4/27/11

Municipality/Organization: United States Coast Guard Air Station Cape Cod

EPA NPDES Permit Number: MAR05A109

MassDEP Transmittal Number: W035615

Annual Report Number & Reporting Period: **Year 8** **April 1, 2010 – March 31, 2011**

NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2011)

Part I. General Information

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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: David M. Tessicini

Printed Name: David M. Tessicini

Title: Director, Environmental Health and Safety

Date: 21 April 2011

Part II. Self-Assessment

The US Coast Guard at Air Station Cape Cod (ASCC) 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 8 were attainted. Air Station 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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Welcome Aboard Packet	Environmental Health & Safety (EHS) / Elizabeth Kirkpatrick	Distribute a Welcome Aboard Package, containing information about the environment and stormwater pollution prevention	Welcome Aboard Package provided to new ASCC Personnel.	Continue with activity
2.	Educational Pamphlet	Environmental Health & Safety (EHS) / Elizabeth Kirkpatrick	Develop educational pamphlet/ fact sheet for distribution	Informational pamphlet developed and distributed at various functions, such as the annual Environmental Fair.	Continue with activity
3.	Water Quality Report (Consumer Confidence Report)	EHS / Elizabeth Kirkpatrick	Include Stormwater Pollution Prevention paragraph in annual Water Quality Report	Article about stormwater included in the 2009 Water Quality Report, which was published and distributed in the summer of 2010 to 3,000 staff, military personnel and residents on the MMR. Reports are also distributed to arriving personnel as part of the Welcome Aboard Package.	Article about stormwater to be included in the 2010 Water Quality Report, which will be published and distributed in the summer of 2011.

4.	Annual Awareness Training Presentation	EHS / Elizabeth Kirkpatrick	Conduct Stormwater Pollution Prevention presentation for all USCG personnel	Live Stormwater Pollution Prevention presentation provided to all USCG personnel in May 26, 2010.	Provide live Stormwater Pollution Prevention presentation to all USCG personnel April 27, 2011.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Coordinate with other agencies on the Massachusetts Military Reservation	EHS / David Tessicini	The Environmental Quality Committee, which has representatives from all tenant commands will add to meeting agenda (as appropriate) water quality and storm water pollution prevention initiatives, share SWPPP information and support each other in implementation of the plan.	EQC meeting held on 14 April 2010.	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	Fall clean up conducted on November 5, 2010 for 3 hours. Spring Clean up conducted April 16, 2010. Approximately 100 personnel participated in both events. Organized additional curbside pick- up of bulk items from housing units November 1-4, 2010 and April 12-15, 2010.	Continue with activity
3.	Upper Cape Cod household hazardous waste collection	EHS / Marc Robert	Volunteer at the Upper Cape Cod household hazardous waste collection. Over 50 tons of hazardous waste diverted from contaminating water quality.	Completed quarterly with the surrounding towns	ASCC does not plan to continue with activity in future years.
4.	Cape Cod Children's Museum Environmental Program	EHS / Elizabeth Kirkpatrick	Conducted an Environmental Fair at the Cape Cod Children's Museum during April Vacation 2010. Topics include water quality, air quality, renewable energy, natural resources, waste reduction, etc.	Conducted a week long environmental program at the Cape Cod Children's Museum. Providing a variety of activities focusing on environmental aspects for all children and parents who visited the museum during April Vacation	Host Environmental Fair for 160 5th graders from South Hadley, MA April 29, 2011.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Map storm drains	EHS / Elizabeth Kirkpatrick	Develop storm drain map	Map developed. Latest addition 1/30/03.	Update as needed
2.	Illicit discharge instruction	EHS / Elizabeth Kirkpatrick	Develop illicit discharge instruction prohibiting illicit discharge into storm drains	Instruction included in EMS	Revise as needed
3.	Illicit discharge detection	FED / Howard Greeson	Plan to detect and address illicit discharges	There is minimal concern for illicit discharges as no unauthorized connections can be made due to the nature of this federal facility. Nonetheless, outfalls are inspected monthly for signs of illicit discharge.	Maintain inspection activity and resulting documentation.

4.	Auto Hobby Shop	EHS / Marc Robert	Open an Auto Hobby Shop for use by residents as a location for free self service maintenance of vehicles to minimize illicit discharges from vehicle maintenance and improper disposal of waste oils, gasoline, antifreeze and solvents.	The Auto Hobby Shop opened in May 2009. The shop is fully contained indoors and no floor drains exist in the facility. The manager is trained in Hazardous Waste Management and spill prevention. The facility is inspected weekly as part of our pollution prevention program.	Continue with activity

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Stormwater assessment at Pre-Construction Meetings	EHS/ David Tessicini	Pre-construction meetings held between Facility Engineering, contractors, COTR (Contracting Officer Technical 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/ David Tessicini	Identify stormwater impacts and requirements at the time of the NEPA Review.	All projects were assessed during NEPA review. One project required a Stormwater Construction Permit.	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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	Post-construction run-off minimization	EHS / Elizabeth Kirkpatrick	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 COTR officer to all construction projects. The COTR will *not* sign off on completion on completion of the project (and payment is withheld) unless restoration of the property has occurred. This is part of the COTR job requirement.	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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1.	EMS procedures for good housekeeping requirements	EHS / Elizabeth Kirkpatrick	Develop procedures in the EMS to address good housekeeping requirements.	Procedures developed in 2005.	Continue with activity
2.	Employee Training	EHS / Elizabeth Kirkpatrick	Conduct annual training for all personnel to provide them updates of any BMPs and new requirements for them while performing their jobs.	Training completed May 26, 2010.	Next training scheduled for April 27, 2011.
3.	Catch basin cleaning	FED / Shawn Patterson	Identify critical basin for cleaning and clean within in a two-year cycle.	Work was completed in PY 07. No basins were rebuilt in PY8, however, monitoring continues. In PY 8 all catch basins were in fair to good condition	Continue with activity
4.	Street Cleaning	FED / Shawn Patterson	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 / Shawn Patterson	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
6.	Upper Cape Cod household hazardous waste collection	EHS / Marc Robert	Volunteer at the Upper Cape Cod household hazardous waste collection. Over 50 tons of hazardous waste diverted from contaminating water quality.	Completed quarterly with the surrounding towns.	ASCC does not plan to continue with activity in future years.

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 Guard Air Station Cape Cod (ASCC) is committed to water quality. Although sustainable management of natural resources has been a priority for Air Station 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 8 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, 2010 through March 31, 2011)

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 %)	500
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 **	(#)	6 days/ week
▪ community participation **	(# or %)	n/a
▪ material collected **	(tons or gal)	8.6 tons
School curricula implemented	(y/n)	y

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 %)	100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	all
% 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 %)	n/a
Tickets/Stop work orders issued **	(# or %)	n/a
Fines collected **	(# and $)	n/a
Complaints/concerns received from public **	(#)	n/a

Post-Development Stormwater Management

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)	Biannual (2009)
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	Biannual (2009)
Qty of structures cleaned **	(#)	none in 2010
Qty. of storm drain cleaned **	(%, LF or mi.)	none in 2010
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	none in 2010
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Bourne Landfill

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

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	once/yr
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	once/yr
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	5 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
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100
• % Roads swept with vacuum sweepers **	%	0

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
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)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	35 65 (in severe conditions we use 1:1, sand:salt ratio.)
Pre-wetting techniques utilized **	(y/n or %)	yes
Manual control spreaders used **	(y/n or %)	yes
Zero-velocity spreaders used **	(y/n or %)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% 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

Storm water 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	