	Environmental Department, MS4 Compliance Contractor
		Provide description of SWMP document effectiveness	Year 2 - Year 5	Annual	
		Summary of monitoring data	Year 2 - Year 5	Annual	
		Planned activities for the following year	Year 2 - Year 5	Annual	
		Detailed fiscal analysis	Year 2 - Year 5	Annual	

**Appendix F: 2020 Naval Base Guam
MS4 Construction Site Inspection Summary**

Project and Contractor Information	Project Site	NPDES ID#	SWPPP Review Process		NOI Coverage Effective Date	NOI Coverage Expiration Date	Pre-Construction Inspection (Date, Inspection Report Reference)	BMP Inspection Dates*	Post Construction Inspection (Date, Inspection Report Reference)
			Reviewed By / Date	Approved By / Date					
Project #JFY10 J0007 Contract Watts Inc. POC: James Kirk Title: Project Manager Phone: 633-4534 Email: james.kirk@watts-con.com	Water Front HQ Building	GUR10000F			12/25/2017	2/15/2022		*	Pending project completion
								26-Jun-20	
								29-Jul-21	
								21-Dec-20	
Project # P - 535 Contract Watts Inc. POC: Maria Theresa Delfin Title: Environmental Manager Phone: 633-4534 Email: Teresa.Delfin@watts-con.com	Sanitary Sewer System Recapitalization	GUR10000Y	All three (3) projects broke ground prior to issuance of the NBG MS4 Permit. SWPPP review conducted in accordance with the CGP requirements.		11/19/2018	2/15/2022	All three (3) projects broke ground prior to issuance of the NBG MS4 Permit. Inspections conducted in accordance with the CGP requirements.	*	Pending project completion
								10-Jun-20	
								8-Sep-20	
								17-Dec-20	
Caddell Nan A JV POC: Andy So Title: EV Manager Phone: 687-4200 Email: evalencia@nanhawaii.com	Apra Medical / Dental Clinic	GUR100013			1/3/2019	2/15/2022		*	Pending project completion
								26-Jun-20	
								29-Jul-20	
								21-Dec-20	

* March 24, 2020 scheduled inspections with the Government was cancelled due to COVID-19 concerns. Inspections were conducted by contractors EV representatives and reports provided to the Government.