ENGINEERS
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May 31, 2017

Mr. Frederick Civian
Massachusetts Department of Environmental Protection
One Winter Street – Fifth Floor
Boston, MA 02108

RE: NPDES Small MS4 General Permit Number [MAR041168]
Year 14 Annual Report
Wareham, Massachusetts
G.A.F. Job No. 8910

Dear Mr. Civian:

On behalf of the Municipal Maintenance Department of the Town of Wareham, G.A.F. Engineering, Inc. is submitting the enclosed Year 14 Annual Report for NPDES Small MS4 General Permit Number [MAR041168].

If we can be of any further assistance regarding this matter, please contact William F. Madden, P.E. at our office.

Sincerely,
G.A.F. Engineering, Inc.

William F. Madden, P.E.

WFM/mas

Cc: Mr. Newton Tedder, US EPA CIP
Dave Menard, Wareham Director of Municipal Maintenance
Ken Buckland, Wareham Town Planner

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May 31, 2017

Mr. Newton Tedder
United States Environmental Protection Agency
Stormwater and Construction Permits Section (OEP06-01)
Five Post Office Square, Suite 100
Boston, MA 02109

RE: NPDES Small MS4 General Permit Number [MAR041168]
Year 14 Annual Report
Wareham, Massachusetts
G.A.F. Job No 8910

Dear Mr. Tedder,

On behalf of the Municipal Maintenance Department of the Town of Wareham, G.A.F. Engineering, Inc. is submitting the enclosed Year 14 Annual Report for NPDES Small MS4 General Permit Number [MAR041168].

We have also sent a copy of the annual report to Frederick Civian at the Boston office of DEP.

If we can be of any further assistance regarding this matter, please contact William F. Madden, P.E. at our office.

Sincerely,
G.A.F. Engineering, Inc.

William F. Madden, P.E.

WFM/mas

Cc: Dave Menard, Wareham Director of Municipal Maintenance
Ken Buckland, Wareham Town Planner

Municipality/Organization: **Town of Wareham**

EPA NPDES Permit Number: **MAR-04-1168**

MaDEP Transmittal Number: **W- 045147**

Annual Report Number & Reporting Period: **No. 14: March 31, 2016-May 1, 2017**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: David Menard | Title: Director of Municipal Maintenance

Telephone #: (508) 295-5300 | Email: dmenard@wareham.ma.us

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: David Menard

Printed Name: DAVID MENARD

Title: DIRECTOR MUNICIPAL MAINTENANCE

Date: 5-31-17

Part II. Self-Assessment

The Town of Wareham has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part II.B.1-6 Any Provisions of Part II.B.1-6 that have not been met are detailed in Part III below.

Part II.B.8 The Town encourages BMPs that promote groundwater recharge and Standard 3 of the DEP Stormwater Management Standards. Town mandated groundwater recharge/infiltration regulations, however, have not been adopted.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
1-1	Form Partnerships	Town Administrator	Partnerships Developed	The Town continues to work with the Buzzards Bay Natural Estuaries Program. They have also partnered with the Buzzards Bay Action Committee for assistance with water quality monitoring and training. The BBAC trained 4-5 DPW employees on water quality sampling and testing.	Continue to work with the Buzzards Bay Natural Estuaries Program and BBAC. Reach out to other similar groups.
Revised					
1-2	Educational Material	Dir. of Municipal Maintenance	Educational Material Developed	The town displays educational pamphlets and provides handouts in the Town Hall and Municipal Maintenance Building. Links are provided on the town website that access storm water regulations and guidelines. Some prior MS4 annual reports are available on the Maintenance Dept. web page.	Continue to make educational materials available throughout the Town and on the Town's website. Update the website by including the MS4 annual reports from 2008-2016. Review the storm water related links and update the information as needed.
Revised					
1-3	Annual Public Hearing	Town Administrator	Y1. Meetings Held Y2. Radio ads for participation Y3. Community participation in community cleanups Y4. Establish Citizen Watch Groups	The annual meeting on the Phase II Stormwater Permit requirements was not held during Permit Year 14. The Town invites the public to assist with various activities pertaining to the Phase II permit. The Town participates in the annual Earth Day activities, as well as various designated beach clean up days.	Continue to invite the public to participate in Phase II activities including Earth Day activities and beach cleanup days. Conduct the annual Public Hearing and meet with the Board of Selectmen to review the new permit requirements, previously unmet goals, and advocate for more funding and cooperation toward meeting the Town's objectives.
Revised					

1a. Additions

None at this time.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
2-1	Encourage Citizen Action	Dir. of Municipal Maintenance	Brochure and flyers prepared in step 1-2 utilized to invite public participation in discharge mapping and detection.	For Permit Year 14, the Town invited the public to assist with various activities pertaining to the Phase II permit. The Town participates in the annual Earth Day activities, as well as, various designated beach cleanup days. Rain barrels were purchased for use at municipal buildings and made available to the public. The town sponsors an annual Hazardous Waste Collection program which encourages residents to drop off their old or unwanted containers of paints and solvents which requires special disposal.	Continue to invite the public to participate in Phase II activities including Earth Day activities and beach cleanup days. Rain barrels will continue to be made available to the public and utilized at municipal buildings. Continue the Hazardous Waste Collection program.
Revised					
2-2	Establish Stormwater Committee	Town Administrator	Committee Created	The Stormwater Committee did not hold any meetings during Permit Year 14.	Hold at least one Stormwater Committee meeting. Discuss the goals and requirements of the new 2016 MS4 General Permit.
Revised					
2-3	Selectmen's Meeting	Town Administrator	Meeting Held	General discussions were conducted with the Town Administrator but a separate meeting with the Selectmen was not held.	Discuss progress on Phase II requirements at a Selectmen's meeting. Present the new 2016 MS4 General Permit requirements.
Revised					
2-4	Storm Drain Stenciling	Dir. of Municipal Maintenance	Record No. of CB's Stenciled	No additional storm drains were stenciled this year however the Town has been purchasing grates which come pre-stenciled with "no dumping" or similar messaging cast into the grate.	During Permit Year 15, at least 15 new storm drains will be stenciled.
Revised					
2-5	Stream Cleanup	Dir. of Municipal Maintenance	Report on Cleanup Activities	The Town invites the public to assist with various activities pertaining to the Phase II permit. The Town participates in the annual Earth Day activities, as well as, various designated beach clean up days.	Continue to invite the public to participate in Phase II activities including Earth Day activities and beach cleanup days. Reach out to the local kayak groups to encourage organized cleanup trips.
Revised					

2a. Additions

The Director of the Municipal Maintenance Department attended multiple meetings with the Buzzards Bay Action Committee. The purpose of the meetings was to interact with other town officials regarding testing of stormwater outfalls to better manage shellfish area closures.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
3-1	Discharge Identification	Dir. of Municipal Maintenance	Discharges Identified	In Permit Year 14, the Town continued to update the drainage system mapping. Three direct discharges to Onset Bay were capped and replaced as part of the Hotel St., Ocean Ave., East Blvd. street improvement project.	In Permit Year 15, the Town will continue to update the drainage system mapping on an as-needed basis. The direct discharge from the Onset Mobile Home Park will be eliminated. The system will be connected to the new Ocean Ave. system.
Revised					
3-2	Prohibition/ Enforcement	Board of Health	Report Prepared, Bylaws Amended	During Permit Year 14, the Town has not amended the bylaws to provide a mechanism for illicit discharge detection and elimination. During Permit Year 14, the Town continued to discuss drafting a by-law.	In Permit Year 15, the Town will continue to work on a stormwater bylaw. The Town plans to present a stormwater article at a future Town Meeting.
Revised					
3-3	Drainage Network Map	Town Planner	Map Produced	In Permit Year 14, the Town updated the drainage system mapping.	In Permit Year 15, the Town will continue to update the drainage system mapping on an as-needed basis.
Revised					
3-4	Illicit Discharge Identification	Dir. of Municipal Maintenance	Y1. Illicit Discharges Quantified Y2. Ordinances adopted re: illicit discharges Y3. Elimination of illicit discharges ongoing & household hazardous collection program in place Y4. Elimination of most illicit discharges complete	During Permit Year 14, the Town has not taken any formal steps to identify illicit discharges. However, if an illicit discharge is discovered, the Town takes steps to eliminate the illicit discharge. The Town is considering the establishment of a stormwater remediation fund which would be used in part to detect illicit discharge connections.	For illicit discharge detection, the Town will work on updating the drainage system mapping. Since the original drainage system map was produced, new subdivisions and developments with drainage systems have been built. These drainage systems will be added to the drainage system mapping. The Director will meet with the Buzzards Bay Action Committee to coordinate the detection of illicit discharges.
Revised					

3-5	Illicit Discharge Enforcement	Dir. of Municipal Maintenance	Y1. Illicit Discharges Quantified Y2. Ordinances adopted re: illicit discharges Y3. Elimination of illicit discharges ongoing & household hazardous collection program in place Y4. Elimination of most illicit discharges complete	During Permit Year 14, the Town has not taken any formal steps to identify illicit discharges. However, if an illicit discharge is discovered, the Town takes steps to eliminate the illicit discharge. The sewer department purchased a pipe network camera system which can be used to detect illicit discharges.	For illicit discharge detection, the Town will update the drainage system mapping on an as-needed basis. Utilize the new pipe camera system where needed to detect illicit connections.
Revised					
3-6	DPW Training	Dir. of Municipal Maintenance	Training Provided	The executive secretary of the municipal maintenance department attended an EPA NPDES workshop during Permit Year 14. The Municipal Maintenance Director and Conservation Administrator attended meetings of the Buzzards Bay Action Committee (BBAC). The BBAC has been training DPW employees on water quality sampling and testing.	Continue attending BBAC meetings. In addition, the Town plans to continue the stormwater training program for DPW and other Town employees during the permit year.
Revised					
3-7	Public Information	Dir. of Municipal Maintenance	Complaint File Completion and Maintenance	The Town has implemented a system for residents to report illicit discharge complaints. If a resident calls about an illicit discharge, the message is taken and the Director is notified. They, in turn, investigate the call and determine ways to rectify the situation.	Continue educating residents about illicit discharges. Continue current practice of accepting stormwater and illicit discharge calls at the Municipal Maintenance office. The Director or Foreman will investigate the call and determine ways to rectify the situation.
Revised					

3a. Additions

None at this time.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
4-1	Conservation Commission Bylaw	Conservation Commission Agent	1. Review bylaw, prepare findings, report on necessary changes/amendments to bylaw, revise bylaw to incorporate necessary revisions 2. Institute site inspection procedures 3. Realize improved water clarity 4. Realize increased number of aquatic organisms in water bodies.	The Conservation Commission already prevents erosion from construction sites and controls post construction stormwater management, although the bylaw language does not directly state this. The Conservation Commission has developed a local wetland by-law.	The Conservation Commission may propose updates to the bylaw at the Fall 2017 Town Meeting.
Revised					
4-2	Subdivision Rules and Regulations	Town Planner	1. Review regulations, prepare findings report, rules and regulations revised per findings 2. Institute site inspection procedures 3. Realize improved water clarity 4. Realize increased number of aquatic organisms.	The Town has hired a full time Town Planner this past year. The current subdivision rules and regulations have adopted the DEP Stormwater Management Standards as the Town's drainage requirements.	The Stormwater Committee with assistance of the new Town Planner will start to draft a stormwater bylaw during Permit Year 15. In addition, the Town will work on updating the subdivision rules and regulations.
Revised					

4-3	Zoning Review	Town Planner	1. Review bylaw, prepare findings report on necessary changes/amendments to bylaw, revise bylaw to incorporate necessary revisions 2. Institute site inspection procedures 3. Realize improved water clarity 4. Realize increased number of aquatic organisms in water bodies.	The Town was not able to work on stormwater specific bylaws due to the fairly recent hiring of a Town Planner. Once the new full time Town Planner is able he will be in a position to coordinate putting forth new regulations for adoption by the Town.	In Permit Year 15, the Town will work on updating the zoning bylaws.
Revised					

4a. Additions

None at this time.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
5-1	Conservation Commission Bylaw	Conservation Commission Agent	Bylaw Amended	The Conservation Commission already controls erosion from construction sites and controls post construction stormwater management, although the bylaw language does not directly state this. The Conservation Commission has an existing wetland protection by-law.	The Town has established a committee to review the current wetland protection bylaw and make any recommendations to Town Meeting.
Revised					
5-2	Subdivision Rules and Regulations	Town Planner	Rules and Regulations Revised	The Town did not update the subdivision rules and regulations regarding erosion from construction sites and to control post construction stormwater management during Permit Year 14. The subdivision rules and regulations have a provision that the Planning Board could require a "Soil Erosion and Sedimentation Control Plan" if erosion due to development activity is excessive or significant to wetlands, streams, ponds, or other water bodies.	In Permit Year 15, the Town Planner will have the task of reviewing and providing recommendations for updating the Planning Board's Rules and Regulations.
Revised					
5-3	Zoning Review	Town Planner	By-laws Amended	The Town appointed a zoning by-law committee in year 14 to evaluate the current By-laws and make recommendations for changes.	The By-law committee will report their recommendations to the Town Planner and Planning Board who will hold a hearing on any proposed changes. By-law revisions will be submitted for approval by Town Meeting in the Fall of 2017.
Revised					

5a. Additions

None at this time.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
6-1	D.P.W. Policy Guide	Dir. of Municipal Maintenance	Policy Guide Developed	The Town did not establish a policy guide for vehicle maintenance and salt storage. The Town is, however, moving ahead with a project to construct a new state of the art salt storage shed at the Town Barn.	The Town plans to develop a policy guide for vehicle maintenance and salt storage. The salt storage shed project will move forward with engineering design with a goal of establishing a construction budget.
Revised					
6-2	D.P.W. Annual Training	Dir. of Municipal Maintenance	Training Manual Prepared, Employee Training completed, recycling program fully implemented, pesticide reduction implemented	The Town did not complete the training manual for stormwater pollution prevention. The Town continued the recycling program. In addition, the DPW has used pesticides minimally for weed control only. Training of employees by the BBAC is ongoing.	The Town plans to continue the recycling program. The Town plans to start the development of a training manual for stormwater pollution prevention. The Town plans to continue using pesticides minimally for weed control only. The BBAC is utilized for employee training to the extent possible.
Revised					
6-3	D.P.W. Maintenance Schedule	Dir. of Municipal Maintenance	Maintenance Schedule Developed	Street sweeping begins in March and catch basin cleaning is ongoing. Over 200 catch basins were cleaned during permit year 14.	The Town plans to continue street sweeping and catch basin cleaning. All new catch basins installed shall be deep sump units with special outlet traps which will greatly enhance the water quality leaving each catch basin.
Revised					
6-4	D.P.W. Permit Filing	Dir. of Municipal Maintenance	Permits on File	On-going filing of all stormwater related projects.	Continue permit filing.
Revised					

6a. Additions

6-5				The Hotel St., Ocean Ave., & East Blvd. street reconstruction project included a significant amount of new drainage structures and a new outfall system of leaching galleys which eliminated 3 separate direct discharges to Onset Bay. A proprietary separator manhole was installed prior to discharge to the leaching system.	Existing streets proposed for reconstruction, drainage, and sidewalk improvement in Year 15 will include stormwater treatment BMPs and Low Impact Development techniques where possible. The Onset Mobile Home Park will be connected to the new drainage system in Ocean Ave. This will eliminate another untreated direct discharge to Onset Bay. The Rose Point section of Wareham is also scheduled for drainage upgrades.
Revised	Water Quality Improvements to Existing Drainage System	Dir. of Municipal Maintenance	Y13. Design stormwater treatment system Y13. Construct stormwater treatment system		

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
7-1	Pooper Scooper Educational Materials	Department of Public Works	Y8. Start to develop educational materials on pet waste and pooper scooper regulations Y9. Distribute educational materials	The Town continued to work on developing educational material on pet waste and the pooper scooper regulations.	The Town plans to develop and distribute educational material on pet waste and the pooper scooper regulations. Dog waste bag stations will be requested to be installed at popular pet walking locations.
Revised					
7-2	Educational Materials for Reduction in Phosphorus in Stormwater	Department of Public Works	Y9. Start to develop educational materials on phosphorus reduction Y10. Distribute educational materials	The Town continued to work on educational material on septic system maintenance and reducing fertilizer use.	The Town plans to develop educational material on septic system maintenance and reducing fertilizer use.

7a. Additions

7b. WLA Assessment

Not applicable at this time.

Part IV. Summary of Information Collected and Analyzed