

**UPDATED SWMP PLAN
MS4 SPDES PERMIT NO. NYR20A507**

**BRIARCLIFF MANOR SCHOOL DISTRICT
45 INGHAM ROAD
BRIARCLIFF MANOR, NEW YORK 10510**

NOVEMBER 2015

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**STORMWATER MANAGEMENT PROGRAM
SPDES PERMIT NO. NYR20A507**

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SECTION 1 – SWMP ORGANIZATION

1.1 PLAN OVERVIEW

This Stormwater Management Program Plan (SWMP Plan) was prepared by CFE Consulting Services, LLC on behalf of the Briarcliff Manor School District (BMSD), with input and assistance of the Offices of School Facilities and Operations. The report documents the various steps taken by the BMSD and includes ongoing and planned activities during the during the current permit term.

The District permitted facilities include:

- Biarcliff Manor Middle School, 444 Pleasantville Rd. Briarcliff Manor, NY 10510
- Biarcliff Manor High School, 444 Pleasantville Rd. Briarcliff Manor, NY 10510

The SWMP Plan complies with the intent of the NYSDEC SPDES Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-15-003, issued pursuant to Article 17, Title 7, 8 and Article 70 of the Environmental Conservation Law. **The current permit extends from May 1, 2015 and expires on April 30, 2017.**

This SWMP Plan is intended to be a guide to aid District in complying with the United States Environmental Protection Agency (EPA) Phase II Stormwater Regulations. The document does not constitute rule making nor does it substitute reading of the regulations and understanding all of its requirements as it applies to your facility. Additional information on Phase II rules, including a series of fact sheets and a full copy of the final rule, can be found on EPA's web pages at <http://www.epa.gov/owm/sw/phase> or at the New York State Department of Environmental Conservation (NYSDEC) website:

www.dec.state.ny.us/website/dow/mainpage.htm .

The SWMP Plan includes a description of the following elements:

- Federal Stormwater Regulations
- Sensitive Waterbodies
- POCs and their impacts to Stormwater Runoff
- Current Permit Implementation Program
- Proposed Actions for the Current Permit
- District's Staffing, Funding and Training for the second term

1.2 PLAN REVISIONS AND UPDATES

In accordance with Permit No.GP-0-15-003, the SWMP will be amended/updated whenever the Best Management Practices (BMPs) specified in this plan are ineffective in controlling the discharges of pollutants. These changes, if adopted, will be reflected in the Annual Report submitted to NYSDEC.

1.3 DOCUMENT ORGANIZATION

This document is organized into five (5) major sections as follows:

Section 1.0

- Introduces you to this document
- Provides a program overview and the program's objectives

Section 2.0

- Provides background information of the federal stormwater regulations and its applicability
- Discusses New York State General Permit requirements under GP-0-15-003
- Lists some of applicable definitions used under the new regulations

Section 3.0

- Includes the current permit proposed actions
- Describes requirements of six minimum measures

Section 4.0

- Describes the permit implementation program
- Discusses the impact of POCs on receiving water bodies
- Describes the Districts SWMP efforts
- Discusses the Stormwater Management Measurable Goals

Section 5.0

- Provides a discussion on the District's Staffing Program
- Describes the District's Training Program
- Provides a discussion on the District's Program Funding

SECTION 2 – FEDERAL STORMWATER REGULATIONS

2.1 CURRENT PERMIT REQUIREMENTS

Under the Phase II Stormwater EPA Regulations, the District was granted a SPDES General Permit from the New York State Department of Environmental Conservation (NYSDEC) for the discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 Permit) under GP-0-15-03. The current SPDES Permit is extended from May 1, 2015 and expires on April 30, 2017.

The permit requires the District to develop, implement and enforce a stormwater management program (SWMP) designed to reduce the discharge of pollutants from stormwater runoff. Pursuant to the permit conditions, the District is required demonstrate compliance with the following six minimum control measures:

- MCM 1: Public Education And Outreach
- MCM 2: Public Involvement/Participation
- MCM3: Illicit Discharge Detection & Elimination
- MCM 4 Construction Site Stormwater Runoff Control
- MCM 5 Post-Construction Stormwater Management
- MCM 6: Pollution Prevention/Good Housekeeping

The SPDES Permit requires the District to show steady progress towards achieving the above measurable goals by April 30, 2017.

2.2 IMPACTS OF DIFFUSE SOURCES OF POLLUTION

Efforts to improve our nation's water quality have been focused on reducing pollutants from industrial process wastewater and municipal sewage treatment plant discharges (typically referred to Point Sources of Pollution).

Over time it has become evident that more pollution is caused by diffuse sources of pollution from overland runoff and construction sites. Sources of pollution, typically referred to as Non-Point Sources of Pollution, vary from location to location.

According to an inventory conducted by EPA, major sources of water pollution nationally, are as follows:

- 60% of total pollution results from overland runoff from diffuse sources
- 15% from urban stormwater channelized flow
- 25% from wastewater facilities (point sources or piped discharges)

According to Federal Clean Water Action Plan:

- The nation’s waters, assessed by the States, are still unsafe for fishing and swimming
- Watersheds evaluated are experiencing “significant” levels of degradation under generally accepted methodologies.

2.3 DEFINITIONS

A listing of definitions used in this document follows:

Best Management Practice (BMP) – management practices to prevent or reduce pollution of the waters of the State. These practices include structural practices such as stormwater treatment devices (swales, retention basins, sediment traps) as well as non-structural practices such as policies and procedures, and other activities to reduce, and prevent stormwater pollution

Construction Activity(ies) – include clearing, grading, excavation, demolition, stockpiling or other activities that result in soil disturbance

Illicit Discharges – include non-stormwater discharges such as sanitary sewage overflows, oils and greases, chemicals and other pollutants that are conveyed to the storm conveyance system

Municipal Separate Storm Sewer System (MS4) – consists of a publicly-owned system of conveyances that discharges stormwater to waters of the U.S. The separate storm sewer conveyance system consists of the underground network of piping systems, as well as above ground catch basins, storm drainage inlets and manholes, including drainage ditches, swales, man-made channels and gullies. However, the separate storm sewer system excludes combined sewers and sewers within a Publicly Owned Treatment Works

Non-traditional MS4s – state and federal prisons, hospitals, transportation agencies, university campuses, public housing authorities, schools and other special districts

Outfall – any point where an MS4 discharges stormwater to either the surface waters of the State or to another MS4. Outfalls include discharges from pipes, ditches, swales and other points of concentrated flow. However, areas of non-concentrated (sheet) flow, which drain to surface waters of the State or another MS4’s system, are not considered outfalls

Permittee – is a holder of a SPDES permit or any entity required to gain coverage under the general SPDES permit.

Pollutants of Concern (POC) – consists of 1) primary POCs (comprise the majority), such as nitrogen, phosphorus, silt and sediment, pathogens and floatables, typically found in urban runoff, erosion and on-site wastewater treatment systems and 2) secondary POCs (less likely), such as petroleum hydrocarbons, heavy metals, and polyaromatic hydrocarbons

Qualified Professional – may consist of 1) a licensed Professional Engineer 2) licensed Landscape Architect or 3) other Department endorsed individual, knowledgeable in the principles and practices of stormwater management and treatment. All stormwater management programs, treatment and practices shall be prepared by, or under direct supervision of, a professional engineer licensed to practice in the State of New York

Retrofit – applies to modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings to stormwater

State Pollutant Discharge Elimination System (SPDES) – System established for issuance of permits authorizing discharges to waters of the state

Storm Sewershed – a catchment area that drains into a storm sewer system based on the topography in the area served by the storm sewer

SWPPP – Stormwater Pollution Prevention Plan prepared by a licensed professional for stormwater discharges from construction activity

Stormwater – consists of precipitation that falls on the ground, which flows or will flow off the land by surface runoff to waters of the state

Stormwater Management Program (SWMP) – the program implemented by the permittee to address POCs and to reduce the discharge of pollutants to nearby surface waters of the state or another MS4

Surface Waters of the State – include lakes, bays, ponds, marshes, wetlands, rivers and streams, inland or coastal fresh or salt waterbodies, which are wholly or partially within or bordering the state or within its jurisdiction

SECTION 3 – CURRENT PERMIT REQUIREMENTS

3.1 CURRENT PERMIT REQUIREMENTS

As part on the ongoing SWMP, new permits have been issued for another two (2) year term beginning on May 1, 2015 and extending to April 30, 2017. This section of the SWMP Plan describes proposed actions that the District will undertake to meet the current permit requirements.

3.2 PUBLIC EDUCATION AND OUTREACH PROGRAM

The District will develop an ongoing public education and outreach program designed to:

- Identify Pollutants of Concern (POCs) and their sources
- Identify waterbodies impacted by stormwater discharges
- Describe the impacts of POCs on waterbodies
- Describe steps taken to reduce POCs from stormwater discharges
- Describe steps taken to reduce POCs from non-stormwater discharges

3.3 PUBLIC INVOLVEMENT/PARTICIPATION PROGRAM

The District will develop an ongoing public involvement/participation program designed to:

- Identify a local point of contact for SWMP. The name, title, telephone number of this contact must be published in all outreach materials
- Provide the community with public outreach materials by posting these materials on the website, bulletin boards, common areas and staff meeting rooms
- Provide an opportunity for the public to participate in the development and implementation and review of the SWMP

3.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Under the illicit discharge and detection minimum measure, the District will:

- Describe priority areas of concern
- Detect and address categories of non-stormwater discharges
- Prohibit the illicit discharges into the storm sewer system
- Develop procedures or policies for the enforcement of illicit discharges, equivalent to the State's model for IDDE
- Field verify outfall locations
- Conduct an outfall reconnaissance inventory annually
- Report to the District new outfalls as they are constructed or discovered

3. 5 CONSTRUCTION SITE RUNOFF CONTROL

Under the construction site runoff control minimum measure, the District will, as required:

- Develop procedures or policies for the enforcement of construction activity, equivalent to the State’s model for Construction Activities
- Develop, implement and enforce a program to reduce pollutants from a land disturbance in a construction site of greater than equal one acre
- Develop, a regulatory mechanism or policy that requires erosion and sediment controls in accordance to New York Standards and Specifications for Erosion and Sediment Control
- Employ design professionals for developing and/or review of SWPPPs Include a process whereby the public can review and comment on the construction plans through use of postings on the stormwater website, local newspapers and or public hearings
- Develop policies and procedures for compliance inspections at construction sites of greater than equal one acre
- Provide training by a design professional to site contractors in proper erosion and sediment control practices
- Establish and maintain an inventory of active construction sites
- Develop and update measurable goals and BMPs to ensure the reduction of POCs in stormwater discharges

3. 6 POST-CONSTRUCTION RUNOFF CONTROL

Under the post-construction site runoff control minimum measure, the District will, as required:

- Provide equivalent protection to the NYS SPDES General Permit for Construction Activities
- Develop procedures or policies for the enforcement of post-construction activity, equivalent to the State’s model for Post-Construction Activities
- Establish and maintain an inventory of active post-construction sites
- Ensure long-term operation and maintenance of management practices by trained staff
- Develop and implement resources for inspection of post-construction SMPs
- Develop and update measurable goals and BMPs to ensure the reduction of POCs in stormwater discharges

3. 7 POLLUTION PREVENTION/GOOD HOUSEKEEPING

Under this minimum measure, the District will, as required:

- Develop policies and procedures that address District's operations that contribute or potentially contribute POCs to stormwater discharges
- Determine management practices that will reduce POCs to stormwater discharges
- Address pollution prevention and good housekeeping priorities
- Include O & M Staff training
- Provide contracted third party certification, as required by Part IV .G of the permit requirements

SECTION 4 - CURRENT PERMIT IMPLEMENTATION

4.1 INTRODUCTION

Under the Phase II Stormwater EPA Regulations, the District was granted a SPDES General Permit from the New York State Department of Environmental Conservation (NYSDEC) for the discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 Permit).

The permit requires the District to develop, implement and enforce a stormwater management program (SWMP) designed to reduce the discharge of pollutants from stormwater runoff. The SPDES Permit requires the District to show steady progress towards achieving the above measurable goals by April 30, 2017.

To demonstrate the District's progress towards meeting their MS4 measurable goals under the SPDES Permit issued, the District has selected a SWMP Coordinator, established a SWMP Steering Committee and hired a consultant to assist them in implementing the program.

4.2 SENSITIVE WATERBODIES

The BMSD permitted properties lie within the Saw Mill River Drainage Basin, which discharges into the Hudson River in Yonkers.

4.3 IMPACTS FROM POLLUTANTS OF CONCERN

Potential pollutants to stormwater runoff from the District may include:

- Litter and debris from paved driveways and parking lots
- Polycyclic aromatic hydrocarbons, oils and greases from paved areas and driveways
- Salt, sand and de-icing chemicals from winter road maintenance
- Fertilizers, pesticides and herbicides from lawns and gardens
- Pathogens from on-site individual septic systems septic system overflows from septic fields

4.4 DISTRICT'S SWMP EFFORTS

After filing a Notice of Intent (NOI) to comply with the Phase II Stormwater Regulations the District received a NYSDEC SPDES Permit # NYR20A507 for stormwater discharges from the BMSD. Under the State mandated program, BMSD initiated the following actions:

Stormwater Website

A Stormwater Website was developed for inclusion of key documents such as newsletters and fact sheets. The Stormwater Website is also used to report storm water events such as public meetings, and other relevant stormwater information.

Newsletters & Fact Sheets

Newsletters and Fact Sheets have been prepared for the District as part of the Public Education and Outreach Program on stormwater impacts. Newsletters and Fact Sheets have been posted on the District’s Stormwater Website and are also available for the District Community to review at the District’s Office.

Stormwater Committees

A SWMP Steering Committee was established to review the current and the ongoing steps the District will take to reduce stormwater pollution. The Steering Committee meets annually at the start of each stormwater program.

Student Participation

Under the guidance of the Environmental/Conservation Teachers, or their Consultant, presentations are made to students on relevant stormwater issues.

4.5 STORMWATER MANAGEMENT MEASURABLE GOALS

The SWMP adopted by the District included the six (6) minimum control measures (MCM) required by the NYSDEC Permit. For each of the six minimum measures, the District identified measurable goals. The measurable goals for each of the six minimum measures adopted by the District are summarized below:

BMP ID	MCM1 - PUBLIC EDUCATION & OUTREACH PROGRAM	RESPONSIBLE ENTITY	MEASURABLE GOALS
1-1	Phase II Stormwater Regulations	District	Updated In 2016, Available To Public
1-2	Stormwater Website W/ Contact Names, Newsletters And Fact Sheets	District	Updated Annually
1-3	Stormwater Steering Committee	District	Ongoing, Annual Meeting
1-4	Fact Sheets On A Variety Of Stormwater Issues,	Consultant & District	Updated Annually
1-5	Stormwater Management Annual Reports (SWMPAR) On The Current And Ongoing Stormwater Program	Consultant	Submitted Annually, Available To Public

BMP ID	MCM2 - PUBLIC INVOLVEMENT/PARTICIPATION	RESPONSIBLE ENTITY	MEASURABLE GOALS
2-1	Access To Public Notices, Newsletters And Fact Sheets On The Stormwater Website	Consultant	Updated Annually, Available At The District Office
2-2	Public Presentations Made By The District Or Consultant	District/ Consultant	Annual Presentations
2-3	Stormwater Management Annual Report	Consultant	Available To The Public On The Stormwater Website For Review And Comment

BMP ID	MCM3 - ILLICIT DISCHARGE DETECTION & ELIMINATION	RESPONSIBLE ENTITY	MEASURABLE GOALS
3-1	Public Workshop On Illicit Discharge Detection & Elimination, (IDDE) Presented To O & M Staff	Consultant	Presented Annually
3-2	A Guidance And Procedures Document On IDDE Was Developed And Adopted By The District.	Consultant	Updated As Necessary
3-3	Presentations Were Made To Staff On Non-Stormwater Discharges, The Impacts Of Pollutants On Stormwater Discharges.	Consultant	Presented Annually
3-4	Outfall And District Operations Survey To Detect Illicit Discharges	Consultant	Conducted Annually

BMP ID	MCM4/5 - CONSTRUCTION/ POST-CONSTRUCTION STORMWATER POLLUTION	RESPONSIBLE ENTITY	MEASURABLE GOALS
4-1 5-1	A Guidance And Procedures Document On Construction Activities And Post-Construction Management	Consultant	Updated, As Required
4-2 5-2	Presentations To O & M Staff On The Construction Activity	Consultant	Presented Annually, As Required

BMP ID	MCM6 - POLLUTION PREVENTION AND GOOD HOUSEKEEPING	RESPONSIBLE ENTITY	MEASURABLE GOALS
6 -1	O & M Staff Training On Potential Sources Of Contamination And Best Management Practices To Control Spills And Reduce Chemical Contamination	Consultant	Presented annually
6-2	A Buildings And Grounds Survey Was Conducted To Determine Sources Of Pollution To Storm Drains.	Consultant	Conducted Annually

SECTION 5 – DISTRICT STAFFING, FUNDING & TRAINING

5.1 SWMP EXECUTIVE OFFICER

The District Executive Officer is the Superintendent of Schools. The Superintendent is responsible for assigning a District Stormwater Coordinator, who in turn is responsible for keeping the Superintendent apprised of the current and ongoing steps implemented by the District to comply with the stormwater permit. The Superintendent is also responsible for annually funding the stormwater program and for signing off the Final Stormwater Management Annual Report to the State.

5.2 SWMP LOCAL PUBLIC CONTACT

The Stormwater Coordinator selected by the District is responsible for the following activities:

- Hiring of a consultant to assist District in developing and implementing the SWMP
- Establishing the SWMP Steering Committee
- Scheduling of the program's implementation schedule
- Overseeing the execution of the SWMP
- Developing staffing needed to carry out the program
- Developing a budget for the implementation of the program

5.3 SWMP CONSULTANT

CFE Consulting Services, LLC, is the current district stormwater consultant. Mr. Carvalho, P.E. of CFE Consulting Services, LLC will continue to be actively engaged in the following activities:

- Assisting the District in the execution of the SWMP program
- Preparation of newsletters, fact sheets, presentations of activities on the current and ongoing SWMP implementation activities
- Conducting of the annual public meeting
- Preparation of the Annual Report to NYSDEC

5.4 SWMP O & M STAFFING

The District's operations and facilities that contribute or potentially contribute POCs' are limited to the following operations:

- Winter Road Maintenance
- Lawn Equipment Maintenance
- Lawn Care
- Stormwater Drainage Maintenance

The District's O & M Staffing will continue to be responsible for lawn care, grounds maintenance, winter road operations, carpentry, plumbing, HVAC and electrical work. Purchase orders for specific construction and building projects, including street sweeping, will be issued to outside vendors, as needed, to perform this work on a contract basis.

5.5 SWMP PRESENTATIONS AND TRAINING PROGRAMS

The District conducts public education and outreach presentations and training programs, on the implementation of the SWMP on an annual basis to include:

- SWMP Steering Committee
- Students
- O & M Staff

The presentations cover a wide array of stormwater issues from a review the status of the current and ongoing SWMP initiatives undertaken and planned activities.

The District also includes a training program for their of O & M staff on stormwater pollution prevention and good housekeeping practices.

5.6 FUNDING OF THE SWMP

The NYSDEC has mandated the development of a SWMP but has not provided any direct funding to the District for the Phase II program. Currently the District provides funding for the program from the District School Budget.