

MAY 05 2015

P

Municipality/Organization: Otis Air National Guard 102D IW

EPA NPDES Permit Number: MAR042023

MassDEP Transmittal Number: W-039880

Annual Report Number & Reporting Period: Year 11
April 1, 2014 – March 31, 2015

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2015)

Part I. General Information

Contact Person: Marc Robert **Title:** Air and Water Quality Manager

Telephone #: (508)968-4233 **Email:** marc.a.robert.civ@mail.mil

Mailing Address: 156 Reilly Street, Box 46, Otis ANG Base, MA 02542-1330

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: DEANE.THURMAN.R.1253807098

Digitally signed by DEANE THURMAN R.1253807098
DN: cn=DEANE THURMAN R.1253807098, ou=USAF,
Date: 2015.04.30 11:01:59 -0400

Printed Name: Thurman Deane

Title: Director, Environmental Operations

Date: 04/30/2015

Part II. Self-Assessment

The 102d Intelligence Wing located at Otis Air National Guard Base has completed the required self assessment (attachment 1) and has determined the base to not be in compliance with all permit conditions. The 102d Intelligence Wing intends to restructure minimum control measures and BMP's upon issuance of the 2014 permit. Permit deficiencies are listed below:

1. Part II.2.B.3.(c)(iii) Discharge Detection and Elimination. Due to staffing shortages, quarterly dry visual inspections were not completed for the second and third quarters 2014.
2. Part II.2.B.4.(g) Construction Site Storm Water Runoff Control. Due to staffing shortages, weekly construction site inspections were not completed for the second, third and fourth quarters 2014.
3. Part II.2.D.1. Program Evaluation. Due to staffing shortages, the Storm Water Pollution Prevention Team annual meeting was not held in 2014.

Please note that Otis Air National Guard Base is a military facility; therefore, some operating and budgeting procedures maybe different than a typical municipality.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1A	<p>Trash Management</p> <p>Enhance employee awareness on the impacts of improper trash management</p> <p>Conduct quarterly inspections to verify proper trash management practices are in use</p>	102 Civil Engineering/ Environmental Management Office (102 CES/CEV)	<p>Track location and dates of trash pick-up.</p> <p>Document inspections</p>	Inspections of trash management practices are included in the weekly Satellite Accumulation Point inspections and quarterly Best Management Practices Inspections required by the 102 CES/CEV.	Continue with inspections of trash management in the future out years.
Revised	N/A	N/A	N/A		
1B	Stormwater Education and Materials	102 Civil Engineering/ Environmental Management Office (102 CES/CEV)	Track number of employees trained	<p>Employees that work in industrial areas complete stormwater P2 training via a DVD presentation. Documented via training records.</p> <p>A public outreach statement was included in our annual Water Quality Report, of which approximately 3,000 were distributed in June 2015.</p>	Continue with annual employee training and include stormwater P2 statement in annual distribution of Water Quality Reports
Revised	N/A	N/A	N/A		

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2A	Base Beautification Day	102 Intelligence Wing	Document event	Involve all base personnel in awareness of environment and base cleanup, planting, and beautification	Continue with base beautification day
Revised	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3A	Implement ordinance for new construction connecting to sanitary sewer	102 CES/CEV	Track new connections to sanitary sewer system	Developed permit and log for new connections	Continue with log
Revised	N/A	N/A	N/A		
3B	Sanitary Sewer Overflows	WWTP	Compile list of areas inspected, dates and results	N/A	Continue with periodic camera inspections of sanitary/storm lines when feasible.
Revised	N/A	N/A	N/A		
3C	Conduct periodic camera inspections of sanitary/storm lines	WWTP	Compile a list of locations serviced, dates maintenance were scheduled/conducted	Maintenance conducted on sewer lines as needed.	Continue with maintenance of sanitary storm lines
Revised	N/A	N/A	N/A		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4A	Good Housekeeping BMP inspection and maintenance	102 Intelligence Wing	Document number of reported spills	Spill log maintained and on file in the environmental management office Quarterly inspections conducted in and around satellite accumulation and 90 day storage area	Continue to inspect industrial areas as required by the 102IW MSGP
Revised	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		
4B	Runoff Control	102 IW CES/CEV	Document BMPs installed, frequency of inspections and results, maintenance activities.	Monitoring guidelines for construction projects are established for potential stormwater runoff impacts and can be found in the Stormwater Pollution Prevention Plan. One construction site inspections not completed or adequately documented for portion of 2014.	Continue to revise and implement construction project guidelines as needed.
Revised	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5C	Document construction stormwater related changes for new construction and demolitions	102 CES	Compile a list of catch basins evaluated and location / number of filter devices installed or removed	Action ongoing. Document maintained in IEMS.	Continue to compile a list of catch basins evaluated and location / number of filter devices installed
Revised	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
	Storm Drain System Cleaning	102 CES	Compile list of areas cleaned, quantity of material collected and dates cleaning was scheduled/conducted	Street sweeping is conducted periodically. Street sweeping material is collected during each sweeping. All roads and parking lots located within the 1021W property boundaries were swept during this reporting period.	Continue street sweeping activities to prevent materials from entering into the storm sewer system.
Revised	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities
	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Revised					

7a. Additions

	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

7b. WLA Assessment

N/A

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, 2014 through March 31, 2015)

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)		Military

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Military Facility
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	No Shoreline
Shoreline cleaned since beginning of permit coverage	(mi.)	0
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	0
▪ community participation **	(# or %)	N/A
▪ material collected **	(tons or gal)	N/A
School curricula implemented	(y/n)	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					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	(#)	4
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0
▪ CADD	(%)	100%
▪ GIS	(%)	0
Outfalls inspected/screened **	(# or %)	3
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	3
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	100
% of population on septic systems	(%)	100

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	2
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	0%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	0%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	N/A
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)	Bi-annually
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	As Needed (Contractual)
Qty of structures cleaned **	(#)	Base Wide
Qty. of storm drain cleaned **	(%, LF or mi.)	100% when completed
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	N/A
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	N/A

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$0.00 (The 1021W draws on contract services when needed)
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	N/A
• 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/A
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with vector **	(%)	0

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	>40
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	N/A
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	>7 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial Use
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	N/A
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	Performed by hourly wage full-time staff
• Disposal cost**	(\$)	\$0.00
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	0
• Vacuum street sweepers owned/leased	(#)	2
• Vacuum street sweepers specified in contracts	(y/n)	N
• % Roads swept with rotary brush sweepers **	%	0%

• % Roads swept with vacuum sweepers **	%	100%
---	---	------

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	89%
▪ Herbicides	(lbs. or %)	100%
▪ Pesticides	(lbs. or %)	0%
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Y

	(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	25% None None None None None 75%
Pre-wetting techniques utilized **	(y/n or %)	N
Manual control spreaders used **	(y/n or %)	N
Zero-velocity spreaders used **	(y/n or %)	N
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	0%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	5%
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

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	N