

MAY 18 2009

**Municipality/Organization:** 102d Intelligence Wing

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**EPA NPDES Permit Number:** MAR042023

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**MassDEP Transmittal Number:** W-039880

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**Annual Report Number** Year 6  
**& Reporting Period:** April 1, 2008 – March 31, 2009

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**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2009)**

**Part I. General Information**

**Contact Person:** Thurman R. Deane **Title:** Water Quality Manager

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**Telephone #:** 508-968-4671 **Email:** Thurman.deane@maotis.ang.af.mil

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**Mailing Address:** 158 Reilly Street, Box 46, Otis ANG Base, MA 02542-1330

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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:** 

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**Printed Name:** EMILY R. WARE

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**Title:** Director, Environmental Operations

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**Date:** 13 MAY 09

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

The 102 Intelligence Wing located at Otis Air National Guard Base has completed the required self assessment and the base is in compliance with all permit conditions. Stormwater Phase II Program: Annual Self Audit is provided.

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

### **Mission Change:**

Due to Base Realignment and Closure (BRAC) the 102d Fighter Wing has been realigned and is now the 102d Intelligence Wing. Ultimately, the mission realignment will result in a smaller footprint and reduce environmental impacts at Otis Air National Guard Base. Buildings and equipment are no longer maintained at the 102d Intelligence Wing and a significant amount of industrial shops have closed.

**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 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 7</b>
1B	Stormwater Education and Materials Create educational pamphlet flyers and displays. N/A	102 Mission Support Group / Environmental Management Office (102 MSG/EM) N/A	Track number of articles and materials created and distributed  N/A	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 2008.  Otis Notice news flyer, Consumer Confidence Report, and internal web page	Continue with annual employee training and including stormwater P2 statement in annual distribution of Water Quality Reports
1A	Trash Management Enhance employee awareness on the impacts of improper trash management Conduct quarterly inspections to verify proper trash management practices are in use N/A	102 Mission Support Group / Environmental Management Office (102MSG/EM) N/A	Track location and dates of trash pick-up. Document inspections	Implemented Adopt-A-Building program which wing personnel routinely removed trash and litter in and around premise  Inspections of trash management practices are included in the weekly Satellite Accumulation Point inspections and quarterly	Continue with Adopt-A-Building program and inspections of trash management in the future out years.

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7

### 2a. Additions

2C	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
2D	Storm Drain Stenciling	102MSG/EMO	Document locations stenciled	N/A	Review catch basins to ensure all are stenciled with proper awareness signage

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
3A	Implement ordinance for new construction connecting to sanitary sewer	102MSG/EMO	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 Conduct periodic camera inspections of sanitary/storm lines Conducts maintenance of sanitary storm lines	WWTP	Compile list of areas inspected, dates and results Compile a list of locations serviced, dates maintenance were scheduled/conducted	Conducted camera inspections on sewer lines running through Herbert Rd., Shelton Rd., and Greenway Rd in 2008. Early 2009 conducted camera inspections on sewer lines running through Kitteridge Rd. Maintenance conducted on sewer lines as needed.	Continue with periodic camera inspections of sanitary/storm lines 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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
4A	Good Housekeeping BMP inspection and maintenance N/A	102 Intelligence Wing N/A	Document number of reported spills N/A	Spill log maintained and on file in the environmental management office Quarterly inspections conducted in and around satellite accumulation and 90 day storage area	
Revised					
4B	Runoff Control	102 MSG/EMO and CE N/A	Document BMPs installed, frequency of inspections and results, maintenance activities. N/A	Monitoring guidelines for construction projects are established for potential stormwater runoff impacts and can be found in the SWMP.	Continue to revise and implement construction project guidelines as needed.
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
5C		Civil Engineering Squadron (102 CES)	Compile a list of catch basins evaluated and location / number of filter devices installed	Action current an ongoing. Document maintained in IEMS. Attachment #5C	Continue to compile a list of catch basins evaluated and location / number of filter devices installed
Revised	N/A	N/A	N/A		

**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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
6G	Storm Drain System Cleaning	102 Civil Engineering	Compile list of areas cleaned, quantity of material collected and dates cleaning was scheduled/conducted	Street sweeping is conducted is conducted periodically. Street sweeping material is collected during each sweeping. The roads and parking lots swept were from Munitions Maintenance to the Flight Line Gates including Easton Rd. and Chavez to the Flight Line gate at bldg. 156.	Continue street sweeping activities to prevent materials from entering into the storm sewer system.
Revised				Estimate greater than 3500 lbs.	
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
N/A	N/A	N/A	N/A	N/A	N/A
Revised					
Revised					

**7a. Additions**

N/A	N/A	N/A	N/A	N/A	N/A

**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, 2008 through March 31, 2009)

**Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	Yes
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)	Yes
Stream teams established or supported	(# or y/n)	No
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		
<ul style="list-style-type: none"> <li>▪ days sponsored **</li> <li>▪ community participation **</li> <li>▪ material collected **</li> </ul>	(#)	3 Days a week
School curricula implemented	(# or %)	N/A
	(tons or gal)	7.669 Tons
	(y/n)	N/A

**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) **	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	N/A
Site inspections completed **	(# or %)	0
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	(%)	N/A
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)	N/A

### 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)	Contractual as needed
Qty of structures cleaned **	(#)	Base Wide
Qty. of storm drain cleaned **	(%, LF or mi.)	N/A
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 We do not have a fixed budget, we draw on contract services when required
• 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 vactor **	(%)		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)	>3500 lbs
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Gravel mix
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	N/A
• Hourly or lane mile contract rate **	(\$/hr. or In 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)	No

• % 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)	Yes

	(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	25% None None None None 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	No
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	No
<ul style="list-style-type: none"> <li>• Treatment units induce infiltration within 500-feet of a wellhead protection area</li> </ul>	# or y/n	No