

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

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**EPA NPDES Permit Number: MAR042008**

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**MassDEP Transmittal Number: W-041046**

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**Annual Report Number Year 14**

**& Reporting Period: April 1, 2016 – March 31, 2017**

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

**Part I. General Information**

Contact Person: Terence Garrahan

Title: Environmental Engineer

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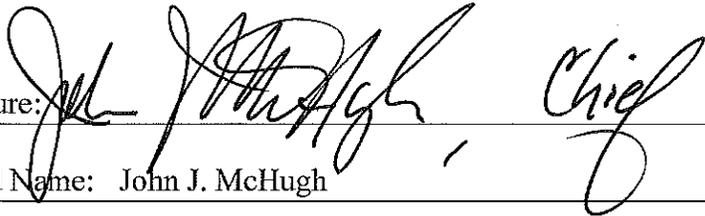
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Mailing Address: U.S. Army Soldier System Center 15 General Greene Ave, Natick, MA 01760-5049

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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: 

Printed Name: John J. McHugh

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Title: Chief DPW Environmental Office

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Date: 29 April 2017

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## **Part II. Self-Assessment**

U.S. Army Soldier Systems Center has implemented storm water control measures during the past 12 months. Outfalls were inspected by boat and/or land, during dry and wet weather. No illicit discharges were identified during this period.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities</b>
PE01 Revised	Drains Marking	ENVIRONMENTAL OFFICE	Job/Annual Inspection	Most storms drains from foundry include “no dumping” and that catch basis drain to waterway. Some older drain covers are marked with “no dumping” disk markers.	Annual inspection of storm drains, place additional marking as needed. When catch basins are upgraded, foundry grates with no dumping/waterways drain markings should be suggested. Paint may be added to hi-lite no dumping markings.
PE02 Revised	Information-Workforce Training	ENVIRONMENTAL OFFICE	Job	Spill response information emphasized in annual training.	June 2017- train approximately 400 workforce employees annually concerning proper handling chemicals and emergency response measures. Slide has been created to educate employees concerning storm water compliance.
PE03 Revised	Post Notices via website/email/training	ENVIRONMENTAL OFFICE	Job	Spill Response notifications flyers are posted near bulk POL areas and chemical locations. Annual website training includes storm water compliance.	Spill Response procedures are posted near bulk POL and chemical locations. Leadership will be informed during meetings concerning storm water compliance and preventing releases to lake.
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PP01	Establish a Storm Water Coordinator	ENVIRONMENTAL OFFICE/Terry Garrahan	Appointment	A Storm Water Coordinator has been appointed by a senior management.	Environmental Office will continue to assign a storm water coordinator responsible for ensuring compliance..
Revised					
	Meet with local conservation commission	ENVIRONMENTAL OFFICE	Projects	As needed, project reviews are coordinated with local Natick officials. Chief of Environmental Office has met with local town officials concerning proposed housing upgrade project.	Continue to coordinate project reviews with local officials concerning construction projects having impact to wetlands and/or lake.
Revised					
	Training	ENVIRONMENTAL OFFICE/Terry Garrahan	Training provided	Annual training is provided for laboratory and industrial personnel. Response measures needed to prevent spills, and contingency actions taken should a release occur are covered. Spill Response team members also received training. Environmental Office reviewed standard operating procedures (SOPs) to ensure that SOPs include statements such as “no dumping waste into drains”.	Continue workforce for personnel who handle oil/chemicals
Revised					
Revised					
Revised					

Revised					
Revised					

**2a. Additions**


Revised					
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### 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
ID01 Revised	Update storm water drain map as needed	PWD	Updated map	Storm water maps are available on DPW/Environmental online folders. GIS database also includes storm water outfalls.	Update map as needed and review GIS layers to ensure current.
ID02 Revised	Detect and address non storm water discharges	Environmental	Annual as needed	Outfalls, catch basins, dumpsters, POL storage locations have been inspected during the past year.	Continue dry weather inspections of outfalls, dumpsters and POL locations.
ID03 Revised	Identify discharges from non-compliant sources.	Environmental/DPW	As needed	No discharges from non-compliant sources observe..	Continue inspecting storm water system for non-compliance sources.
ID04 Revised	Illicit discharge/illegal dumping	Environmental/DPW	As needed	Spill response notification number (x5911) established for emergencies and for reporting illicit discharges/ dumping to facility police.	Spill Response number established.
ID05 Revised	Prohibit non-storm discharges into storm water system.	Environmental/DPW	As needed	No offenders required to be educated.	Educate offenders as needed.
Revised					

**3a. Additions**


#### 4. Construction Site Storm Water 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
CS01	Construction Site Storm Waste Control	ENVIRONMENTAL OFFICE/PWD	Projects	U.S. Army CORP of Engineers (COE) procedures are followed which include standard construction storm water controls. Environmental Office representatives participate in pre-design/construction meetings. No construction projects greater than an acre during this period. National Environmental Policy Act (NEPA) reviews were completed. New warehouse project was constructed is implementing Best Management Practices and Low Impact Design.	Continue project NEPA reviews, review Records of Considerations (RECs) and/or Environment Assessments for construction projects to ensure storm water impacts are mitigated and that necessary permits are obtained.
Revised					
Revised					
Revised					

#### 4a. Additions


**5. Post-Construction Storm Water 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
PC01	Post-Construction Storm Water Management	ENVIRONMENTAL OFFICE/PWD/COE	Follow-up inspections	Environmental Office, Project Officers and COE Engineering Construction Support inspected post-construction sites to ensure no illicit charges. Recent warehouse project as required implemented low impact design, no post construction issues storm water issues have been identified being caused by this completed project.	Continue to coordinate with Master Planner, Project Officers and COE Project Managers to ensure low impact design and best managements practices are being implemented to prevent post construction storm drainage problems. Follow-up inspection by Environmental Office and project engineers will be completed.
Revised					
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
GH01 Revised	Pesticide Management	ENVIRONMENTAL OFFICE/PWD	Annual Review	Pest contractor data was reviewed this past year and overall active ingredients used continue to be quite low.	Continue to review pest applicator usage data. Army Entomologist consultant already has issued a technical approval letter concerning latest performance work statement for pest control services which helps minimize pest usage for upcoming year.
GH02 Revised	Inspect and clean out OWS	ENVIRONMENTAL OFFICE/PWD	Annual Inspections	All OWS's were inspected and three OWS were cleaned.	OWS will be inspected and additional OWSs are planned to be clean in upcoming year.
GH03 Revised	Inspect and clean catch basins as needed	PWD	Annual Inspection	Catch basins were inspected during the past year and debris removed.	Continue annual inspections and clean out as needed.
GH04	Sweep Streets and parking lots	PWD	Annual parking lot, street sweep.	Completed. Parking lots visually inspected for sand and observed to be clean.	Planned to street sweep and visually observe parking lots for sand, request additional frequency based upon observations.
GH05 Revised	Clean-up day	PWD	Clean-up-day	Completed spring 2016.	Fall cleanup day planned after leaves fall.
GH06 Revised	Tree Planting	PWD	Planted trees	46 trees were planted summer 2015. Arborist pruned trees past 12 months. Follow-up observation of overall tree health completed by in-house staff with consultation with professional contractor arborist.	Coordinate with COE concerning construction projects impact to help minimize impacts to trees. Arrange to have professional arborist prune trees to keep healthy.

**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 14 (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, 2016 through March 31, 2017)

**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)	

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**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 vacator **	(%)	

	(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 <sub>2</sub> % MgCl <sub>2</sub> % 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/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)	(%)	
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	
<ul style="list-style-type: none"> <li>• Treatment units induce infiltration within 500-feet of a wellhead protection area</li> </ul>	# or y/n	