



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BUCHANAN
390 CRANE LOOP, SUITE 303
FORT BUCHANAN, PUERTO RICO 00934-4206

REPLY TO
ATTENTION OF:

Directorate of Public Works

September 29, 2016

Ms. Carmen Guerrero - Pérez, Director
United States Environmental Protection Agency
Multimedia Permits and Compliance Branch
City View Plaza II - Suite 7000
48 Road 165, Km 1.2
Guaynabo, PR 00968-8069
ATTN: Sergio Bosques

2016 SEP 29 AM 10:19
US EPA
OCEPD
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Dear Ms. Guerrero-Pérez :

In order to comply with Section 1.7.2 of the General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4), enclosed is a copy of the NPDES MS4 Notice of Intent (NOI) for U.S. Army Garrison Fort Buchanan (PRR04001F). An advance electronic copy of the NOI was delivered via email to Mr. Sergio Bosques.

The technical point of contact for additional information is Mr. Osvaldo I. Fantauzzi, Pollution Prevention Manager, at (787) 707-2553. Should you have any questions, please feel free to contact me at (787) 707-3575.

Sincerely,


Anibal Negron, P.G., R.E.M.
Chief, Environmental Division

Enclosure

United States Environmental Protection Agency
National Pollutant Discharge Elimination System
Notice of Intent (NOI) for coverage under the Small Municipal Separate
Storm Sewer System (MS4) General Permit (PRR040000) for Puerto Rico

UNITED STATES ARMY GARRISON FORT BUCHANAN NPDES MS4 NOI

Part A. General Information

1. Name of Municipality or Organization: United States Army Garrison Fort Buchanan
2. Type: ☒ Federal ☐ State ☐ Municipality ☐ Other: _____
3. Existing Permittee: ☒ Yes ☐ No If yes, provide EPA NPDES Permit Number: P R R 0 4 0 0 1 F
4. Location Address:
 - a. Street: 34 South Gate Road
Directorate of Public Works – Environmental Division
 - b. City: Fort Buchanan State: PR Zip Code: 00934
5. Mailing Address:
 - a. Street: 34 South Gate Road
Directorate of Public Works – Environmental Division
 - b. City: Fort Buchanan State: PR Zip Code: 00934
6. Telephone Number: 787-707-3575 Fax: 787-707-3570
7. E-mail: anibal.negron1.civ@mail.mil
8. Standard Industrial Classification (SIC) Code (see instructions for common codes): 9 1 9 9
9. Latitude: _____ Longitude: _____
18 ° 24 ' 50 " N (degrees, minutes, seconds) 66 ° 7 ' 50 " W (degrees, minutes, seconds)

(Approximate center of the regulated portion of the MS4)

Part B. Primary MS4 Program Manager Contact Information

1. Name: Mr. Aníbal Negrón
2. Position Title: Environmental Division Chief
3. Stormwater Management Program (SWMP) Location (web address or physical location):
Directorate of Public Works – Environmental Division
4. Mailing Address:
 - a. Street: 34 South Gate Road
 - b. City: Fort Buchanan State: PR Zip Code: 00934
5. Telephone Number: 787-707-3575
6. E-mail: anibal.negron1.civ@mail.mil

Part C. Eligibility Determination

1. Endangered Species Act (ESA) determination complete? ☒ Yes ☐ No
 - a. Eligibility Criteria (check all that apply): ☐ A ☐ B ☐ C ☐ D ☒ E ☐ F
2. National Historic Preservation Act (NHPA) determination complete? ☒ Yes ☐ No
 - a. Eligibility Criteria (check all that apply): ☐ A ☒ B ☐ C ☐ D

Part D. Map/Boundaries

1. MS4/Organization Description of regulated boundaries (narrative):

Fort Buchanan comprises 746 acres and is located in Guaynabo County, near San Juan, Puerto Rico, at approximately: latitude 18° 24' 50" North; longitude 66° 7' 50" West. Fort Buchanan is a regulated small MS4 within a U.S. Census urbanized area.

The large majority of Fort Buchanan's storm water discharges to El Toro Creek (known as Quebrada Santa Catalina outside of Fort Buchanan) which flows to the northwest into the Malaria Control

Canal and eventually discharges to San Juan Bay. El Toro Creek is a concrete lined ditch for much of its path through Fort Buchanan. The community of Tintillo in Guaynabo County, where Quebrada Santa Catalina originates, discharges municipal storm water to El Toro Creek upstream of the southern forested area of Fort Buchanan. The northeastern portion of Fort Buchanan (the 600-area) discharges storm water via drainage ditches directly to the Malaria Control Canal. The Amelia industrial park located off-post, just south of the 600-area also discharges via the same drainage ditches, upstream of the Fort Buchanan discharges. A small area occupied by a radio antenna drains to a man-made lake on-post which has a flood-control overflow via the Fort Buchanan storm water piping system to El Toro Creek. The lake is wholly surrounded by Fort Buchanan, but is not owned or maintained by Fort Buchanan. CEMEX, a cement company, owns the lake, but does not use it and it is commonly known as CEMEX Lake. The farthest eastern portion of Fort Buchanan drains via Rio Puerto Nuevo into San Juan Bay.

2. Location Map/Boundaries. A location map must be attached showing the pertinent city, town, wards, or boundaries, the boundaries of the Small MS4, including surface water body(s), and the "urbanized area" (UA) when applicable.

Is map attached? ☒ Yes ☐ No

Part E. MS4 Infrastructure (if covered under the 2006 general permit)

1. Estimated Percent of Outfall Map Complete? (*Section 4.2.3 of 2006 general permit*): 100 %
- a. If 100% of 2006 requirements are not met, enter an estimated date of completion:
- b. N/A (MM/DD/YYYY)
- c. Web address where MS4 map is published: An electronic copy is included with NOI submission.

Part F. Bylaw/Ordinance Development (if covered under the 2006 general permit)

1. Illicit Discharge Detection and Elimination (IDDE) authority adopted? ☒ Yes ☐ No
- a. Effective Date or Estimated Date of Adoption: 05/09/2011
(MM/DD/YYYY)
2. Construction/Erosion and Sediment Control authority adopted? ☒ Yes ☐ No
- a. Effective Date or Estimated Date of Adoption: 05/09/2011
(MM/DD/YYYY)

☒ Yes ☐ No

(MM/DD/YYYY)

List the names of all surface waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments. You may attach additional information.

| Waterbody Segment that receives flow from the MS4 | Number of Outfalls into receiving waterbody segment | Have any monitoring been performed to outfalls? (Yes/No) | List of Pollutant(s) causing impairment (if applicable) | List of TMDL Pollutant (s) (if any) |
|---|--|--|---|--|
| San Juan Bay Estuary System (PREE13A1) Caño Control de La Malaria/San Juan Bay | 7 | Yes Sampling Stations: (USGS 50048580 And USGS 50048565) | Enterococcus Bacteria (1700) Low Dissolved Oxygen (1200) Oil & Grease (1900) pH (1000) Thermal Modifications(1400) Turbidity (2500) | Fecal Coliforms (1700)* *Approved September 2012 |
| San Juan Bay Estuary System (PREE13A2) Rio Puerto Nuevo/San Juan Bay | 1 (Intermittent drainage stream) | No | Ammonia (0600) Low Dissolved Oxygen (1200) Oil & Grease (1900) pH (1000) Thermal Modifications (1400) Total Coliforms (1700) Turbidity (2500) | Fecal Coliforms (1700) * *Approved September 2012 |

Part H. Summary of Stormwater Management Program (SWMP) under the 2006 Small MS4 General Permit

For every measurable goal and associated Best Management Practice (BMP) listed in the adopted program, provide the following information (You may include additional pages):

| BMP Description or BMP ID (e.g. MCM-1) | Goal Achieved? (Yes/No) | Continued in next permit cycle? (Yes/No) | Who was the targeted audience? Explain reason for not achieving goal. | Modification(s) to goals or BMP for next permit cycle |
|---|--------------------------------|---|--|--|
| MCM-1: PUBLIC EDUCATION AND OUTREACH | | | | |
| Hold quarterly Environmental Quality Control Committee (EQCC) meeting with interested residents and workforce to enlist volunteers to sit on storm water working committee (discuss all storm water minimum control measures) | Yes | No | Residents and Workforce | N/A |
| Distribute storm water awareness fact sheets and other materials | Yes | Yes | General Public | Ongoing BMP |
| Write/publish article on illicit discharge detection and elimination – specifically the discharge from Amelia Industrial Park | Yes | Yes | General Public | Ongoing BMP |
| Environmental office facilitates high school participation in World Water Monitoring Day | Yes | Yes | High School students | Ongoing BMP |

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|--|-----|-----|--|--|
| Develop and prominently display storm water awareness posters (Don't Dump Here; pet waste; preventing grease discharges; car care) | Yes | Yes | General Public | Ongoing BMP |
| Translate English version of promotional items to Spanish | Yes | Yes | General Public (Spanish speaking) | Ongoing BMP |
| Sponsor a table with storm water information at Earth Day event; allow volunteers to assist | Yes | Yes | General Public | Ongoing BMP |
| Sponsor speaker from environmental office at a brown bag lunch session in the DPW Operations and Maintenance (O+M) break room | Yes | Yes | DPW Operations and Maintenance Employees | Use A/V media material to increase frequency and vary location |
| Write/publish article on pollution prevention and good housekeeping practices for storm water | Yes | Yes | General Public | Ongoing BMP |
| Publish a fact sheet on proper household hazardous waste disposal | Yes | Yes | Residents and General Public | Ongoing BMP |

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|--|-----|-----|---------------------------|------------------------|
| Sponsor a table with illicit discharge detection and elimination information at Earth Day event; allow volunteers to assist | Yes | Yes | General Public | Ongoing BMP |
| Host a speaker from Environmental Office regarding illicit discharge program | Yes | Yes | General Public | Use external resources |
| Write/publish article about construction and post-construction storm water BMPs | Yes | Yes | General Public | Ongoing BMP |
| MCM-2: PUBLIC PARTICIPATION AND INVOLVEMENT | | | | |
| Recruit interested residents and employees as volunteers for the storm water program at Army Schools | Yes | Yes | Residents and Employees | Ongoing BMP |
| Take storm water recommendations from public during Town Hall Meeting | Yes | Yes | General Public | Ongoing BMP |
| Establish neighborhood storm water watch and hotline (environmental office number) | Yes | Yes | Residents | Ongoing BMP |
| Sponsor tree planting in conjunction with Tree Day to reduce erosion in vulnerable areas. Invite school children to help. Get volunteers to assist | Yes | Yes | General Public/Boy Scouts | Ongoing BMP |

| | | | | |
|---|-----|-----|--------------|-------------|
| and solicit donations (plants/saplings) | | | | |
| Inform newcomers and elicit volunteers for the storm water program via the resident welcome package | Yes | Yes | Residents | Ongoing BMP |
| MCM-3: ILLICIT DISCHARGE DETECTION AND ELIMINATION | | | | |
| Introduce illicit discharge detection program during EQCC meeting | Yes | No | EQCC | N/A |
| Maintain golf course and main washrack wash systems as proposed in P2 Plan | Yes | Yes | Golf course | Ongoing BMP |
| Articulate policy regarding illicit non-storm water discharges | Yes | Yes | Installation | Ongoing BMP |
| Perform storm water outfall assessment | Yes | Yes | Installation | Ongoing BMP |
| Establish and implement a dry weather inspection program | Yes | Yes | Installation | Ongoing BMP |
| Complete floor drain survey of shops, warehouses, and motor pools | Yes | Yes | Installation | Ongoing BMP |

| | | | | |
|---|-----|-----|--------------|-------------|
| Sponsor a speaker from the environmental office to discuss ways the public can help identify and eliminate illicit discharges | Yes | No | EQCC | N/A |
| Update storm sewer map, if needed | Yes | Yes | Installation | Ongoing BMP |
| MCM-4: CONSTRUCTION SITE RUNOFF CONTROL | | | | |
| Establish draft policy memorandum requiring BMP review for new site plans | Yes | No | Contractors | N/A |
| Begin writing model SWMP for small construction sites | Yes | No | Contractors | N/A |
| Make storm water construction BMPs available to contractors | Yes | Yes | Contractors | Ongoing BMP |
| Finalize model SWMP for small construction sites | Yes | Yes | Contractors | Ongoing BMP |
| Establish final policy memorandum requiring BMP review for new site plans | Yes | Yes | Installation | Ongoing BMP |
| Establish quarterly inspection program for all small construction sites, | Yes | Yes | Installation | Ongoing BMP |

| | | | | |
|---|-----|-----|----------------|-------------|
| with guidelines for report preparation and submission | | | | |
| Draft a policy to consider low-impact development (LID) at all new construction sites | Yes | Yes | Installation | Ongoing BMP |
| Finalize a LID policy | Yes | No | Installation | N/A |
| Review effectiveness of policy directive requiring BMP reviews for all new site plans | Yes | Yes | Installation | Ongoing BMP |
| Identify critical points where LID should be implemented | Yes | Yes | Installation | Ongoing BMP |
| Develop a policy to employ buffer zones where feasible at all construction sites near surface water | Yes | Yes | Installation | Ongoing BMP |
| Write/publish article about construction and post-construction storm water BMPs | Yes | Yes | General Public | Ongoing BMP |
| MCM-5: POST- CONSTRUCTION STORM WATER MANAGEMENT | | | | |

| | | | | |
|---|-----|-----|--------------|-------------|
| Perform a storm water outfall assessment | Yes | Yes | Installation | Ongoing BMP |
| Establish draft policy memorandum requiring post-construction BMP review for completed construction sites | Yes | Yes | Installation | Ongoing BMP |
| Begin writing model storm water plan with post-construction guidelines | Yes | No | Installation | N/A |
| Make storm water post-construction BMPs available to contractors | Yes | Yes | Contractors | Ongoing BMP |
| Finalize model storm water plan with post-construction BMPs | Yes | No | Installation | N/A |
| Finalize policy memorandum requiring BMP review for post-construction | Yes | No | Installation | N/A |
| Establish regular inspection program for small construction sites in post-construction phase | Yes | Yes | Contractors | Ongoing BMP |
| Develop a draft policy to consider LID at new (post-construction) sites | Yes | No | Installation | N/A |

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|--|-----|-----|----------------|-------------|
| Finalize a LID policy for major post-construction BMPs | Yes | No | Installation | N/A |
| Choose the most eroded outfalls from the outfall assessment and develop plans to reduce the velocity of the storm water while repairing the eroded areas | Yes | Yes | Installation | Ongoing BMP |
| Maintain records of post-construction inspections | Yes | Yes | Installation | Ongoing BMP |
| Write/publish article about construction and post-construction storm water BMPs | Yes | Yes | General public | Ongoing BMP |
| Consider LID when developing plans to reduce the velocity of storm water while repairing the eroded areas of the most eroded outfalls | Yes | Yes | Installation | Ongoing BMP |
| MCM-6: POLLUTION PREVENTION AND GOOD HOUSEKEEPING | | | | |
| Improve Fats, Oils, and Grease (FOG) Management | Yes | Yes | Installation | Ongoing BMP |
| Incorporate GH inspections into existing Resource Conservation and Recovery Act | Yes | Yes | Installation | Ongoing BMP |

| | | | | |
|---|-----|-----|--------------|-------------|
| (RCRA) inspections | | | | |
| Discuss ways to improve GH at EQCC meeting | Yes | No | EQCC | N/A |
| Develop employee training program for P2 and GH – to be incorporated into existing training, particularly contracting office representatives and credit card holders. This training may be incorporated into existing training on Green Procurement and the Fort Buchanan EMS | Yes | Yes | Employees | Ongoing BMP |
| Maintain golf course and main post wash rack wash systems as proposed in P2 Plan | Yes | Yes | Golf Course | Ongoing BMP |
| Conform to Environmental Management Systems (EMS) International Standards Organization (ISO) 14001 requirements | Yes | Yes | Installation | Ongoing BMP |

| | | | | |
|---|-----|-----|-----------------------------------|-------------|
| Provide storm water compliance training to Environmental and Military Officers; incorporate into existing training | Yes | Yes | Environmental Compliance Officers | Ongoing BMP |
| Develop and prominently display a storm water awareness poster (pet waste) | Yes | Yes | General public | Ongoing BMP |
| Inform public about proper FOG disposal | Yes | Yes | General public | Ongoing BMP |
| Begin employee training for P2 and GH | Yes | Yes | Employees | Ongoing BMP |
| Write/publish article on pollution prevention and good housekeeping practices for storm water | Yes | Yes | General public | Ongoing BMP |
| Develop and prominently display a storm water awareness poster (car care) | Yes | Yes | General public | Ongoing BMP |
| Examine three year spill history in the SPCC plan and determine actions that would deter further spills, sewer overflows, or bypasses | Yes | Yes | Installation | Ongoing BMP |

Part I. 2016 Stormwater Management Program (SWMP) Summary

Public Education and Outreach (See Section 2.4.2 for detailed information of required BMPs):

| BMP Description or BMP ID (e.g. MCM-1) | Education Topic (Identify the issue your BMP is educating the public about.) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|---|---|--|--|
| MCM-1: PUBLIC EDUCATION AND OUTREACH | | | |
| Incorporate into the existing and ongoing public education and outreach efforts a reference to pollutants of concern for impaired and TMDL waters discharges. | Fecal Coliform, Pollutant of Concern and TMDL of impaired waters (San Juan Bay). | Ongoing public education efforts as referred in existing SWMP for the installation. | Incorporation and emphasis of TMDL POC (fecal coliforms) into the written public education and outreach material. |

Public Involvement and Participation:

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will inspire public participation, e.g. special events, volunteer sampling and monitoring efforts, household hazardous waste recycling, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., participation, amount of sampling performed, waste collected, etc.) |
|--|---|---|
| Incorporate public input to assess and modify, as necessary, existing elements of the SWMP Program to reduce the discharge of pollutants of concern. | Modification and incorporation of new elements to be added to the SWMP and recommended by public involvement and participation will promote ownership of the program by the residents and the general public at the installation. | Modifications incorporated to the SWMP arising from public participation will be registered and will be incorporated into the SWMP. |

Illicit Discharge Detection and Elimination:

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will identify and remove illicit connections from the MS4, e.g. new regulations, investigation practices, removal of illicit connections, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., adoption of bylaws/ordinances, amount of investigation performed, identified and removed illicit connections, etc.) |
|---|--|---|
| Assess existing program elements and modify the SWMP, as necessary, to incorporate new discharge detection strategies to continue to reduce pollutant discharges. | Modification and incorporation of new elements to be added to the SWMP will promote continuous improvement of the illicit discharge detection and elimination program and assess the effectiveness of existing mechanisms. | New initiatives will be incorporated to the existing SWMP to detect and eliminate illicit discharges of pollutants of concern to water bodies, mainly sanitary sewer overflows (SSO). Annual assessment review of newly implemented IDDE strategies will be performed and documented. |
| Develop and revise the existing storm water system map. | The revision and update of the storm water system map should include enough detail to serve as an effective real time tool to implement the IDDE. | Map completion progress report on an annual basis until final completion. |
| Develop an outfall inventory that identifies each outfall and interconnection discharging from the MS4. | The outfall inventory shall provide a framework for tracking inspections, screenings and other activities under the IDDE program. | Outfall inventory report |
| Establish an IDDE Program in writing and implementation. | The IDDE and its implementation will systematically find and eliminate sources of non-allowable non-storm water from the MS4. | A written IDDE Program within a year from re-authorization under the MS4 permit and implementation within three years. |

Construction Site Stormwater Runoff Control:

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will help control stormwater runoff at construction sites, e.g. new regulations, construction practices, inspection protocols, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., adoption of bylaws/ordinances, amount of inspections performed and sites actively regulated, etc.) |
|--|--|--|
| Assess existing program elements and modify the SWMP, as necessary, to optimize procedures and incorporate new elements. | Reduce pollutant discharges arising from small and large construction activities by means of operational practices which reviews, eliminates and controls the potential impacts to storm water. | Update the program procedures, if deemed necessary, within a year from re-authorization under the MS4 permit. |

Stormwater Management in New Development and Redevelopment:

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will control stormwater runoff from properties after they are developed, e.g. new regulations, practices, or resources for contractors to use Low Impact Development (LID), etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., adoption of bylaws/ordinances, amount of implemented practices, development of capacity building resources, etc.) |
|--|---|---|
| Assess existing program elements and modify the SWMP, as necessary, to regulate runoff from new development and redevelopment projects and training. | Reduce pollutant discharges arising from runoff small and large construction activities by means of operational practices and regulatory restrictions which review, eliminates and controls the potential impacts to storm water runoff. | Modifications to the SWMP shall be incorporated within one (1) year from authorization. |

| | | |
|--|--|--|
| Reinforce the inspection program to ensure post construction stormwater control measures operate correctly and with an optimal maintenance plan. | Assure all established measures are properly maintained and operated in a manner consistent with its intent to control storm water runoff. | An inspection report available for review. |
|--|--|--|

Good Housekeeping and Pollution Prevention in Municipal Operations:

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will mitigate stormwater runoff at municipal properties or through municipal activities, e.g. installation of structural stormwater controls on the municipal properties, new practices to reduce pollutant exposure to rain events, runoff management, trainings, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., structural BMPs installed, SOPs developed and implemented, etc.) |
|--|--|--|
| Assess program elements described in the existing SWMP and develop and implement new elements, as necessary to continue reducing discharges of pollutants. | Implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from owned areas. | Modifications to the SWMP shall be incorporated within one (1) year from authorization. |

Part J. Application Certification and Signature

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 gathered and evaluated 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.

Signature: _____

Print Name: Mr. Anibal Negron

Title: Chief Environmental Division Date: 09/29/2016

Telephone: 787-707-3575 / 3576

Email: anibal.negron1.civ@mail.mil



