

**Municipality/Organization:**  
Division of Capital Asset Management

---

**EPA NPDES Permit Number:** MAR043018

---

**MaDEP Transmittal Number:** W-036168 Grafton Complex,  
W-035906 Lancaster Complex, W-037313 Medfield State  
Hospital, W-039898 Oakdale Complex

---

**Annual Report Number  
& Reporting Period:** No. 9:  
April 1, 2011 - March 31, 2012

---

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Kim Plunkett

Title: Project Manager

---

Telephone #: 617-727- 4050 x225

Email: Kim.Plunkett@state.ma.us

---

#### 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: *Stephen R Casavecchia*

---

Printed Name: Stephen Casavecchia

---

Title: Manager, Office of Surplus Properties

---

Date: 4/25/12

---

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

DCAM is in the process of hiring a new Deputy Director of Facilities and until the new person is in place, Kim Plunkett will serve as the point of contact for the permit.

DCAM is pleased to report that a lot of stormwater management progress was made during permit year 9 at the four facilities covered by this permit. Work completed included site visits, good housekeeping reviews, and mapping updates. Each facility manager and other pertinent staff members walked the site and looked at catch basins and other stormwater system components. During these inspections when it was discovered that the catch basins needed cleaning, DCAM had the basins cleaned at more than half of the facilities. In addition, all outfalls were visited again during dry weather. Two outfalls (one in Lancaster and one in Medfield) had surfactant levels that were somewhat elevated. Follow on work is planned for Year 10. This is the second time in the 9 permit years that DCAM has conducted dry weather outfall inspections. Stormwater system mapping was updated for each site and is now electronically available in GIS. An updated draft stormwater management manual was also completed; it includes standard operating procedures (SOPs) with BMPs for 12 standard activities at each site.

**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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
1A	Review educational BMP requirements with facility manager (all sites)	Kim Plunkett DCAM	Meet with facility’s personnel.	DCAM staff met on-site with facility contacts at all facility locations. DCAM staff reviewed with facility contacts, stormwater educational goals for lease staff and contractors.	If the facility managers staff position changes then meet at facility with new facility manager. If a meeting is required then the goals are to review current programs and site users, and identify any needed changes to facility’s activities and potential impacts to receiving waters. Otherwise a phone call check in will be sufficient.  Provide each facility with an updated stormwater management manual. Review the SOPs.
1A.2	Education on NPDES and on-site activities - Grafton Job Corps.	Paul Bohnsen Job Corps	Number of education materials reviewed/provided.	Met on site with Mr Bohnsen and maintenance staff in Fall 2011. Reviewed all facility practices and identified 12 applicable BMPs good housekeeping procedures.	Continued stormwater education for facility staff, visitors and contractors.

1A.3	Education on NPDES and on-site activities - Grafton DYS Facility	Jonathan Sawyer DYS	Number of education materials reviewed/provided.	Literature regarding proper snow disposal and removal is displayed on site. Staff members actively participate in the Massachusetts Facility Management Managers Association training program, which includes the following stormwater related trainings: <ul style="list-style-type: none"> <li>• Best Practices Snow Removal</li> <li>• Floor Care and Green Cleaning</li> <li>• Integrated Pest Management</li> <li>• Sweeper Training</li> </ul>	Continued stormwater education for facility staff, visitors and contractors. Continue MAFMA training as applicable.
1A.4	Education on NPDES and on-site activities - Oakdale Complex	John Scannell DCR	Number of education materials reviewed/provided.	Facility user produces several stormwater educational materials and runs a program to educate the local community on stormwater related issues. All staff at the Oakdale complex is trained annually for spill response.	Continued stormwater education for facility staff, visitors and contractors.
1A.5	Education on NPDES and on-site activities - Lancaster Complex	Stephen Casavecchia DCAM	Number of education materials reviewed/provided.	In preparation for staff training, conducted a facility good housekeeping review to determine education needs. Draft manual is complete and includes 12 BMPs.	Continued education for onsite facility staff.
1A.6	Education on NPDES and on-site activities - Medfield	Stephen Casavecchia DCAM	Number of education materials reviewed/provided.	In preparation for staff training, conducted a facility good housekeeping review to determine education needs. Draft manual is complete and includes 12 BMPs.	Distribute updated manual as appropriate.

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
2A	Public Information Meeting (all sites)	Kim Plunkett DCAM	Review meeting needs	Meeting needs were discussed with each facility manager during the Fall 2011.	Once annually the DCAM Project Manager will discuss public information meeting needs with each facility manager.
2A.1	Public Information Meeting - Grafton Complexes	Paul Bohson Job Corps Jonathan Sawyer DYS	Number of meetings	No meetings held.	No meetings anticipated.
2A.2	Public Information Meeting Oakdale	John Scannell DCR	Conduct meeting.	Facility user at Oakdale site worked directly with DPW directors and Town Administrators from some of the main watershed communities, focusing on individual stormwater management issues, such as BMP maintenance.	Continue throughout permit term.
2A.3	Public Information Meeting Lancaster	Stephen Casavecchia DCAM	Number of meetings	No meetings held.	No meetings anticipated.
2A.4	Public Information Meeting Medfield	Stephen Casavecchia DCAM	Number of meetings	No meetings held.	No meetings anticipated.

### 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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
3A	Conduct dry weather sampling of outfall.	Kim Plunkett DCAM	Identify suspected illicit connections as DCAM obtains additional surplus property.	DCAM conducted dry weather inspections at all DCAM-owned outfalls and sampled those with flow. No illicit discharges were found. A separate memo dated January 2012 summarizes the findings.	No action required.
3B	Investigate drainage system.	Kim Plunkett DCAM	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	DCAM completed the record drawing review and supplemented with field work. New 'draft' drainage system maps are now available for each facility in GIS.	Review 'draft' drainage system maps with facility managers and finalize.
3B.1	Investigate drainage system – Grafton Job Corps	Paul Bohanson Job Corps	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	Complete.	No action required.
3B.2	Investigate drainage system – Grafton DYS Facility	Jonathan Sawyer DYS	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	Complete.	No action required.
3B.3	Investigate drainage system - Oakdale	John Scannell DCR	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	Complete.	No action required
3B.4	Investigate drainage system – Lancaster Complex	Stephen Casavecchia DCAM	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	Conducted investigations and found one outfall (OF-2) to have elevated levels of surfactants only.	Revisit & resample OF-2. If elevated levels continue, develop a plan of action.

3B	Investigate drainage system - Medfield	Stephen Casavecchia DCAM	For all suspect outfalls, identify outfall tributaries and investigate drainage system.	Conducted investigations and found one outfall (OF-1) to have elevated levels of surfactants only.	Revisit & resample OF-1. If elevated levels continue, develop a plan of action.
3C	If outfalls are polluted, eliminate the sources.	Kim Plunkett DCAM	Resample sources to verify polluted sources are removed.	No suspected illicit connections were identified in previous permit years. All outfalls were re-inspected in this permit term and no illicit discharges were found. Therefore, no action taken.	If illicit connections are identified, and, if time allows, a plan for removal will be prepared.

**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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
4A	Incorporate EPA’s Construction General Permit for all DCAM construction projects.		Completed	DCAM continues to incorporate EPA NOIs into DCAM Standard Specifications. Contractors also completed NOIs.	DCAM continues to incorporate EPA NOIs into DCAM Standard Specifications. Contractors also completed NOIs.
Revised	Incorporate EPA’s Construction General Permit for DCAM construction projects of 1 acre or greater of disturbed land area.	Kim Plunkett DCAM			
Revised					
Revised					
Revised					

#### 4a. Additions

--	--	--	--	--	--

**5. Post-Construction Stormwater Management in New Development and Redevelopment**

**Not Applicable.**

<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 9</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 10</b>
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
6B	Employee training (all sites)	Kim Plunkett DCAM	Discuss employee training needs with individual facility managers. Speak with facility managers at all sites	Reviewed facility information with each facility manager. Information pertaining to each applicable site is listed below.	Continue throughout permit term.
Revised					
6B.1	Employee training – Grafton Job Corps	Paul Bohson Job Corps	Number of employees trained.	Reviewed DCAM’s Stormwater Management Manual with 7 employees.	Continue throughout permit term
6B.2	Employee training – Grafton DYS	Jonathan Sawyer DYS	Number of employees trained.	2 staff members from the Grafton DYS Complex attended stormwater related trainings offered by Massachusetts Facility Management Managers Association (MAFMA).	Continue to attend stormwater trainings through MAFMA as they are offered.
6B.3	Employee Training - Oakdale	John Scannell DCR	Number of employees trained.	25 employees received training on reservoir spill emergency response in November 2011 and April 2012. Additional roadway spill response training is scheduled for April 29, 2012 with 20 participants expected.	Continue throughout permit term
6B.4	Employee Training – Lancaster & Medfield	Stephen Casavecchia DCAM	Number of employees trained.	One employee has reviewed good housekeeping and spill response BMPs for this site during review of the updated draft stormwater management manual.	Continue throughout permit term

6C (all sites)	Standard Operating Procedures	Jonathan Sawyer Grafton DYS Paul Bohnon Grafton Job Corps John Scannell DCR Stephen Casavecchia DCAM	Good Housekeeping procedures established and implemented (assessed annually)	A draft manual with SOPs for Good Housekeeping has been prepared. It was prepared based on an assessment of each facility.	Distribute the SOPs to facility managers.
6D All Sites	Materials Management	Jonathan Sawyer Grafton DYS Paul Bohnon Grafton Job Corps John Scannell DCR Stephen Casavecchia DCAM	Proper storage of materials (assessed annually)	Site assessments were conducted in Fall 2011. Outside waste containers/dumpsters are maintained properly including keeping them covered. Sand and salt storage areas are covered.	Continue throughout permit term.

**6a. Additions**

6a	Site inspection (all sites)	Kim Plunkett DCAM	Number of site inspections performed	In Fall 2011 a site visit was conducted at each DCAM owned property. (a total of 4 site visits) Current good housekeeping practices were reviewed and compared to BMPs.	Provide feedback to property managers and DCAM staff on proper BMPs for each site.
Revised					
6b	Update Good Housekeeping Manual (all sites)	Kim Plunkett DCAM	Good Housekeeping Manual updated	An updated draft Stormwater Management Manual was completed in February 2012.	Complete review of updated Stormwater Management Manual and distribute as appropriate to facilities.
Revised					
6c	Develop catch basin cleaning program (all sites)	Kim Plunkett DCAM		A complete inventory of catch basins was completed for all sites. Many were found to need cleaning. DCAM cleaned more than 50% of the basins.	Clean all catch basins at least once annually.

Revised					
6d	Site management (Medfield)	Kim Plunkett DCAM	SOPs reviewed, site visited, and BMPs recommended.	Site was visited in Fall 2011, SOPs were reviewed and a draft BMP has been prepared and is under review.	Finalize BMP and distribute as appropriate.
Revised					
6e	Rain garden review (Oakdale)	John Scannell DCR	Rain garden feasibility researched	Staff members are currently working on a design of a rain garden for filtering stormwater before it enters reservoir. Installation is expected by June 30.	Finalize design and install rain garden.
Revised					

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

**Not 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 – Permit Year 9
Revised					

**7a. Additions**

--	--	--	--	--	--

**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

During this Annual Report period, no data reports have been generated.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	(\$)	

**Education, Involvement, and Training**

Estimated number of residents 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.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

**Legal/Regulatory**

	In Place Prior to Phase II	Under Review	Drafted	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**

Outfall mapping complete	(%)	95
Estimated or actual number of outfalls	(#)	26 outfalls total at 4 locations
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	95
Outfalls inspected/screened	(# or %)	100
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

### Construction

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 completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

### Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1x/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	n/a
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	< 1 ton
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	< 1x/yr
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)	< 1 ton
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Commercial contract
Cost of sweepings disposal	(\$)	small
Vacuum street sweepers purchased/leased	(#)	purchased
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	none
▪ Herbicides	(lbs. or %)	none
▪ Pesticides	(lbs. or %)	none

Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	Yes as of April 2012
Manual control spreaders used	(y/n)	yes
Automatic or Zero-velocity spreaders used	(y/n)	no
Estimated net reduction in typical year salt application	(lbs. or %)	50%
Salt pile(s) covered in storage shed(s)	(y/n)	yes
Storage shed(s) in design or under construction	(y/n)	no