DEPARTMENT OF THE AIR FORCE
102D FIGHTER WING (ACC)
MASSACHUSETTS AIR NATIONAL GUARD
OTIS AIR NATIONAL GUARD BASE MASSACHUSETTS

APR 28 2006

24 April 2006

102FW/EM
197 Granville Ave, Box 46
Otis ANG Base, MA 02542-1330

Certified Mail
United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

SUBJECT: Annual Report of Phase II General Permit Activities at Otis Air National Guard Base for Permit Year 03.

1. In accordance with the provisions of the National Pollutants Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) the annual reporting requirements are submitted herewith. To view the Otis ANGB Storm Water Management Plan please reference the Notice of Intent provided for the Phase II Permit Application on 19 June 2003, NPDES Permit MAR042023/ MADEP Transmittal Number W039880.

   Owner/Operator Information:
   Name: 102nd Fighter Wing
   Address: 197 Granville Ave, Box 46
   Otis ANG Base, MA 02542-1330
   NPDES PERMIT #: MAR042023

2. The 102nd has successfully met conditions set forth in the permit and is operating in compliance. The Self Audit Checklist is included as Attachment 1.

3. The BMPs chosen for implementation in Permit Year #3 were appropriately selected. No conflict arose during implementation.

4. All measurable goals designated for Permit Years #1, #2 and #3 have been addressed at Otis Air National Guard Base, are current and in progress. The new BMPs for Permit Year #3 are included in Attachment 2. Progress toward achieving measurable goals and resulting data that has been collected or analyzed is identified in Attachments 3 - 9. All storm water monitoring and analytical data obtained throughout Permit Year #3 is included as Attachment 11. In a proactive effort this facility has made excellent advancement to achieve and meet measurable goals.

Stormwater Phase II Program: *Annual Self Audit*

Permit Year 3, Calendar Year 2005/2006

Otis Air National Guard Base
102nd Fighter Wing
Program Manager: Elizabeth Mascia

Questions		YES	NO	N/A	Comment
1.	Is the 102nd Fighter Wing in compliance with 40 CFR 122?	X			
2.	Does the 102FW maintain a current Storm Water Pollution Prevention Plan?	X			
3.	Is the 102FW in compliance with the conditions set forth in the NPDES General Permit for MS4's. Permit Number MAR04023/MADEP?	X			
4.	Has the 102FW had any incidents of non-compliance with the permit?		X		
5.	Has the 102FW filed an eNOI for all construction projects which disturbed >1 acre?	X			
6.	Has the 102Fw addressed/implemented all new Minimum Control Measure for the current permit year?	X			
7.	Has the 102FW addressed/implemented all new actions and measurable goals for Public Education Outreach in the current permit year?	X			
8.	Has the 102FW addressed/implemented all new actions and measurable goals for Public Participation Involvement in the current permit year?	X			
9.	Has the 102FW addressed/implemented all new actions and measurable goals for Illicit Discharge Detection/Elimination in the current permit year?	X			
10.	Has the 102FW addressed/implemented all new actions and measurable goals for Construction Site Runoff Control in the current permit year?	X			
11.	Has the 102FW addressed/implemented all new action and measurable goals for Post Construction Runoff Control in the current permit year?	X			
12.	Has the 102FW addressed/implemented all new actions and measurable goals for Pollution Prevention/Good Housekeeping in the current permit year?	X			
14.	Has the 102FW addressed/implemented all reoccurring Minimum Control Measures in the current permit year?	X			
15.	Does the Storm Water Pollution Prevention Team meet on an annual basis to discuss the progress of the Phase II Program?	X			
16.	Has an annual report been submitted to the EPA and DEP for the previous permit year?	X			

ATTACHMENT 1

PERMIT YEAR 3:

STORMWATER MANAGEMENT CONTROL MEASURES FOR IMPLEMENTATION

ID #	BMP	ACTION	MEASURABLE GOAL	STATUS
1C	P2 Programs	Create educational pamphlets/fliers/displays	Track number articles/ materials created and distributed	Current
1D	Education and Outreach for Commercial Activities	Conduct quarterly inspections to verify that personnel keep dumpsters closed	Compile list of dates and areas inspected and actions taken to ensure compliance	Current
3B	SSO's	Develop preventative maintenance instruction for sewer system cleaning and maintenance	Compile list of locations serviced and dates maintenance was scheduled/conducted	Current
3C	ID Illicit Connections	Develop priority list of buildings for inspection/survey	Compile list of buildings inspected, date inspected and results of inspection	Current
4C	Erosion Control	Develop ordinance for contractors to implement erosion control measures	Document BMPs installed, frequency of inspections and results, maintenance activities and analyze BMP failure rate for future consideration	Current
5B	BMP Inspection/ Maintenance	Develop inspection Program; develop ordinance for contractors to conduct post –construction maintenance of permanent BMPs	Conduct analysis of BMPs; track what BMPs were installed, effectiveness of each and remediation of identified problems	Current
6G	Storm Drain System Cleaning	Establish regular cleaning program	Compile list of areas cleaned, quantity of material collected and dates cleaning was scheduled/conducted	Current

ATTACHMENT 2

BMP: *P2 Programs - Item 1C*

Action: *Create educational pamphlets/flyers/displays*

Measurable Goal: *Track number articles/ materials created and distributed*

Date	Media	Description	Distribution
ongoing	PowerPoint Presentation	Self paced online Stormwater Pollution Training	In CY 2005, 423 personnel viewed training. Thus far in CY 06, 66 personnel have view training.
31-Mar-06	Otis Notice Newspaper 5,000 copies	Article details tips for pollution prevention and water conservation	Distributed among tenants on the Massachusetts Military Reservation, to include the US Coast Guard, Army National Guard, Air National Guard and available to public at the local Post Office
31-Mar-06	Seagull Magazine	Article details tips for pollution prevention and water conservation	Distributed to all staff of the 102nd Fighter Wing at Otis Air National Guard Base
22-Mar-06	Email disseminated to All Staff	Email discusses tips for pollution prevention and water conservation during spring cleaning	Distributed among tenants on the Massachusetts Military Reservation, to include the US
Aug-05	Consumer Confidence Report (Water Quality Report)	Article illustrates the 102nd Fighter Wing's stormwater management program and stormwater pollution prevention	Approximately 2000 copies are published and distributed among f the Massachusetts Military Reservation and towns of Falmouth, Mashpee, Sanwhich and Bourne

ATTACHMENT 3

BMP: *Education and Outreach for Commercial Activities - Item 1D*
Action: *Conduct quarterly inspections to verify that personnel keep dumpsters closed**
Measurable Goal: *Compile list of dates and areas inspected and actions taken to ensure compliance*

Bldg #	2nd Quarter 2005	Action Reqiured	3rd Quarter 2005	Action Reqiured	4th Quarter 2005	Action Reqiured	1st Quarter 2006	Action Reqiured
124	7-Jun	N/A	16-Sep	N/A	7-Dec	N/A	13-Mar-06	N/A
156			26-Jul	N/A	27-Oct	N/A	17-Jan-06	N/A
158 - Flightline Docks	18-May	N/A	24-Aug	N/A			10-Feb-06	N/A
162			22-Jul	N/A	25-Oct	N/A	20-Jan-06	N/A
171	15-Jun	N/A	22-Sep	N/A	2-Dec	N/A	24-Mar-06	N/A
175			23-Aug	N/A	1-Nov	N/A	16-Feb-06	N/A
189			26-Jul	N/A	25-Oct	N/A	6-Jan-06	N/A
190	26-May	N/A	moved to Bldg 196					
196	26-May	N/A	4-Aug	N/A	4-Nov	N/A	10-Feb-06	N/A
432			20-Sep	N/A	2-Dec	N/A	9-Mar-06	N/A
754	1-Jun	N/A	21-Sep	N/A	6-Dec	N/A	9-Mar-06	N/A
971	15-Jun	N/A	20-Sep	N/A	1-Dec	N/A	15-Mar-06	N/A
3250	9-Jun	N/A	16-Sep	N/A	1-Dec	N/A	15-Mar-06	N/A

*Inspection report included in our Hazardous Waste Satellite Accumulation Point Checklist, May 2005

ATTACHMENT 4

BMP: *SSO's - Item 3B*

Action: *Develop preventative maintenance instruction for sewer system'*

Measurable Goal: *Compile list of locations serviced and dates maintenance was scheduled/conducted*

Quick Air National Guard Base
102nd Fighter Wing
Program Manager: Elizabeth Massa

Location	Cleaning or Maintenance	Action Preformed	Dates Scheduled	Date Completed
Riley Rd.	Cleaning & Maint.	Removed sticks,paper & grit	13-Sep-05	16-Sep-05
Granville Ave	Cleaning & Maint.	Removed sticks,paper & grit	1-Nov-05	3-Nov-05
Kelley St.	Maintenance	Jetted lines	10-Jul-05	21-Jul-05
Johnson ST.	Maintenance	Jetted lines	17-Jul-05	27-Jul-05
Hebert Rd.	Maintenance	Camera work	15-Aug-05	17-Aug-05
Mitchell St.	Maintenance	Camera work	18-Aug-05	24-Aug-05
E.Hospital Rd.	Maintenance	Camera work	20-Sep-05	23-Sep-05
Kelley St.	Maintenance	Camera work	10-Jul-05	21-Jul-05
Turpentine Rd.	Cleaning	Jetted lines	1-Nov-05	16-Nov-05
Norstead St.	Cleaning	Jetted lines	1-Nov-05	21-Nov-05
Le May St.	Cleaning & Maint.	Camera work & Jetting	1-Nov-05	27-Nov-05
Carpenter St. Maint.	Cleaning & Maint.	Jetted lines	4-Dec-05	7-Dec-05
Undrehill St.	Cleaning & Maint.	Jetted lines	4-Dec-05	12-Dec-05

ATTACHMENT 5

BMP: *ID Illicit Connections - Item 3C*

Action: *Develop priority list of buildings for inspection/survey*

Measurable Goal: *Compile list of buildings inspected, date inspected and results ofinspection**

Otis Air National Guard Base
102nd Fighter Wing
Program Manager: Elizabeth Meade

Priority	Location/Facility	Date Inspected	Results
1	US Coast Guard Industrial Facilities	March 1-31, 2006	no illegal discharges identified
2	Army National Guard Industrial Facilties	April 1-30, 2006	no illegal discharges identified
3	Otis Air National Guaud		Schuduled for May 1-31, 2006
4	Air Force - Installation Restoration Program		Scheduled for Summer 2006
5	US Department of Agriculture		Scheduled for Summer 2006
6	Bourne Schools		Scheduled for Summer 2006

*October thru December 2001 a contractor was hired to preform an evaluation of non-stormwater discharge on the base. The completed evaluation of 300 separate buildings idententied no illicit discharges of wastewater to stormwater. The final report, *Non-Stormwater Discharges*, was published April 2002.

ATTACHMENT 6

BMP: *Erosion Control - Part IC*

Action: *Develop ordinance for contractors to implement erosion control measures.*

Measurable Goal: *Document BMPs installed, frequency of inspections and results, maintenance activities, and analyze BMP failure rate for future consideration.*

[redacted]

Location	Inspection Date	BMPs	Results	Resolve
New Fire Crash/ Rescue Station	10-May-05	staked straw bales around each existing catch basin, silt fence, minimization disturbance of existing vegetation and buffer zones	erosion control measure were properly installed and functioning effectively	None required at this time.
New Fire Crash/ Rescue Station	1-Sep-05	staked straw bales around each existing catch basin, silt fence, minimization disturbance of existing vegetation and buffer zones	Staked hay bales not surrounding sediment stock pile and entrance to site not covered with gravel as identified in contractors SWPPP	Required contractors to implement these measures. Reiterated the importance of properly maintained BMPs.
New Fire Crash/ Rescue Station	21-Sep-05	staked straw bales around each existing catch basin, silt fence, minimization disturbance of existing vegetation and buffer zones	Follow up visit	Contractors implemented staked hay bales around stockpiles and agreed to sweep entrance rather than use crushed gravel.
New Fire Crash/ Rescue Station	9-Nov-05	silt fence, storm drain protection, straw bale dikes, minimization disturbance of existing vegetation and buffer zones	One newly installed catch basin appeared to be missing or covered with gravel.	Reiterated the importance of properly maintained BMPs. Required contractors investigated all newly installed catch basins to ensure they were
New Fire Crash/ Rescue Station	week of Nov 14, 2005	EPA multi media inspection. Mr. Steve Couto of EPA Region 1, inspected document, SWPPP and conducted inspection of construction site	No items of non-compliance identified. Mr. Couto was extremely helpful by making recommendations for different techniques and BMP tools. For example, using socks in catch basins rather than staked hay bales.	None required at this time.
New Fire Crash/ Rescue Station	9-Mar-06	silt fence, storm drain protection, straw bale dikes, minimization disturbance of existing vegetation and buffer zones	Lack of protection measures around catch basins by site entrance. Covers on newly installed catch basin knocked off	Ordered and installed silt socks.
New Fire Crash/ Rescue Station	28-Mar-06	staked straw bales around each existing catch basin, silt fence, minimization disturbance of existing vegetation and buffer zones, Sock were installed on two existing storm catch basins at the entrance to the site.	Addressed the requirement of well maintained silt fencing and hay bales.	Required onsite contract manager ensure silt fence and hay bales properly maintained.

Note: Mr. Paul Helmuth, the managing contract Representative is knowledgeable of stormwater BMP requirements. He is at the construction site daily and ensures the stormwater is properly protected.

* Ordinance for contractors to implement erosion control measures was published in Section 01567, Environmental Protection, of the Construction Boiler Plate Contract, August 2005. Additionally, this requirement is addressed at Pre-Construction Meetings.

BMP: *BMP Inspection/Maintenance - Item 5B*

Action: *Develop inspection Program, develop ordinance for contractors to conduct post-construction maintenance of permanent BMPs.[1]*

Measurable Goal: *Conduct analysis of BMPs to ID what BMPs were installed, effectiveness of each and resolution of identified problems.*

Location	Post Construction BMPs	Effectiveness	Problems	Resolve
New Fire Crash/ Rescue Station	Construction still in progress	n/a	n/a	n/a

[1] Ordinance for contractors to conduct post construction maintenance of permanent BMPs was published in Section 01567, Environmental Protection, of the Construction Boiler Plate Contract, August 2005. Additionally, this requirement is addressed at Pre-Construction Meetings.

ATTACHMENT 8

BMP: *Storm Drain System Cleaning - Item 6G*

Action: *Establish regular cleaning program**

Measurable Goal: *Compile list of areas cleaned, quantity of material collected and dates cleaning was scheduled/conducted*

Otis Air National Guard Base
102nd Fighter Wing
Program Manager: Elizabeth Mascia

Actions	Dates	Quantity
The 102nd Fighter Wing removed dirt and debris from all storm drain catch basins on all roads located inside the industrial area of Wing and along the main roads of the MMR.		
The collected material was stockpiled by the munitions bunker and sampled by the Environmental Management Office. The material was deemed suitable for junk fill on the MMR.	Aug-Sept 2005	51 Cubic Yards

*An established regular cleaning program is documented in the 102nd Fighter Wing's Water Management Plan.

ATTACHMENT 9

PERMIT YEAR 4:

STORMWATER MANAGEMENT CONTROL MEASURES FOR IMPLEMENTATION

ID #	BMP	ACTION	MEASURABLE GOAL	STATUS
1C	P2 Programs	Create signs/billboards for employee education and display at public events	Track number articles/ materials created and distributed; track number of people at event viewing display (via a guest book)	
3S	ID/ Elimination	Develop program for annual review of of piping schematics for historicalbuildings	Track number of buildings reviewed per year na dresults of review	
3C	ID Illicit Connections	Conduct periodic camera inspections of suspect locations	Compile list of areas inspected, dates inspected and results	
3C	ID Illicit Connections	Develop program for annual removal/testing of catch basin sediment	Compile list of catch basins cleaned, quantity of material collected an ddates preventative maintenece was scheduled/conducted	
4D	Sediment Control	Develop ordinance for contractors to implement sediment control measures	Document BMPs installed, frequency of inspections and results, maintenance activities and analyze BMP failure rate for future consideration; monitor TSS levels at outfalls	
6B	Roadway Maintenance	Reduce quantity of sand salt application	track reduction amount of deicing salt used; quantiry of alternate products used	

ATTACHMENT 10