

Municipality/Organization: U.S. Army Soldier Systems Center

EPA NPDES Permit Number: MAR042008

MassDEP Transmittal Number: W-041046

Annual Report Number Year 10
& Reporting Period: April 1, 2012 – March 31, 2013

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2013)**

Part I. General Information

Contact Person: G. Terence Garrahan Title: Environmental Engineer

Telephone #: 508-233-5993 Email: g.t.garrahan.civ@mail.mil

Mailing Address: U.S. Army Soldier System Center 15 Kansas Street, Natick, MA 01760-5049

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: 

Printed Name: G. Terence Garrahan

Title: Environmental Engineer

Date: 26 April 2013

Part II. Self-Assessment

U.S. Army Soldier Systems Center appears to be in compliance with all permit conditions.
Discharge locations inspected during past year both by boat and land, no illicit discharges identified.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PE01 Revised	Stencil Storm Drains <i>Mark Storm Drains</i>	ENVIRONMENTAL OFFICE	Job/Annual Inspection	The Environmental Office performed an annual inspection of storm drain markings.	Annual inspection of storm drain marking.
PE02 Revised	Information-Workforce Training	ENVIRONMENTAL OFFICE	Job	Spill response information emphasized in annual training letting employees know that should a release of hazardous materials occur, prompt notification and cleanup actions must be taken to minimize environmental impacts and reduce cleanup cost. New employees are required to complete environmental compliance training which is available on website.	June 2013 - train approximately 400 workforce employees annually concerning proper handling chemicals and emergency response measures needed should a spill occur to prevent release to an outfall. Information provided to workforce employees concerning complying with permit regulations.
PE03 Revised	Post Notices via website/email/training <i>Monthly Inspection outfalls</i>	ENVIRONMENTAL OFFICE	Job	No illicit storm water incidents identified during outfall inspections. During Fall 2012 a survey of outfall behind near building #42 was conducted over and no illicit discharges identified. Other outfalls were inspected	Continue monthly inspections of nearby catch basins and/or outfalls to identify illicit discharges.
Revised					
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PP01 Revised	Establish an NPDES Storm Water Coordinator	ENVIRONMENTAL OFFICE/Terry Garrahan	Appointment	Current coordinator has been responsible for submitting NPDES and storm water reports to State and EPA regulators.	Environmental Office will continue to assign an NPDES storm water coordinator.
Revised	Meet with local conservation commission	ENVIRONMENTAL OFFICE	Projects	Construction projects are reviewed to ensure proper coordination with the local Natick Conservation Commission. Environmental Assessments have been posted on website that can be viewed by public and regulators. Local officials are notified about EA availability.	In accordance with National Environmental Policy Act (NEPA) projects are reviewed concerning compliance with MS4 storm water permit. A Master Plan Draft Environmental Assessment has been prepared and posted for Public Review.
Revised	Training	ENVIRONMENTAL OFFICE/Terry Garrahan	Training provided	NPDES Coordinator receives recurring environmental compliance training on an annual basis. Facility-wide, annual training is provided for laboratory and industrial personnel. Training includes response measures needed to prevent spills, and contingency actions taken should a release occur.	NPDES storm water coordinator will continue to receive annual Contingency Plan training to help prevent releases of chemicals from outfalls.
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
ID01 Revised	Update storm water drain map	PWD	Updated map	Site plans have been updated to include latest oil water separator installation. Outfalls shown on GIS map.	Site plans and GIS map will continue to be updated should catch basin and/or discharge locations change.
ID02 Revised	Detect and address non storm water discharges	Environmental/PWD	Number outfalls inspected.	Outfalls and nearby catch basins have been inspected during the past year, and no illicit discharges detected. Outfalls are inspected monthly by stormwater coordinator for illicit discharges.	Continue to complete a dry weather inspection of outfalls to detect illicit discharges and to routinely monitor outfalls and/or nearby catch basins monthly.
Revised	Illicit discharge/illegal dumping hotline	Environmental	Establish Hotline	Spill Prevention response plans and emergency notification cards/flyers have contact numbers for HAZMAT Team Support and if spill is large enough, outside contractor support will supplement, to respond quickly to an incident. Notification requirements are an integral part of our HAZMAT plan.	Keep spill response, emergency notification instructions near chemical storage locations. Conduct periodic HAZMAT training exercise concerning preventing chemical releases. Order spill supplies for bulk POL locations.

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
CS01	Construction Site Storm Waste Control	ENVIRONMENTAL OFFICE/PWD	Projects	U.S. Army CORP of Engineers (ACOE) procedures are followed which include standard construction storm water controls. Environmental Office representatives participate in pre-design/construction meetings providing environmental compliance review.	COE construction projects will continue to include spec language to implement BMPs controlling storm water run-off.
Revised					
Revised					
Revised					

4a. Additions

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Post-Construction Storm Water Management	ENVIRONMENTAL OFFICE/PWD/COE	Follow-up inspections	Oil water separators (OWS) which have been installed throughout the facility are monitored by Environmental Office and contractor support to ensure that alarm systems work properly. OWS are periodically cleaned out.	Continue to perform inspections of outdoor bulk storage areas monthly and properly maintain leak detection alarm systems. Continue to periodically clean out OWSs.
Revised					
Revised					

5a. Additions

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
GH0GH01 Revised	Pesticide Management Plan	ENVIRONMENTAL OFFICE/PWD	Annual Update	The Pesticide Management Plan (PMP) is periodically reviewed. Vendors report active ingredients usage, and amounts compared to previous years. Overall pesticide usage reduced several years ago has remained low. The PMP requires pesticide minimization and application.	Follow PMP and ensure that applicator's licenses are current and coordinators are trained. Follow DoD mandated program requiring compliance with local, state and federal programs.
GH02 Revised	Maintenance of Oil Water Separators (OWS)	ENVIRONMENTAL OFFICE/PWD	Annual Inspections	OWS's alarm systems were inspected and OWS cleaned as needed.	OWS will be inspected and adequately maintained in 2013.
GH03 Revised	Inspect and clean out catch basins	ENVIRONMENTAL OFFICE/PWD	Annual Inspection	Catch basins were inspected during the past year.	Continue annual inspections and clean out as needed.
GH04	Sweep streets and parking lots	PWD	Annual parking lot, street sweep.	Roads and parking lot have been keep cleaned on a routine basis. Street sweeping during spring and fall base wide. Facility owns a street sweeper and has used it quite often.	Periodically facility sweep cleaning.
GH05 Revised	Earth Day Cleanup Event	PWD	Earth Day Week Cleanup	2012 Employee Cleanup day being conducted during the fall. Facility Earth Day program held on April 2013.	2013 Employee Cleanup days are planned usually in the spring and fall. Earth Day program held on April 18 2013.
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No additional information to add then what is already discussed in other sections of this annual report.

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, 2012 through March 31, 2013)

Programmatic

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

Education, Involvement, and Training

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

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					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

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

% of population on septic systems	(%)	
-----------------------------------	-----	--

Construction

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

Post-Development Stormwater Management

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

Operations and Maintenance

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

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• 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 vector **	(%)	

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

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)	

	(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	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/in mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/in mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

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