Municipality/Organization: **Otis Air National Guard Base**

EPA NPDES Permit Number: **MAR042023**

MassDEP Transmittal Number: **W-039880**

Annual Report Number & Reporting Period: **April 1, 2006 – March 31, 2007**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

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:

Printed Name: Christopher M. Faux, LtCol, MAANG, BSC

Title: Director of Environmental Services

Date: April 26, 2007

Part II. Self-Assessment

The 102 Fighter Wing located at Otis Air National Guard Base has complete the required self assessment and has determined the Base is in compliance with all permit conditions. Stormwater Phase II Program: Annual Self Audit is provided as Attachment 1.

Please note that Otis Air National Guard Base is a military facility; therefore, some operating and budgeting procedure maybe different 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1C	P2 Program Create signs/billboards for employee education and for display at public events.	102 Mission Support Group / Environmental Management Office (102 MSG/EM)	Track # of articles/materials created and distributed; track # of people at each event viewing via guest book	351/415 Employees complete stormwater P2 training via PowerPoint presentation. Documented via training records. A public outreach statement was included in our annual Water Quality Report, of which approximately 3,000 were distributed in June 2006. See Attachment 2.	Continue with annual employee training and including stormwater P2 statement in annual distribution of Water Quality Reports.
Revised	*Anticipate distribution of Water Quality Report or clean water P2 brochures at booth for general public at Air Show August 25 – 26, 2007.*	*102 MSG/EM*	*Track number of brochures distributed.*		

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3A	ID/Elimination Develop program for annual review of piping/schematics for historical buildings	102 CES	Track number of building reviewed per year and results of Review	A complete investigation of illicit discharges wastewater to stormwater of the Base was conducted in 2001. As a result of many years of plugging floor drains and working to eliminate known discharges, the final report issued in April 2002 identified zero illicit discharges. Currently we review buildings as needed. In 2007 schematics for Bldgs 124 and 128 were review by our Civil Engineering Department, who deemed that no illicit discharges exist at these locations.	
Revised					
3B	SSO's Conduct rehabilitation/ repair of sewer lines	102 CES	Compile list of locations repaired	Planned for PY 5	Conduct rehabilitation/ repair of sewer lines
Revised					
3C	ID Illicit Connections Conduct periodic camera inspections of suspect locations	102 CES	Compile list of areas inspected, date and results of inspection	Camera inspection of suspect locations are conducted as needed. Attachment 3.	
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4A	Good Housekeeping Develop ordinance for contractors to manage construction site waste.	102 MSG/EM		Planned for PY 5 .	Possibly include this ordinance in 102 FW/CE's Construction Boiler Plate
Revised					
4D	Sediment Control Develop Ordinance for contractors to implement sediment control measures	102 MSG/EM	Document BMPs installed, frequency of Inspections and results, maintenance activities and analyze BMP failure rate for future consideration; monitor TSS levels at out falls.	Ordinance defined in the Water Management Plan and in 102 FW/CE's Construction Boiler Plate. Contractor's building the new Fire Crash Rescue Station conducted weekly inspection of stormwater BMPs and 102MSG/EM conducted 3 inspections in PY 4, which are documented in the SWPPP. BMPs were well maintained or altered to provide maximum protection. Our only construction site began well before Permit Year 4 and therefore TSS monitoring was not part of their contract. However, all future construction subject to Phase 2 will incorporate TSS monitoring. Additionally, when conditions allow TSS is sampled on a quarterly basis at stormwater outfalls currently in place. See Attachment 4.	
Revised					

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5C	Catch Basins Evaluate need for catch basin retrofit; procure funding; install filter devices where necessary	102 MSG/EM	Compile list of catch basins evaluated and location/number of filter devices installed	Planned for PY 5	Six new catch basins were installed in the constructions of the new Fire Crash Rescue Station. Two catch basins near the entry to the construction site are fitted with drain socks and surrounded by hay bales. Construction is currently in progress, though nearing final stages. Newly installed catch basins are operational. No need for retrofit at present.
Revised					

6E	Auto Maintenance Develop "Check for Leaks" Program for POVs and GOVs	102 MSG/EM	Prepare / distribute educational statement from the Commander and establish forced cleanup program for violations (see BMP 1D)	Planned for PY 5	
6F	Vehicle Washing Evaluate Feasibility of central wash station; procure funding if feasible	102 MSG/EM	Document evaluation of central wash station feasibility and funding procurement	Planned for PY 5	
6F	Vehicle Washing Evaluate Feasibility of obtaining funding for recirculating wash racks	102 MSG/EM	Document evaluation of feasibility and funding procurement	Planned for PY 5	

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Not applicable to the 102nd Fighter Wing

Part IV. Summary of Information Collected and Analyzed

- Post- construction inspections included as Attachment 6.
- Quarterly dumpster and Trash inspections included as Attachment 7.
- Quarterly dry visual monitoring of stormwater outfalls included as Attachment 8.
- Quarterly BMP inspections of facilities with potential to discharge to stormwater included as Attachment 9.
- Results of voluntary monitoring of our stormwater outfalls Attachment 10.
- EPA has conducted week long environmental compliance inspections of our base on two occasions: April 2007 and November 2005
- DEP has conducted week long environmental compliance inspections of our base on two occasions: February 2007 and November 2005

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	(%)	
▪ CADD	(%)	100%
▪ GIS	(%)	
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	(%)	3000
% of population on septic systems	(%)	3000

Operations and Maintenance Continued

• Annual budget/expenditure (labor & equipment)**	($)	$0.00. We have no fixed budget, we draw on contract services when needed
• Hourly or per basin contract rate **	($/hr or $ per basin)	85.00/hr
• Disposal cost**	($)	11,560.00
Cleaning Equipment		
Clam shell truck(s) owned/leased	(#)	0
Vacuum truck(s) owned/leased	(#)	0
Vacuum trucks specified in contracts	(y/n)	0
% Structures cleaned with clam shells **	(%)	100
% Structures cleaned with vactor **	(%)	0
• Annual budget/expenditure (labor & equipment)**	($)	$0.00. We have no fixed budget, we draw on contract services when needed

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	52
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	30
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	52 ton
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Gravel mix

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 75%
Pre-wetting techniques utilized **	(y/n or %)	no
Manual control spreaders used **	(y/n or %)	no
Zero-velocity spreaders used **	(y/n or %)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	No change
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	No change
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100 %
Storage shed(s) in design or under construction	(y/n or #)	Completed shed
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	N