

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

EPA NPDES Permit Number: MAR042008

MassDEP Transmittal Number: W-041946

**Annual Report Number
& Reporting Period:**

**Year 15
April 1, 2017 – March 31, 2018**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: Terence Garrahan

Title: Environmental Engineer

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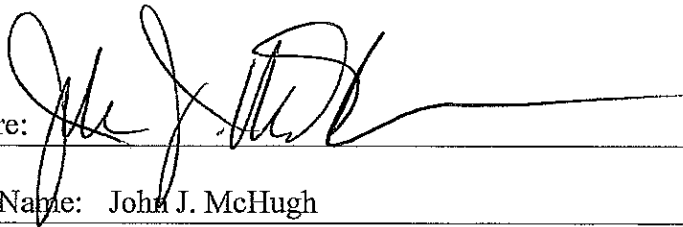
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Certification:

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

Title: Chief DPW Environmental Office

Date: 25 April 2018

Part II. Self-Assessment

**U.S. Army Soldier Systems Center 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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PE01	Drains Marking	Environmental Office	Job/Annual Inspection	Many oft storm drains from foundry include “no dumping” and that catch basins drain to waterway. Some older drain covers are marked with “no dumping disk markers. Additional disk markers were ordered and received.	Annual inspection of storm drains will include placing additional disk markers.
Revised					
	Information Workforce Training	Environmental Office	Job	Spill response information emphasized in annual training.	New 2018 2019 on-line training module will include slides concerning storm water training.
Revised					
	Post notices via website/email/training	Environmental Office	Job	Spill response flyers posted near bulk POL and chemical locations.	Continue to post spill response procedures. Keep leadership informed at Environmental Quality Control Committee meetings emphasizing importance of prevention releases from reaching storm water system.
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 15 (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 senior management.	Senior management will continue to appoint a storm water coordinator.
Revised					
	Meet with local conservation commission	Environmental Office	Projects	Environmental Office met and obtain approval for new Building 42 addition project, construction to start 2018.	Continue to coordinate project reviews with Conservation Commission to help minimize impacts to wetlands and nearby lake.
Revised					
	Training	Environmental Office	Training provided	Annual training for laboratory and industrial personnel concerning spill response measures needed to prevent releases to storm water system. Spill response team received training.	Continue spill response training for employees who handle oil and hazardous chemicals.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
ID01	Update Storm water drain map as needed	PWD	Updated Map	Storm water maps are available on DPW/Environmental online folders and GIS database.	Review map data annually, update as needed to ensure current.
Revised					
ID02	Detect and address non storm water discharges	Environmental Office	Annual as needed	Outfalls, catch basins, dumpsters, POL Storage locations have been inspected during the past year. T-25 CERCLA Pump and treat outfall observed also.	Continue to inspect storm water system for non-compliant sources.
Revised					
ID03	Identify discharges from non-compliant discharges	Environmental Office	As needed	No non-compliant discharges observed.	Continue inspecting storm water system for noncompliant sources.
Revised					
ID04	Illicit discharge/illegal dumping	Environmental Office	As needed	Spill response number (x5911) established for emergencies and for reporting illicit discharges/dumping to facility police.	Spill response number established.
Revised					
Revised					
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
CS01	Construction Site Storm Water Control	Environmental Office/PWD/COE	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. National Environmental Policy Act (NEPA) reviews were completed. Best Management Practices and Low Impact design included in specifications.	Continue NEPA project reviews, prepare Records of Environmental Considerations (RECs) and Environmental Assessments (EAs) in accordance with Army Regulation 200-2 (32 CFR 651). Ensure proposed construction projects are mitigated per EA, and necessary storm water permits obtained.
Revised					
Revised					
Revised					
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 15 (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, COE construction inspectors, inspected post construction sites to ensure no illicit discharges. Fitness trail was upgraded in 2017, and inspected for erosion control.	Best Management practices being implemented for a building 42 addition include rain gardens which have been designed to control storm water runoff. Environmental Office will inspect rain garden twice a year for erosion. Signs will be placed to alert landscape company not to mow. Building 42 addition construction expected to be completed 2019, rain garden inspections should start next year.
Revised					
Revised					
Revised					
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
GH01	Pest Management	Environmental Office/PWD Pest Management Coordinator	Annual Review	Pest Management data reviewed and overall active ingredients used continues to be quite low. Pest contractor provided a latest pest usage update for review.	Continue to review active pesticide usage per contract. Continue to consult with Army Entomologist annually and as needed to help to minimize active ingredient usage.
Revised					
GH02	Inspect and clean out OWS as needed	Environmental Office/PWD	Annual Inspections	All OWS were inspected past 12 months and two OWSs and one interceptor tank were cleaned.	Continue to inspect OWS and request funding to schedule cleaning additional OWS during the next 12 months as needed. Adjust OWS cleaning schedule based upon annual inspections.
Revised					
GH03	Inspect and clean catch basins as needed.	Environmental Office/PWD	Annual Inspections	All catch basins were inspected visually. And as needed catch basins were cleaned. Recent March 2018 inspection observed catch basins with small amounts of debris since they were last cleaned. Facility parking lots appear very clean which can be attributed to sweeping and landscape company keeping overall facility clean from leaves and sand.	Continue to inspect catch basins at least annually, clean as needed. Adjust catch basin cleaning schedule based upon annual inspections.
Revised					
GH04	Street Sweep (parking lots included)	PWD	Annual parking lot street sweeping.	March 2018 inspection of facility streets and parking lots show that overall facility appearance is very clean from past winter.	Continue having landscape contractor and in-house DPW workers cleanup facility, fall leaves and street/parking lot sand from winter,
Revised					
GH05	Clean up day	PWD	Clean-up-day	Completed spring 2017	Fall cleanup day planned after leaves fall.
Revised					

GH06	Tree Planting	Environmental Office/PWD	Plant/maintain trees	Landscape companies have maintained trees, 46 trees were planted in 2015. An arborist prunes trees annually and provides expert recommendations.	Continue to have arborist tree service to maintain healthy trees. Follow recent Army COE Management for future plantings.
Revised					

6a. Additions

N/A

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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)	
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	(%)	
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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/lb mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb 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	