Municipality/Organization: United States Coast Guard Base Cape Cod (formerly USCG Air Station Cape Cod*)

EPA NPDES Permit Number: MAR05A109

MassDEP Transmittal Number: W035615

Annual Report Number & Reporting Period: **Year 14** **April 1, 2016 – March 31, 2017**

NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2017)

Part I. General Information

Contact Person: Marc Robert Title: Environmental Protection Specialist

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Certification:

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.

Signature: E. Kirkp Digitally signed by KIRKPATRICK.ELIZABETH.L.1269864539 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USCG, cn=KIRKPATRICK.ELIZABETH.L.1269864539 Date: 2017.04.20 11:25:37 -04'00'

Printed Name: Elizabeth Kirkpatrick

Title: Director, Environmental Health and Safety

Date: 22 April 2017

*Please note that the footprint of the U.S. Coast Guard on Joint Base Cape Cod Massachusetts, formerly known as USCG Air Station Cape Cod, was renamed Coast Guard Base Cape Cod August 2014.

Part II. Self-Assessment

The US Coast Guard Base Cape Cod (BCC) has completed the required self-assessment and has determined that this federal facility is in compliance with all permit conditions. Measurable Goals identified for Permit Year 14 were attained. Coast Guard Base Cape Cod continues to focus on enhancing the quality of stormwater.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 14** (Reliance on non-municipal partners indicated, if any)	**Planned Activities**
1.	Welcome Aboard Packet	Environmental Health & Safety (EHS) / Marc Robert	Distribute a Welcome Aboard Package, containing information about the environment and stormwater pollution prevention	New members sign form documenting that they acknowledge the environmental and stormwater pollution prevention programs discussed. Signatures maintained on file in EHS.	Continue with activity
2.	Educational Pamphlet	EHS / Marc Robert	Develop educational pamphlet/ fact sheet for distribution	Stormwater pollution prevention pamphlet developed and provided to incoming personnel and distributed at training events.	Continue with activity
3.	Annual Awareness Training Presentation	EHS / Marc Robert	Conduct Stormwater Pollution Prevention presentation to all Facilities Engineering Department (FED) and Air Station personnel	Stormwater Pollution Prevention and SPCC presentations were provided to USCG FED personnel on 2 Nov 2016 and USCG Air Station personnel on 19 Oct 2016. Incoming personnel are provided Stormwater Pollution Prevention and SPCC training.	Continue with activity

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Coordinate with other agencies on Joint Base Cape Cod	EHS / Marc Robert	The Environmental and Energy Committee, which has representatives from all Commands on JBCC, will add to meeting agenda stormwater pollution prevention initiatives, share SWPPP information and support each other in implementation of the plan.	The Environmental and Energy Committee met quarterly in PY14. In addition, the Housing Advisory Council (HAC) represents all Commands on JBCC and has members whom live on Base meets monthly. Water quality and stormwater pollution prevention initiatives for base housing are passed through the HAC .	Continue with activity
2.	Trash pickup volunteer day	Housing / Terry Krout	Reduce litter and other solids from storm drains and water ways. Coordinate efforts with general public to clean up public lands around watersheds	Spring clean up conducted the third week in April 2016. Approximately 100 personnel participated in event. Organized additional curbside pick- up of bulk items from housing units April 2016.	Typically two clean up events are scheduled per year. Fall clean up was not completed in 2016 due to staff shortages. Continue with scheduling two clean up events in PY15.
3.	BCC household hazardous waste collection	EHS /Neil Gibb, Dan Morisset	Provide specific dates/times for BCC residents to properly dispose of household hazardous waste	BCC held one household hazardous waste collection event in PY14: Week of April 18, 2016. Provided information for Barnstable county household hazardous waste collection events.	Continue with localized household hazardous waste collection.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Map storm drains	EHS / Marc Robert	Develop storm drain map	Map developed. Latest addition 1/30/03.	Revise as needed to include 2016 MS4 mapping requirements.
2.	Illicit Discharge Detection and Elimination Program	EHS / Marc Robert	Develop Illicit Discharge Detection and Elimination Program	Previously included in a prior version of the EMS. Incorporated in all NEPA reviews.	Include document as required of the 2016 MS4 Stormwater Management Program.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Stormwater assessment at Pre-Construction Meetings	EHS/ Marc Robert	Pre-construction meetings held between Facility Engineering, contractors, COR (Contracting Officer Representative) and EHS	Pre-construction meetings are held formally or informally project dependant. Ensure all environmental and safety issues are covered.	Continue with activity
2.	Stormwater assessment as part of NEPA review.	EHS/ Marc Robert	Identify stormwater impacts and requirements at the time of the NEPA Review.	All projects were assessed during NEPA review. No projects required a Stormwater Construction Permit in this reporting year.	Continue with activity

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Post-construction run-off minimization	EHS / Marc Robert	Develop a process to identify post-construction run-off to prevent/ minimize impacts to water quality	Restoration of property is part of the contract, i.e. erosion control. The CG assigns a COR officer to all construction projects. The COR will not sign off on completion of the project (and payment is withheld) unless restoration of the property has occurred. This is part of the COR job requirement. One construction project was inspected for post construction run-off minimization this PY.	Continue with activity

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	EMS procedures for good housekeeping requirements	EHS / Marc Robert	Develop procedures in the EMS to address good housekeeping requirements.	Procedures will be included in the MS4 2016 Stormwater Management Program and is referred to in the 2016 EMS revision. Good housekeeping requirements are also identified in the BCC MSGP Stormwater Pollution Prevention Plan.	Continue with activity

2.	Employee Training	EHS / Marc Robert	Conduct annual training for all personnel to provide updates of any BMPs and new requirements while performing their jobs.	Stormwater Pollution Prevention and SPCC training was provided to applicable personnel on 2 November 2016 and 19 Oct 2016.	Continue with activity
3.	Catch basin cleaning	FED / Dave Riordan	Identify critical basin for cleaning and clean within in a two-year cycle.	Monitoring was conducted PY14; all catch basins were in fair to good condition.	Continue with activity
4.	Street Cleaning	FED / Dave Riordan	Sweep all city streets at least annually. Sweeping begins after the last snow/ frost and continues until completion.	On going.	Continue with activity
5.	Salt/ sanders maintenance	FED / Dave Riordan	Perform annual maintenance on salt/ sander to ensure proper function and set the dispersing rate to minimize dumping of loads.	On going.	Continue with activity

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<Not Applicable>>*

Part IV. Summary of Information Collected and Analyzed

The US Coast Base Cape Cod is committed to water quality. Although sustainable management of natural resources has been a priority for Base Cape Cod for many years, the NPDES Phase II Small MS4 Permit Program contributed to the evolution of successful management techniques and shift in cultural awareness. No data collected during Permit Year 14 requires further elaboration.

Part V. Program Outputs & Accomplishments (OPTIONAL)
(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2016 through March 31, 2017)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	y
Annual program budget/expenditures **	($)	n/a
Total program expenditures since beginning of permit coverage	($)	n/a
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		n/a

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	800
Stormwater management committee established	(y/n)	y
Stream teams established or supported	(# or y/n)	n/a
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	n/a
Shoreline cleaned since beginning of permit coverage	(mi.)	n/a
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	3 days/ year
▪ community participation **	(# or %)	n/a
▪ material collected **	(tons or gal)	20 gallons
School curriculum implemented	(y/n)	n/a

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X
Accompanying Regulation Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	43
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0%
▪ CADD	(%)	100%
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	30%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	100%
% of population on septic systems	(%)	0%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	n/a
Site inspections completed **	(# or %)	3
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and $)	0
Complaints/concerns received from public **	(#)	0

Post-Development Stormwater Management

	(Preferred Units)	Response
Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	n
Low-impact development (LID) practices permitted and encouraged	(y/n)	y

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	as needed
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	as needed
Qty of structures cleaned **	(#)	5 (during completion of repairs)
Qty. of storm drain cleaned **	(%, LF or mi.)	50LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	.5 ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial use on site

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	n/a
• Hourly or per basin contract rate **	($/hr or $ per basin)	federal facility
• Disposal cost**	($)	n/a
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(y/n)	n
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with vactor **	(%)	0

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	6/yr
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	6/yr
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	12 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	beneficial use onsite
Annual Sweeping Costs		40 man hours for 20 miles
• Annual budget/expenditure (labor & equipment)**	($)	n/a
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	n/a
• Disposal cost**	($)	n/a
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100
• % Roads swept with vacuum sweepers **	%	0 (sidewalks only)

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	61% reduction from PY13
▪ Herbicides	(lbs. or %)	5% decrease from PY13
▪ Pesticides	(lbs. or %)	No reduction
Integrated Pest Management (IPM) Practices Implemented	(y/n)	yes

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) Due to the steep grade in the vicinity of the single drinking water well protection area salt is applied as minimally feasible for safety. *Based on MADOT 2010 Road Salt and Sand study BCC implemented Pre-Wetting and near elimination of sand to align more with State Environmental goals.	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	*100% 0%
Pre-wetting techniques utilized **	(y/n or %)	yes
Manual control spreaders used **	(y/n or %)	no
Zero-velocity spreaders used **	(y/n or %)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	+100 lbs/ mile
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	-10 lbs/mi
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	no
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	yes

Water Supply Protection

Stormwater outfalls to public water supplies eliminated or relocated	# or y/n	n

Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	n
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	n