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1 Introduction

The Town of Burrillville, Rhode Island contracted Vanasse Hangen Brustlin, Inc. (VHB) to assist them in the preparation of their Stormwater Management Program Plan (SWMPP) to achieve compliance with the Rhode Island Department of Environmental Management (RIDEM) *General Permit for Storm Water Discharge from Small Municipal Separate Storm Sever Systems (MS4s) and from Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s (RIRI4000, December 19, 2003).* The lead responsible party for implementation of the SWMPP for the Town is the Burrillville Planning Department. General information relative to the town and its water resources for which this program is designed to protect is as follows.

Existing Conditions

A brief description of the physical setting and cultural features within the Town of Burrillville is outlined to apprise the reviewer of considerations made during the drafting of the General Permit application. The Town of Burrillville occupies approximately 58 square miles of the northeast corner of Rhode Island and has a population of approximately 16,000 people. According to the 2000 U.S. Census data, only approximately 9 square miles of the central portion of the Town, is characterized as urbanized. The urbanized area includes all or portions of the villages and neighborhoods of Bridgeton, Pascoag, the town center in Harrisville, Oakland, Mapleville, Gazzaville, Glendale, Mohegan, Oak Valley, Whipple, Tarkiln, and Nasonville. Most of the provisions of the General Permit require the program to be implemented within urbanized portion of the municipality.

Town Image

Respondents to a citizen survey commissioned for the Burrillville Comprehensive Plan (Burrillville Comprehensive Planning Commission, 1998) indicated that the rural atmosphere and country character were the most favorable part of the Town's image. Aside from maintaining this rural character, the second concern listed during the planning process was water quality protection. **VHB**

Existing Infrastructure and Development

The Department of Public Works Garage and the Burrillville Waste Water Treatment Facility are the two industrial activities owned by the Town. Other facilities in the Town which may generate storm water runoff include six fires stations. These are located in Nasonville, Oakland/Mapleville, Harrisville, Wallum Lake and Pascoag. The Town Hall is located in Harrisville and the Police Station is located in Oakland. The Burrillville school system consists of the High School, Middle School and three Elementary Schools. Burrillville operates a leaf-waste recycling program at a closed landfill on Whipple Road south of the High School. At present, road salt and sand is stored at this site by the RIDOT.

The Town owns a number of small parks and recreation areas. One of the most important recreational areas is Spring Lake that includes a public beach with concessions.

Burrillville does not have an extensive industrial base. The Burrillville Industrial Park is located on Route 100 and is mostly occupied. Some of the larger industrial facilities in the Town include Ocean State Power, Turex, Inc., Supreme Mid-Atlantic Trucking, Metech International and Atlas Pallet.

Surface Water Resources

Surface water resources are important landscape features throughout the Town. Most of the Town is situated in the Blackstone River Watershed, with the extreme western part in the Quinebaug River Watershed in the State of Connecticut. Important Rivers in the Town include the Pascoag, Chockalog, Nipmuc, Clear, Chepachet and Branch Rivers.

Smaller brooks with surface water 'A' use-classifications that are potentially suitable for drinking water sources include Cold Spring, Lesson, Round Top, and Hemlock Brooks. Class B surface waters include Tarkiln, Iron Mine, Mowry, Tuckey and Leeson, Croff Farm, and Keach Brooks

There are many named and unnamed ponds and lakes within Burrillville that are important for both consumptive and non-consumptive recreational uses. In total, it is estimated that 1,225 acres of surface water ponds and lakes occur within the Town (Albert Veri, 1998). Wallum Lake is the second largest and is used as a public water supply at the Zambarano Memorial Hospital situated at the southeastern corner of the lake. The other Class 'A' surface water body in the Town in the much smaller Big Round Top Pond located east of State Route 96 south of the Douglas, Massachusetts State/Town Line.

The largest lake in Burrillville is the Pascoag Reservoir. Other Class B surface water bodies over 50 acres in size include Wilson Reservoir, Spring Lake which hosts the Burrillville Town Beach, Wakefield Pond, Slatersville Reservoir, and Sucker Pond.

Surficial Geology and Soils

The surficial geology of Burrillville is characterized predominantly of till uplands. These tills occur in two different forms. Drumlin-like elongate rounded hills oriented along a north to south axis exhibit sculpting by the last continental glacier and are known as basal or lodgment till. Irregular rugged hills characterized by bedrock controlled topography are called ablation till where a mantle of friable till drapes over the underlying bedrock. Till deposits are often slowly permeable due to the presence of a restrictive layer such as a dense "hardpan", shallow water table or shallow depth to ledge. This limits the ability of these soils to infiltrate storm water and individual septic system effluent. Positions on till hillsides with steeper slopes have higher risks of erosion and sediment transport associated with land development.

Stratified drift deposits are less common within the Town. The two most significant deposits are associated with the valley along the Clear River, including central Harrisville and in the southeastern portion of the Town between the Slatersville Reservoir and the neighborhood of Tarkiln. These deposits are often exploited for valuable sands and gravel. Stratified drift can serve as important recharge areas for groundwater aquifers, which may be utilized for public drinking water supplies. The deposits overlying these aquifers generally are rapidly permeable and do not effectively remove contaminants from infiltrating waters. The Town of Burrillville is dependent solely on groundwater for its public water supply (Beta Group, 2002). The principal groundwater source utilized by the Town is the Upper Branch River Groundwater Reservoir. According to the RIGIS database, there are nine public water supply wells, mostly in the southeastern part of the Town. An Aquifer Protection District has been established through a Town Zoning Ordinance. Only uses specified in the Aquifer Protection District may take place within this zone.

Open Space

In addition to lakes and ponds, Burrillville includes large public holdings of open space which attract outdoor recreation enthusiasts. Chief among these are the state owned Casimir Pulaski Memorial Forest, Buck Hill Management Area, the Buck Hill Boy Scout Reservation, Black Hut Management Area and Round Top Fishing Area and provide a combined 10.7 square miles of open space.

The Town has a strong interest in the proper implementation of the BMPs in the SWMPP as these will assist in the protection of the Town's water resources. Included in the SWMPP are BMPs to address the parameters of concern for those waters assessed with TMDLs (described in following sections). In addition to stormwater quality control, the Town is focused on improving ground water which has been impacted by the three Superfund Sites in the town.

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Storm Water Advisory Committee

Committee Organization

The Town of Burrillville Storm water Advisory Committee is responsible for implementing and coordinating the Stormwater Management Program Plan (SWMPP).

The following individuals have helped to develop the Storm Water Management Program Plan and will serve as the Burrillville Storm Water Advisory Committee. These individuals will be responsible for implementing the Program:

Mr. Kevin Cleary, EIT, LSIT, Chairman c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Thomas J. Kravitz Town Planner, Acting Secretary Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Norman Manville c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Paul Vanasse c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

VHB

Mr. Richard A. Bernardo, PE Town Engineer/Director of Public Works 65 Union Avenue Harrisville, RI 02830 401-568-4440

Mr. Geoffrey DiCenso c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Mark Fowler c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Mark Tremblay c/o Town Hall Harrisville Main Street Harrisville, RI 02830 (401) 568-4300

Mr. Charles Boucher Burrillville High School 425 East Avenue Harrisville, RI 02830-1559 Phone: 401-568-1310

Mr. Richard St. Sauveur Superintendent of Public Works Retired

Responsibilities

The Storm Water Pollution Prevention Advisory Committee, under the guidance of the Chairman, is responsible, with direct guidance from the Planning Department, for completing an annual evaluation and corresponding report that describes the effectiveness of the current Storm Water Management Program Plan (SWMPP). The report should include recommendations for revisions, deletions and/or additions as deemed necessary and must be submitted to RIDEM by March 18, 2004.

Implementation and coordination of each of the measures described in the SWMPP is the responsibility of the parties/department(s) indicated in the following written description of the plan and the Plan Summary Schedule included as Appendix A.

Costs of Measures

At the present time it is difficult to estimate the actual costs for each of the proposed measures in the SWMP. Practices that are currently part of Town of Burrillville storm water management program will continue funding under existing annual budget requests. The costs for implementing new measures will first be assessed to determine if existing department budgets can absorb the cost of the new procedures/tasks. If it is determined that the necessary funding exceeds an amount that could be secured through a reasonable increase in an annual operating budget, additional funding sources will be sought. These sources may include non-point source grants, such as in the case of the salt shed, state revolving fund loans, and others yet to be identified.

VHB

Vanasse Hangen Brustlin, Inc.

FIGURE 1 SITE LOCATION MAP

3

Six Minimum Control Measures

The Town of Burrillville's Storm Water Management Program Plan (SWMPP) presented herein will reduce the discharge of pollutants to the maximum extent practicable, protect water quality and satisfy the water quality requirements of the Federal Clean Water Act and Rhode Island Water Quality standards. The plan has been designed to meet the requirements of the six minimum control measures listed as follows:

- 1. Public Education and Outreach
- 2. Public Participation and Involvement
- 3. Illicit Discharge Detection and Elimination
- 4. Construction Site Runoff Control
- 5. Post-Construction Runoff Control
- 6. Good Housekeeping Measure for Municipal Operations

General Requirements

The general requirements for each minimum measure as listed in the regulations have been achieved and are included in the SWMPP.

Prioritize Plan Implementation

Burrillville has identified the following priority areas for the implementation of the SWMPP:

- [™] Segments of the Branch and Clear Rivers within Urbanized portions of the Town as these rivers are adjacent to public water supply aquifers
- [™] Lakefront communities within the Town where Public Education and Outreach may help preserve water quality.

The SWMPP must include a description of how the six minimum measures will be implemented when the MS4 discharges to Outstanding Natural Resources Waters, Special Resource Protection Waters and Impaired Waters. VHB

Vanasse Hangen Brustlin, Inc.

FIGURE 2 URBANIZED AREA MAP

Identify Water Bodies and Outfalls

The Burrillville Public Works Department has an inventory of town-owned catch basins but has only begun to identify the approximate location of outfalls and the receiving waters at the time of filing this permit. A strategy has been developed to begin location of these structures using GPS methods as part of Measure 3. This data will be included in annual revisions to the SWMPP.

Water bodies within the urbanized area (see Figure 2) that may receive discharges include Pascoag Reservoir, Slatersville Reservoir, Spring Lake, Wilson Reservoir and Duck Pond. Streams and rivers which pass through urbanized parts of Burrillville include the Nipmuc River, Mowry Brook, Battey Brook, Chepatchet River, Leland Brook, Clear River, Spring Lake Brook, and Tucker Brook. As better information is developed, water bodies may be added or deleted from this preliminary list.

Critical Habitat and Endangered Species

The General Permit requires that the operator of the MS4 identify all discharges to a critical habitat of a listed or a proposed to be listed endangered or threatened species (as found on DEM's web-site as Natural Heritage Areas). The Town has not located all outfalls at this time, but there are no known discharges to any critical habitat of a listed or a proposed to be listed endangered or threatened species. When all outfalls have been mapped, Burrillville will submit information in a subsequent Annual Report with a revised evaluation of MS4 discharge impacts to endangered or threatened species.

Cooperation with Other Entities

Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully implement the measure. The operator may rely on another entity only if:

- ™ The other entity, in fact, implements the control measure;
- ™ The particular minimum measure, or component of that measure is at least as stringent as the corresponding permit requirement;
- ™ When the other entity fully implements the control measure on the operator's behalf, a legally binding written acceptance of this obligation is required. This obligation must be maintained as part of the SWMPP. If the other entity agrees to

report on the minimum measure, the operator must supply the other entity with the reporting requirements contained in Part IV.G of the general permit.

™ In cooperative agreements where the responsibility is shared, no legally binding acceptance of obligation is required. The operator shall remain responsible to the State for permit compliance and implementation of the minimum measure if the other entity fails to do it.

At this time, Burrillville is not relying on other entities to fulfill requirements of this permit. The SWAC is aware of the Blackstone River Watershed Action Plan and scheduled a joint meeting with the Blackstone Valley Tourism Board to look for opportunities to coordinate water sampling and outreach activities, but this meeting was not held. The BVTB indicated an interest in expanding its education and outreach activities up major tributaries of the main stem of Blackstone River. This coordination will be pursued again, but is not included as a formal element of this General Permit Application.

Qualifying Local Programs

A qualifying local program (QLP) is a State or local storm water management program that RIDEM has determined imposes the relevant requirements in Rule 31(e)(3)(ii) of the RIPDES Regulations. A QLP may be referenced by the operator to satisfy the requirements of Part IV.B of the general permit. In order to reduce duplication of effort, municipalities may accept a permit from the RIDEM Freshwater Wetlands and Water Quality Certification Programs, and the Coastal Resources Management Council (CRMC) to meet the requirements for site plan and SWPPP reviews for Construction Site Storm Water Runoff Control and Post-Construction Storm Water Management in New Development and Redevelopment. Municipalities may also accept a permit from the RIDEM RIPDES Program in accordance to the limitations described in Part IV.B.4.b.5 of this permit for Construction Site Storm Water Runoff Control and Part IV.B.5.b.5. for Post-construction Storm Water Management.

The Town of Burrillville presently has an Erosion and Sediment Control Ordinance in Chapter XIV of the Revised General Ordinances and includes both construction and post-construction storm water management design standards in its Subdivision & Land Development Regulations adopted in June 2001. Revisions to these regulations would be necessary to accept permits from the Freshwater Wetlands, Water Quality Certification, or RIPDES Programs in lieu of Town review. During the preparation of this SWMPP the Storm Water Advisory Committee referred to the Town of Smithfield Erosion Control Ordinance as a model. The Advisory Committee anticipates that the RIDEM will provide a revised model erosion and sediment control regulation which includes provisions of accepting QLP review before attempting to draft revisions for the existing Town ordinance.

Best Management Practice Decision Process

Burrillville developed their SWMPP in accordance with RIPDES Regulations and addressed each of the requirements. The Town developed appropriate BMPs through an extensive decision process.

The Town contracted Vanasse Hangen Brustlin, Inc. in September 2002 to assist in preparation of a SWMPP. Burrillville held the following meetings to discuss the Plan:

™ October 23, 2002

Representatives from Burrillville met with VHB for a "kickoff" meeting to discuss Storm Water Advisory Committee (SWAC) members' backgrounds. VHB presented a slide show on the six minimum measures required under the RIPDES Phase II regulations. There was a recommendation to add a volunteer from the school system to the SWAC.

™ December 2, 2002

Representatives from Burrillville met with VHB to review the document summarizing the Town's responses to VHB's questionnaire. The focus of the meeting was on the Public Education and Public Involvement measures. VHB incorporated input from SWAC members.

™ December 16, 2002

The Storm Water Advisory Committee met with VHB so that VHB could present revisions to the draft outline of the SWMPP based on input from previous meeting. Attendees discussed outreach opportunities involving Northern RI Conservation District and RIRRC. They also discussed measurable goals for Illicit Discharge Detection and Elimination and Good Housekeeping measures. Members began to prioritize activities based on RIDEM focus on non-attainment waters and Class 'A' surface waters. The SWAC noted that there are many waterfront properties and recreational waterbodies that add value to the Town and should be a priority outreach for the town. Brownfields sites were also cited as a potential priority.

™ February 5, 2003

Anticipating that the Draft General Permit would have been issued by this date. Blackstone Valley Tourism Board representative did not show. Discussed scheduling outreach meeting for the public to present the plan, but agree to delay until GP out.

™ March 8, 2003

The Storm Water Advisory Committee met with VHB so that VHB could present the Draft General Permit to SWAC. Attendees reviewed some of the requirements of the permit that exceed the level of effort proposed in the draft outline prepared for the Town. Attendees discussed methods of meeting goals.

The representative from the school system committed his students to prepare multimedia outreach materials. VHB distributed the Draft General Permit to members for review.

™ March 18, 2003

The Storm Water Advisory Committee met with VHB to discuss the updated plan. VHB presented an updated preliminary plan to reflect conditions of the draft general permit issued by RIDEM. The Committee worked to assign a responsible party for each BMP and to make final modifications, deletions and additions to the SWMPP outline.

Additional meetings and phone conversations were held between the Town and the consultant to discuss strategies for complying with conditions in the General Permit. Following the above meetings, VHB compiled the Town's comments and sent a draft of the 5-year plan to the Town for their review and comment in order to finalize the plan.

BMPs for the Public Education and Outreach Measure and the Public Involvement Measure were chosen based on past experience in the Town. The Town's primary goal is to raise the general awareness of the concept of non-point source pollution. The message delivered must explain how everyday activities can impact water quality in surrounding water bodies. To begin this outreach, the Town purchased advertising space in The Bugle. The Bugle is a local publication that is mailed to each resident of the Town.

These two control measures target pollution activities that are known to be problems nationally and are thought to be concerns within the Town. These include the disposal of wastes such as leaves, pet droppings, and auto fluids in storm drains and the over application of lawn care pesticides and fertilizers.

Existing illicit discharges of sanitary waste are known to occur in the villages of Glendale, Mohegan, and Nasonville. The Town approved bonding for the extension of sewers into these villages. This work is proposed to be undertaken in Glendale in 2004, Nasonville in 2005, and Mohegan in 2006, based on the information in the Town of Burrillville Waste Water Facilities Plan (July 2002). The 5.1 million dollar cost for these expansions demonstrate the Town's commitment for protecting and improving surface water quality.

RIPDES Phase II regulations dictate the required BMPs the Town must implement to achieve compliance with the regulations. Burrillville will implement each of the required practices.

The BMPs for all six minimum control measures are shown in outline form in Appendix A.

Public Education and Outreach – Measure 1

Permit Requirement

The operator must implement an ongoing public education program to distribute education material to the community over the term of the permit. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in storm water runoff.

Best Management Practices – Rationale Statement

The Storm Water Advisory Committee (SWAC) was concerned that the public is not aware of problems associated with non-point source pollution and the unintentional effects of daily activities on surface water quality. Common problems cited during meetings were the dumping of leaves and grass clippings in catch basins or wetlands along roadways. Other concerns included the disposal of household hazardous waste, pet waste disposal methods, and the over application of lawn and garden fertilizers and pesticides. Nearly every committee member agreed that these actions were not intentional, and reflected a lack of understanding of non-point source pollution.

The SWAC heard testimony from the Refuse and Recycling Coordinator, Mr. Geoffery DiCenso, about the importance of education in expanding recycling in the state. Geoff emphasized the effectiveness of outreach efforts directed at school age children for changing recycling practices in individual homes. The education program is therefore focused on residents of Burrillville with school-aged children. The message will be similar to one used by the EPA that everyone has a role in controlling the pollution of storm water runoff.

A Burrillville High School Teacher, Mr. Charles Boucher volunteered to have his students prepare a multimedia educational presentation on non-point source pollution. The school had previously prepared educational computer animated films on water conservation for the local water departments and the committee was confident a good product would be developed. Themes similar to those provided in the multimedia CD "Water You Doing" (City of Seattle Public Utilities, 1997) were an inspiration for this project. The use of local students and local issues was thought to enhance the effectiveness of this education and outreach program with the benefit of local participation by students.

The SWAC approved an approach to have students present a mock up of the themes of their presentation to the committee. SWAC would then select the winners and help locate funding sources. The SWAC also agreed to write scholarship

recommendations for the student filmmakers to local groups such as the Chamber of Commerce and Lions Club.

The Town hopes the selected educational BMPs will help residents change ongoing practices to reduce exposure of non-point source pollutants and protect surface water quality. Protection of water quality is especially important to maintain the recreational and aesthetic qualities of the lakes and ponds that enhance the rural character of the Town and those streams that flow adjacent to and potentially recharge public water supply aquifers in the Town.

The Town presently provides information on recycling, composting, and household hazardous waste disposal via flyers and the local paper that educate residents about pollution prevention methods. This practice will continue and more locations for distribution of existing and new information will be included in the future. An example is the SWAC identified two popular in town family restaurants where placemats with non-point source pollution themes will be distributed.

The Planning Department, working closely with the Department of Public Works, will oversee the BMPs and will be responsible for compiling and submitting the annual report. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following BMPs to achieve compliance with the requirements of Measure 1:

,	
Responsible Party:	Department of Public Works/Information Systems
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Household hazardous waste and used oil
Description:	The town website ¹ : contains information on auto oil, anti- freeze, filters, batteries and a link to the RIRRC website that has complete information on recycling and schedules. The website also lists fines for illegal dumping, littering and pet waste.
Measurable Goals:	Year 1-5: Update information regularly.

1A) Used Oil and Household Hazardous Waste Information, Website

1B) Used Oil and Household Hazardous Waste Information, Pamphlet

Responsible Party:	Department of Public Works/Town Clerk
Target Audience:	Residents of Burrillville

1 (http://www.burrillville.org/Public_Documents/BurrillvilleRI_Refuse/index)

Target Pollutant Sources:	Household hazardous waste, used oil, anti-freeze
Description:	The Town will generate a pamphlet with information on the
	Eco-Depot and oil and anti-freeze drop-off at the DPW yard.
	This pamphlet will be displayed daily in Town offices.
Measurable Goals:	Year 1-5: Display pamphlet daily in Town offices; Document number
	of pamphlets taken.

1C) Recycling and Yard Waste Information Pamphlet, Mailing

neey ening whe while who the information i uniprice, when ing		
Responsible Party:	Department of Public Works	
Target Audience:	Residents of Burrillville	
Target Pollutant Sources:	Nutrients, litter	
Description:	The Town currently mails a pamphlet to residents annually that describes curbside recycling and leaf and yard waste disposal.	
Measurable Goals:	Year 1-5: Mail pamphlet annually in the tax bills.	

1D) Recycling and Yard Waste Information, Website

Responsible Party:	Department of Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Nutrients, litter
Description:	Information on recycling and yard waste, including dates, locations and acceptable materials are displayed on the Town website.
Measurable Goals:	Year 1-5: Update website regularly.

1E) Lawn Care, Leaf and Yard Waste Information, Article in Newspaper

Responsible Party:	Planning
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Nutrients, toxins
Description:	The Town will place an article in the local paper describing the effects of improper fertilization, pesticide use, and/or leave disposal on water quality each year (topic varies year to year).
Measurable Goals:	Year 1-5: Place one article about leaves and yard waste in the local
	paper once per year.

1F) Multi-Media Presentation

Responsible Party:	School Department
Target Audience:	Students, Residents of Burrillville
Target Pollutant Sources:	Any/all potential storm water pollutants

Description:	School will prepare multimedia presentation on non-point source pollution similar to educational clips in the <i>Water You</i> <i>Doing</i> CD ² (See Public Participation). A presentation will be made at each school annually and perhaps at other public venues. Residents currently receive informational packets on water conservation when they move into town. The Town will include storm water pollution prevention information in this packet.
Measurable Goals:	Year 1-2: Create themes/produce presentation. Year 2-5: Document presentation at each school each year/family fair/Earth Day.

1G) Educate Local Businesses

Responsible Party:	Planning Department
Target Audience:	Local Businesses
Target Pollutant Sources:	Any/all potential storm water pollutants
Description:	The Town will educate local businesses with fleets and local restaurants about good housekeeping measures by
	distributing a flyer. Restaurants will receive placemats with non-point source pollution educational theme.
Measurable Goals:	Year 1-5: Distribute 100 placemats annually to local restaurants;
	Year 3: Distribute flyers to 50% of businesses.

1H) Assess Opportunities to Display Storm Water Materials at Existing Town Events

Responsible Party:	Planning Department
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Any/all potential storm water pollutants
Description:	The Town will assess existing Town events for opportunities
	to display educational materials (pamphlets, placemats, multimedia presentation, etc.).
Measurable Goals:	Year 1-5: Assess existing events and document
	discussions/evaluation.

11) Display Materials in Town-Owned Locations

Responsible Party:	Planning Department
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Any/all potential storm water pollutants
Description:	The Town will display bookmarks at the Town library
	annually and will display educational posters at Town Hall,
	DPW garage and Spring Lake Recreational Area.
Measurable Goals:	Year 1-5: Display 100 bookmarks at Public Library.
	Display posters at three locations (minimum).

τ 2 (Seattle Public Utilities, 1997)

Public Participation/Involvement – Measure 2

Permit Requirement

Measure 2 is similar to Measure 1 and serves to both educate the public and to encourage them to become involved in storm water management activities. All Public Involvement/Participation activities must comply with State and local public notice requirements.

Best Management Practices – Rationale Statement

The Public Participation and Involvement program will focus primarily on residents of Burrillville and the ways they can take part in the storm water pollution prevention program, either through volunteer efforts on cleanup days or through everyday activities, such as recycling.

Public participation in the drafting of the storm water management plan was accomplished primarily through the inclusion of a cross section of the town on the Storm Water Advisory Committee. An ad was run in the Bugle, a paper distributed free to every household in Burrillville, in February 2003 encouraging residents to learn more about the storm water management planning in the Town and providing the Planning Department phone number.

Public involvement activities include annual cleanup days and more frequent activities for source reduction, such as proper disposal of household waste and recycling efforts.

The Town will make the draft annual report available to the public each year, and allow a sufficient comment period. The Town will respond to all comments received.

The Planning Department will oversee the BMPs and will be responsible for compiling and submitting the annual report. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following programs to achieve compliance with Measure 2:

2A) Pascoag Earth Day Cleanup

Responsible Party:	Department of	Public	Works/RIDEM/Burrillville	Lions
	Club/Conservatio	n Comn	nission	
Target Audience:	Residents of Burril	llville		
Target Pollutant Sources:	Litter			
Description:	The Town assists i RIDEM. The Burri volunteers and loc	in the an llville Li cal scout	nual cleanup days organized l ons Club assists by organizing troops.	уy ç
Measurable Goals:	Year 1-5: Coordinate	e with Rl	DEM to hold one event each year	<i>^</i> .

2B) Eco-Depot at RIRRC

Responsible Party:	Department of Public Works/RIRRC
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Household hazardous waste
Description:	Residents are encouraged to bring household hazardous waste to the RIRRC facility in Johnston.
Measurable Goals:	Year 1-5: The Town will continue to encourage residents through a link on the Town website and in informational flyers.
2C) Curbside Recycling	
Responsible Party:	Department of Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Litter
Description:	The DPW picks up curbside recycling weekly and advertises it

Description:	The DPW picks up curbside recycling weekly and advertises it
	on the website and in informational flyers.
Measurable Goals:	Year 1-5:The DPW will continue to pick up curbside recycling once
	per week and will advertise the service.

2D) Oil/Anti-Freeze Drop-Off

Responsible Party:	Department of Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Oil, anti-freeze, car batteries
Description:	Residents are encouraged to drop off used oil and anti-freeze at the DPW yard.
Measurable Goals:	Year 1-5: The DPW will continue to accept these items at the yard
	and will continue to advertise the service.

2E) Leaf and Yard Waste Drop-off

Responsible Party:	Department of Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Nutrients
Description:	Residents are encouraged to drop off leaf and yard waste at the compost facility from April to November.
Measurable Goals:	Year 1-5: The DPW will continue to advertise the drop-off schedule.
	Report estimated annual production.

2F) Storm Drain Stenciling

Responsible Party:	Local Boy Scouts/Conservation Commission/Department of
	Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Nutrients (yard waste, animal waste)
Description:	Local boy scout troops will stencil storm drains each year. The Public Works department will assist them by providing materials, such as stencils and paint.
Measurable Goals:	Year 1-5: Stencil 5 drains per year.

2G) Multi-Media Presentation

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Responsible Party:	School Department
Target Audience:	Students, Residents of Burrillville
Target Pollutant Sources:	Any/all potential storm water pollutants
Description:	School will prepare multimedia presentation on non-point source pollution similar to educational clips in the <i>Water You Doing</i> CD ³ (See Public Participation).
Measurable Goals:	Year 1-2: Develop and produce multimedia presentation on non- point source pollution and BMPs.

Illicit Discharge Detection and Elimination – Measure 3

Permit Requirement

At a minimum, the operator must develop, implement and enforce a program to detect and eliminate illicit discharges or flows into the small MS4. The management practices must include a map showing outfall locations and receiving water bodies; a regulatory mechanism/ordinance prohibiting non storm water discharges into the system; plan to detect and address non-storm water discharges, including illegal dumping, into the system; and education for residents, businesses and public employees.

The operator must address the following categories of non-storm water discharges or flows only if they are identified as significant contributors of pollutants: discharges from the washdown of vehicles at retail dealers selling new and used automobiles where no detergents are used and individual car washing; external building washdown where no detergents are used; the use of water to control dust; fire fighting activities; fire hydrant flushing; natural springs; uncontaminated groundwater; dechlorinated pool discharges; air conditioning condensate; lawn watering; potable water sources including water line flushing; landscape irrigation; pavement washwater where no detergents have been used and where no spills or leaks of toxic or hazardous materials have occurred (unless all spills have been removed); discharges from foundation or footing drains where flows are not contaminated with process materials such as solvents, or contaminated by contact with soils where spills or leaks of toxic or hazardous materials have occurred; uncontaminated utility vault dewatering; dechlorinated water line testing water; hydrostatic test water that does not contain any treatment chemicals and is not contaminated with process chemicals.

^{3 (}Seattle Public Utilities, 1997)

Best Management Practices – Rationale Statement

The Illicit Discharge Detection and Elimination program will include development of a storm sewer map that shows the locations of all outfalls and the names of water bodies receiving discharges from these outfalls. The Town has an inventory of existing road culverts and a list of catch basins on town roads referenced to utility pole locations. The town has recently developed an inventory of 86 known outfalls located within the Urbanized Area. This inventory will be used to assist in GPS locating of outfalls. This list includes catch basins at town facilities such as the High School, but final mapping is not available at this time.

During Storm Water Advisory Committee meetings, problems with locating outfalls were discussed. The Public Works Director was aware of situations where outfalls discharge onto private property without recorded easements providing access to inspect and maintain. Locating some of these unrecorded outfalls may be a very challenging task.

The Town has a well-managed GIS system running on ArcView 8.2A software, capable of storing geo-referenced data on MS4 outfalls. The Town does not own any GPS equipment but is interested in acquiring a unit for this task and continuing inventory of additional town infrastructure. A coordination meeting was held between a GIS/GPS manager from VHB, the Town Planner, DPW Director and GIS Manager from the Town of Burrillville to determine the best method for producing the outfall map.

A strategy was developed that begins with the DPW Director marking the approximate location of outfalls within urbanized areas of the Town on a paper plan. In the spring outfalls will be located using GPS equipment, outfalls will be photographed and data on the conditions at the outfalls will be collected. The number of outfalls within the area subject to the permit is not thought to be very large. It was thought that a list of outfalls with a discharge that can be sampled would be compiled during the GPS field survey. Sampling would be held later as combining the two activities seemed to be inefficient. A preliminary map should be prepared by the first year of the Permit and submitted to the RIPDES program with the first annual report. Any additional outfalls discovered later will be added to the map as new information is developed.

Outfall locations will be reported in the Rhode Island State Plane Coordinate System (NAD 83). Outfalls will each receive a unique identification number, but there are no plans to try to label outfalls in the field. This data will then be used to create a storm drain infrastructure layer for the Town GIS. The map will be updated as part of illicit discharge investigations to show additional elements as necessary to trace origins of illicit discharges. A final map depicting outfalls, receiving waters and additional elements will be submitted to the RIPDES Program by the third year of the permit.

Burrillville will develop an ordinance or other regulatory mechanism that prohibits illicit discharges and includes sanctions for enforcement. A sample draft ordinance adopted from the NEIWPCC Illicit Discharge Detection and Elimination Manual (2003) to reflect the authority from the Rhode Island General Permit has been provided to the Town Planner. The ordinance will be developed in the first year of the program by reviewing this and other sample ordinances and modifying them as necessary for use in Burrillville. The Town will introduce the ordinance to the public at a public meeting by the end of the first year, and will attempt to pass the mechanism in the second year. The Town Planner will be responsible for drafting this ordinance and presenting it to the Town Council.

Burrillville will develop standard operating procedures to detect and address illicit discharges to the system, including discharges from illegal dumping, spills and individual sewage disposal systems (ISDS) when applicable. Again, guidance from NEIWPCC (2003) will be followed.

The Town will use the first year of the program to determine priority areas for inspection. The Town is aware of the existing illicit sanitary discharges present in the villages of Glendale, Nasonville, and Mohegan and has committed to bonding 5.1 million dollars to extend sewers into these areas over the next three years. This infrastructure investment represents a major commitment of the Towns funds and will provide the greatest benefit to surface water quality during the first half of the General Permit period. The town may wish to delay implementation of water sampling in these villages until after the sewer connections are made. Little new information would be provided by sampling known illicit discharges.

The Town will inspect discharges throughout the first four years of the program. During this time the Town will sample dry weather flows, if found, and trace illicit discharges, if found. Burrillville will begin to remove additional illicit discharges beginning in the fourth year.

Within the first year, Burrillville will develop procedures for coordination with interconnected systems, primarily systems owned and operated by the RIDOT. The Town will also develop procedures for referral to RIDEM of non-storm water discharges not previously authorized under another permit, but that the operator has deemed appropriate to continue discharging, for consideration of another permit. The Town is only aware of three existing RIPDES Individual Permits issued to operators within the Town.

The Town will conduct ongoing education for residents, fire department volunteers, and municipal employees as part of Measures 1 and 6. Proposed education programs are designed to hit on all aspects of pollution prevention such as animal waste, proper disposal of household hazardous waste, etc. Programs include flyers, a storm water video, and training programs for municipal employees.

The Planning Department will oversee the BMPs, in close coordination with the Department of Public Works, and will be responsible for compiling and submitting the annual report. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Legal Authority

If legal authority to pass an illicit discharge ordinance does not exist at the time this permit is filed, the Town will begin bylaw development after receiving authority. The ordinance will be passed within two years of receiving authority.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following BMPs to achieve compliance with Measure 3:

finite Discharge Ordinance / Regulatory Weenanish		
Responsible Party:	Planning/Conservation Commission ⁴	
Target Audience:	Residents of Burrillville	
Target Pollutant Sources:	Illegal dumping, litter, pet waste, household hazardous waste,	
0	gray and black water cross-connections, etc	
Description:	The Town will prohibit through an ordinance or other	
,	regulatory mechanism, non-storm water discharges into the	
	storm sewer system, including implementing appropriate enforcement procedures and actions.	
Measurable Goals:	Year 1: Review models ordinances, draft new wording, educate	
	public and municipal officials and private sector; Introduce draft	
	ordinance at public meeting.	
	Year 2: Attempt to pass ordinance.	

3A) Illicit Discharge Ordinance / Regulatory Mechanism

3B) Storm Sewer Outfall Map

Responsible Party:	Planning Department/Public Works
Target Audience:	N/A
Target Pollutant Sources:	N/A
Description:	The Town will develop map showing the locations of outfalls and names of receiving water bodies within the Urbanized Area. The map will also be expanded to show any additional elements mapped in association with the investigation of illicit discharges.

⁴ The Burrillville Conservation Commission expressed interest in assisting the Town implement and enforce parts of the SWMP. The role of the Conservation Commission has not been determined at this time.

Measurable Goals:	Year 1-2: The Town will locate and map all outfalls and name the
	receiving water bodies within the urbanized area;
	Year 1-5: Expand map to include additional elements as part of illicit
	discharge detection program (as applicable)

3C) Illicit Discharge Detection and Elimination Plan/Prioritize Implementation

Responsible Party:	Planning Department/Public Works/Building Official/
	Conservation Commission ⁵
Target Audience:	N/A
Target Pollutant Sources:	Any/all potential storm water pollutants
Description:	The Town will develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the municipal system. Priority will be given to older developed areas of the town in the urbanized area. Sampling of dry weather flows at outfalls and complaints from
M 11.C 1	residents will be the principle method of action.
Measurable Goals:	Year 1: Prioritize area; develop numbering system.
	<i>Year 1-5. Listing of findings of complaint investigations and follow up from dry weather discharge investigations (see below).</i>

3D) Outfall Dry Weather Flow Inspection/Sampling

Responsible Party:	Public Works	
Target Audience:	N/A	
Target Pollutant Sources:	All Potential Pollutants	
Description:	The Town will inspect all outfalls within portions of the urbanized area serviced by sanitary sewer once between July 1 and October 1. Visual observations of outfalls with dry weather flows will be recorded, along with results from field measurements of pH, conductivity, and temperature. A sample will be collected for bacteria analysis. For areas not serviced by sanitary sewer, a second dry weather inspection/sampling will be conducted between January 1 and April 1	
Measurable Goals:	Year 1: Coordinate with RIDOT for interconnected MS4s. Year 1-4: The Town will locate all outfalls with dry weather discharges and provide a tabular record of results of inspection/samplings. Year 1-5: Trace/remove suspected illicit discharges; expand map to include additional elements as part of illicit discharge detection program (if applicable)	

3E) Catch Basin Inspection Schedule

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Responsible Party:	
Target Audience:	

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Department of Public Works N/A

⁵ The Burrillville Conservation Commission has expressed interest in assisting with this program. This must be approved by the Town Council

Target Pollutant Sources:	Illegal dumping, litter, sediment	
Description:	Town uses private contractor to inspect and clean catch basins.	
	Contractor reports depth of sediment and recommended	
	period before next cleaning. DPW will work with contractor	
	to inspect each catch basin for evidence of cross connections/	
	illicit discharges	
Measurable Goals:	Year 1-5: The Town will continue to clean all catch basins at	
	established frequencies and amended frequency as new data is	
	collected.	
	Year 1-2: Inspect 100% of catch basins to check for cross-	
	connections/illicit discharges and verify existing cleaning schedule	
	for catch basins based on inspections.	
	Year 3-5: Implement amended cleaning schedule	
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3F) Manhole Inspection Schedule

Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Illegal dumping, litter, sediment
Description:	The Town does not have an inventory of MS4 manholes. The
	Town will inspect all manholes in systems with dry weather
	discharges for illicit connections by the fourth year.
Measurable Goals:	Year1-4: Inspect 25% of manholes each year

3G) Procedure to Receive and Address Public Complaints

Responsible Partu:	Planning Department/Town Engineer	
Target Audience:	Residents of Burrillville	
Target Pollutant Sources:	Illegal dumping, litter, pet waste, household hazardous waste	
Description:	The Town will establish a storm water contact for residents to report complaints and concerns. This contact person will be responsible for taking calls and directing the caller to the appropriate Town official. All contact information (telephone, email, etc.) will be advertised on pollution prevention materials generated and distributed by the Town.	
Measurable Goals:	Year 1: The Town will establish the storm water contact and post information on the website and will print the information on the solid waste flyers. Year 2-5: The Town will advertise the contact information in pollution prevention materials available to the public.	

3H) Illicit Discharge Education for Residents

Responsible Party:	Planning Department
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Illegal dumping, litter, pet waste, household hazardous waste,
-	yard waste, etc.
Description:	The Town will educate residents about the hazards associated
-	with illegal discharges and improper waste disposal as part of
	Measure 1.

	Measurable Goals:	Year 1-5: Include ongoing illicit discharge education for residents as part of Measure 1 and 2.
3I)	Illicit Discharge Education	for Municipal Employees
	Responsible Party:	Department of Public Works
	Target Audience:	Municipal Employees
	Target Pollutant Sources:	Illegal dumping, litter, pet waste, household hazardous waste, yard waste, etc.
	Description:	The Town will educate municipal employees about the hazards associated with illegal discharges and improper waste disposal.
	Measurable Goals:	Year 1-5: Include ongoing illicit discharge education for municipal employees as part of Measure 6.

Construction Site Runoff Control – Measure 4

Permit Requirement

The operator of the regulated small MS4 must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one (1) acre. The operator must include disturbances less than one (1) acre if part of a larger common plan or if controlling such activities in a watershed is required by the Director. At a minimum, the program must be consistent with the requirements of the RIDEM RIPDES General Permit for Storm Water Discharge Associated with Construction Activity. The operator must document the decision process for the development of a construction site storm water control program.

Best Management Practices – Rationale Statement

If determined necessary, Burrillville will develop an ordinance or other regulatory mechanism to control storm water runoff from construction sites disturbing greater than one acre. The Town has existing regulations (Subdivision & Land Development Regulations, June 2001) that require erosion and sediment control plans be included in site or land development plans, and that these plans be implemented, monitored and maintained during construction. These regulations apply throughout the Town, not just the urbanized area. In addition to Subdivision and Land Development projects, amendments to the Zoning Ordinance, approved in May 2001 gives the Building Official the authority to require site plan or development plan review for *"any development which in the opinion of the Building Official, significantly alter local drainage patterns and may require development of environmentally sensitive areas"*. The Building Official can apply these regulations to all site development that proposes to

disturb one acre or more of land in compliance with the conditions of the General Permit, unless and until successfully challenged by an applicant.

Should the existing regulations be determined inadequate to implement this BMP, the SWAC recommended that the Town Planner postpone development of an amended regulation or ordinance until after the RIDEM issues a revised model ordinance that conforms to the requirements of the General Permit. This model ordinance was not available at the time the General Permit Application was filed. If necessary, the amended ordinance or regulation changes will be prepared in the first year of the permit and attempts to pass it will be made in the second year. The purpose of the amendment(s) would be to improve compliance with the requirements of the General Permit.

Burrillville will also develop procedures for issuing and tracking permits for construction sites disturbing greater than one acre of land. At present, it appears that the Building Department will be the office with the authority to issue and track permits and conduct inspections. Members of the SWAC that also belong to the Conservation Commission were interested in acquiring regulatory authority for this BMP, but the existing ordinance clearly grants authority to the Building Department.

The existing regulations require construction site operators to implement appropriate erosion and sediment control BMPs and control waste that can impact water quality. The Town also requires construction site operators to develop and implement a Storm Water Management Plan (SWMP) similar to the SWPPP described in the General Permit. Erosion and sediment controls will be reviewed during a site plan review for consistency with the <u>Rhode Island Soil Erosion and Sediment Control Handbook</u> (as amended). Where technical review is required, applications will continue to be referred to the Town Engineer. The Town will also establish procedures for coordination of site plan and SWPPP review of sites with the State when the site falls under a State program, such as RIDEM Wetlands Program or RIDEM Water Quality Certification Program.

Within the first year the Town will determine what sanctions are appropriate, for example monetary fines or issuing orders to stop work when a site is found to be non-compliant. They will also develop procedures for referral to the State of non-compliant site operators.

The Planning Department and Building Department will oversee the implementation of Measure 4 and will be responsible for compiling and submitting the annual report. They will also be responsible for establishing a contact person for complaints and concerns of residents regarding construction site activities. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following BMPs to achieve compliance with the requirements of Measure 4:

4A)	Construction	Runoff	Ordinance	/Regulat	ory Mechanism
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Responsible Party:	Zoning/Building Official/Planning Department/Planning			
	Board/Conservation Commission/Town Council			
Target Audience:	Construction Site Operators			
Target Pollutant Sources:	Construction site erosion controls and construction waste			
Description:	The Town currently has Subdivision and Land Development			
-	Regulations (June 2001) that require erosion and sediment			
	controls plans and monitoring and maintenance schedules on			
	projects covered by the regulations. If necessary, the Town			
	will either amend these regulations or draft and adopt a new			
	ordinance to include elements required by the RIPDES General			
	Permit. This situation will be evaluated once the RIDEM			
	issues the new model erosion and sediment control ordinance.			
	If necessary, the Town will then draft new wording and			
	introduce the new regulation or ordinance at a public meeting,			
	and also educate municipal employees and the public about			
	the changes. In the interim, the Building Otticial will require			
	site plan review for sites disturbing one or more acres			
The Measurable Goals:	Year 1: Review existing regulations and authority and review			
	RIDEM model ordinance, Draft revisions to regulations or new			
	ordinance; Introduce revised new regulation/ordinance at a public			
	meeting			
	Year 2: Attempt to pass new regulation/ordinance			

4B) Procedures for Issuing and Tracking Permits

Responsible Party:	Building Department/Planning Department
Target Audience:	N/A
Target Pollutant Sources:	Construction site erosion controls and construction waste
Description:	The Town will develop procedures for issuing and tracking
	permits.
Measurable Goals:	Year 1:Post and implement procedure

4C) BMPs for Construction Site Erosion, Sediment, and Waste Controls

Responsible Party:	Planning Department/Town Engineer
Target Audience:	Construction Site Operators
Target Pollutant Sources:	Construction site erosion controls and construction waste

Description:	The Town will develop and implement requirements for construction site operators to implement a sediment and erosion control program which includes BMPs that are appropriate for the conditions at the construction site, including efforts to minimize the area of land disturbance. The Town will also develop and implement requirements to control wastes, including but not limited to discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes
Measurable Goals:	Year 1: Review current procedures and document discussions; Draft new wording as necessary.
	Year 1-2: Finalize and implement new procedures.
	Year 1-5: Continue review of construction sites.

4D) Construction Site Plan and SWPPP Review Procedures

Responsible Party:	Planning Department/Building Department	
Target Audience:	Construction Site Operators	
Target Pollutant Sources:	Construction site erosion controls and construction waste	
Description:	The Town will develop and implement procedures for site plan review for all projects of 1-acre or more, including procedures that incorporate consideration of potential water quality impacts. The site plan review will include procedures for preconstruction review.	
Measurable Goals:	Year 1: Review current procedures and document discussions; Draft new wording as necessary; Continue existing procedures until new ones are adopted. Year 2: Finalize and implement new procedures (if required).	

4E) Construction Site Inspection and Enforcement Procedures

Responsible Party:	Planning Department/Building Department/(Conservation
	Commission)
Target Audience:	Construction Site Operators
Target Pollutant Sources:	Construction site erosion controls and construction waste
Description:	The Town Subdivision and Land Development Regulations require erosion and sediment control plan review. The Town will develop and implement procedures for site inspections for all construction sites that disturb greater than 1 acre of land. Two inspections are required – one while the site is under construction and one after the site has been stabilized.
Measurable Goals:	Year 1: Review current procedures and document discussions; Draft new wording; Continue existing procedures until revisions are adopted Year 2: Finalize and implement new procedures.

4F) Procedure to Receive and Address Public Complaints Concerning Construction Sites

Responsible Party:	Planning Department/Building Department
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Construction waste, including sediment

Description:	The Town will establish a storm water contact for residents to direct complaints and concerns regarding construction sites. This contact person will be responsible for taking calls and directing the caller to the appropriate Town official. All contact information (telephone, email, etc.) will be posted on the Town Website, in the Town Hall and Public Works Office and will be advertised on pollution prevention materials generated and distributed by the Town.
Measurable Goals:	Year 1: The Town will establish the storm water contact and post information on the website and will print the information on the pamphlet available in Town offices; Year 2-5: The Town will advertise the contact information in pollution prevention materials available to the public.

4G) Procedures for Referral to the State of Non-Compliant Construction Sites (IV.B.4.b.8)

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Responsible Party:	Planning/Public Works/Building Department
Target Audience:	Construction Site Operators
Target Pollutant Sources:	Construction waste, including sediment
Description:	The Town will develop a procedure for referring non- compliant construction site operators to the RIDEM for assistance in enforcing the provisions of the RIPDES GP for Storm Water Discharges associated with Construction Activity if the operator fails to comply with the provisions of the GP and the non-compliance has the potential to result in significant adverse environmental impact.
Measurable Goals:	Year 1: The Town will establish written procedures for making referrals to RIDEM. Record and report referrals annually.

4H) BMPs and Issues to Consider in the Proposed Program

Responsible Party:	Planning Department/Building Department
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Construction waste, including sediment
Description:	The Town will evaluate the option of applying the construction site plan and SWPPP review to sites which disturb cumulatively less than one acre
Measurable Goals:	Year 1: Evaluate this option. Report decision in annual report.

Post-Construction Runoff Control – Measure 5

Permit Requirement

The operator must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale that discharge into the MS4. The

program must ensure that controls are in place to prevent or minimize water quality impacts.

The operator must document the decision process for the development of a postconstruction storm water management program. The rationale statement must address the overall post-construction storm water management program and the individual BMPs, measurable goals and responsible persons for the program.

Best Management Practices – Rationale Statement

The Town of Burrillville Subdivision and Land Development Regulations, Section 10-10.2.2 include guidance on site design and BMPs and the requirement to submit a Storm Water Management Plan (SWMP) to address post construction storm water runoff from subdivision and land development and redevelopment project sites. These regulations require the applicant manage peak discharge rates, average volumes and water quality using BMPs from the Rhode Island Storm Water Design Manual. While this existing regulation appears to meet the intent of the General Permit, it is unclear that the threshold for these regulations is site disturbance one acre or greater. Similar to the discussion in Measure 4, the Building Official has the authority to require plan submission for any project that in his opinion "*significantly alter local drainage patterns and may require development of environmentally sensitive areas*". Based on the requirement of the GP, the Building Official will consider all projects that propose to disturb one acre or more of land to fit into this category.

If this authority is challenged, revisions to the regulations or a new ordinance may be necessary to ensure that all projects are subject to this requirement consistent with the requirements of the General Permit.

The existing regulations recommend "green designs" and enumerate a number of structural and non-structural measures for post construction storm water management. An undated citation of the <u>Rhode Island Stormwater Design Manual</u> allows the revised manual to be the standard reference. The existing regulations require project proponents to prepare a Storm Water Management Plan similar to the post construction portion of the SWPPP required for construction sites in the General Permit. The existing regulation does not include a monitoring or maintenance requirement. Revisions will be required to comply with GP requirements.

The regulations include procedures for pre-application meetings between the Town and representatives of construction projects to be held prior to submission of civil design of the site. The Town will review of post-construction BMPs, referring engineering calculations and design review to the Office of the Town Engineer. These review procedures will be coordinated with the review procedures established under the Construction Site Runoff Control Measure.

Regulatory procedures will be designed to allow the control of post-construction runoff to be coordinated with existing State programs requiring post-construction storm water management, such as the RIDEM RIPDES Program and Freshwater Wetland Program. The Town may rely on RIDEM review of sites subjected to permitting associated with industrial activity under the RIPDES program.

The Town will develop procedures to identify new activities associated with industrial activity that require permitting under RIPDES, notify RIDEM and inform the facility to ensure that the operators obtain the proper permits. RIPDES Program materials will be kept at the Building Official and Town Planner Offices for reference.

The Planning Department will oversee the implementation of this measure and will be responsible for compiling and submitting the annual report. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following BMPs to achieve compliance with the requirements of Measure 5:

5A) Post-Construction Runoff Ordinance/Regulatory Mechanism

Responsible Party:	Planning Department
Target Audience:	Developers, Owners, Designers
Target Pollutant Sources:	Post-Construction Runoff
Description:	The Town will use the existing Subdivision & Land Development Regulations and authority granted by the 2001 amendments to the Zoning Ordinance as the regulatory mechanisms to address post- construction runoff from new development and redevelopment. These regulations include structural and non-structural BMPs. Amendments to the regulations are required to address operations and maintenance plans that are not included in the SWMP as described by existing regulations.
Measurable Goals:	Year 1: Review existing regulation; Draft new wording; Introduce revised regulations at a public meeting. Year 2: Attempt to pass revised regulations. Year 1-2: Continue to implement existing review procedures.

5B) Site Plan Review Procedures

Responsible Party:	Planning Department
Target Audience:	Developers, Owners, Designers
Target Pollutant Sources:	Post-Construction Runoff

Description: Measurable Goals:	The Town will develop and implement procedures for site plan review for project sites disturbing one or more acres of land. The reviewer will ensure that design controls used to address post-construction runoff are consistent with <u>The State of Rhode Island Stormwater Design and Installation Manual</u> (as amended) and incorporate considerations of potential water quality impacts. <i>Year 1-2: Develop procedures;</i> <i>Year 2-5: Implement procedures for review of 100% of plans, not</i> <i>reviewed by other State programs, for new and redevelopment</i> <i>projects resulting in land disturbance of greater than 1 acre.</i>	
5C) Procedures for Referral of New Industrial Storm Water Discharges		
Responsible Party:	Planning Department/Building Department	
Target Audience:	Developers, Owners, Designers	
Target Pollutant Sources:	Post-Construction Runoff from Industrial Sites	

Description:	The Planning and Building Departments will pro	ovide
	information on Industrial Storm Water Discharge Permi	ts to
	applicants proposing activities that may require RII	DEM
	permitting and notify RIDEM when applications are made to	de to
the Town	the Town	
Measurable Goals:	Year 3: Develop and implement procedure by third year of Permi	it

5D) Choose Structural and Non-Structural BMPs

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Responsible Party:	Planning Department/Department of Public Works
Target Audience:	Developers, Owners, Designers
Target Pollutant Sources:	Post-Construction Runoff
Description:	The Town has recently introduced green development strategies that include a combination of structural and/or non- structural best management practices (BMPs) in the Subdivision & Land Development Regulations. These BMPs are appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. The Town will evaluate the revised Stormwater Design and Installation Manual up-date the Regulations, incorporate comments from the public and improvements in control technologies. The Town will include the public in the selection process by holding at least one public meeting.
Measurable Goals:	Year 1: Assess existing BMPs; Discuss needs in the Town;
	Brainstorm new practices; Hold Public meeting; Draft list for use
	Year 2: Finalize guidance.

5E) Procedures for Adequate Long-Term Operation and Maintenance of BMPs

Responsible Party:	Planning Department/Department of Public Works
Target Audience:	Developers, Owners, Designers
Target Pollutant Sources:	Post-Construction Runoff

Description:	The Town will develop and implement procedures to ensure
-	adequate long-term operation and maintenance of BMPs
	approved for development projects.
Measurable Goals:	Year 1: Develop method for Long-Term monitoring and evaluation of
	O&M of BMPs
	Year 2: Draft, finalize and implement new procedures, including
	amendments to authorizing ordinance and regulations as necessary.

5F) Procedures for Appropriate Implementation of Structural BMPs

Responsible Party:	Planning Department/Department of Public Works
Target Audience:	Developers, Owners, Designers
Target Pollutant Sources:	Post-Construction Runoff
Description:	The Town will ensure the appropriate implementation of the structural BMPs by considering: Pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; Post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance.
Measurable Goals:	Year 1: Review current procedures and document discussions; Draft new wording; Year 1-2: Finalize and adopt new procedures. Year 2-5: Implement new procedures.

5G) Encouragement of Better Site Design

Responsible Party:	Planning Department
Target Audience:	Developers, Owners
Target Pollutant Sources:	Post Construction Runoff
Description:	The Town encourages the protection of wetlands and open space, vegetative buffers at streams and wetlands, and cluster development through the recently adopted Subdivision and Land Development Regulations. The Town will continue to encourage these practices, which help reduce runoff volume and promote infiltration.
Measurable Goals:	Year 1-5: Document use of "Green Design" in development projects within the town. Submit findings annually in Report to RIPDES.

Pollution Prevention/Good Housekeeping – Measure 6

Permit Requirement

The operator must:

- ™ Identify all operations such as activities and facilities that have a point source or the potential for a point source discharge of storm water to an MS4 or waters of the State associated with activities or operations that have the potential to introduce pollutants to storm water runoff.
- ™ Develop and implement a program to prevent and reduce pollutant runoff and runoff volumes from facilities owned and operated by the MS4 operator, and from the MS4 and structural BMPs. The program must include an employee training component.
- [™] Develop and implement a program to prevent and reduce storm water pollution from operations and maintenance activities that have the potential to introduce pollutants to storm water runoff.
- [™] Develop inspection procedures and schedules for long term O&M of municipal facilities, municipal structural BMPs and the MS4.
- [™] Develop and implement an employee training program for good housekeeping, pollution prevention, and O&M of BMPs.
- [™] Implement a site-specific SWPPP developed for each facility that discharges storm water associated with industrial activity.

The operator must document the decision process for the development of a pollution prevention/good housekeeping program for facilities, maintenance activities, and operations that have the potential to introduce pollutants to storm water runoff.

Best Management Practices – Rationale Statement

Burrillville will develop an operation and maintenance (O&M) plan for municipal activities to prevent or reduce pollutant runoff and runoff volumes from Town-owned or managed facilities to the MS4 and structural BMPs. The Town owns or manages a number of non-industrial use properties that have the potential to introduce pollutants into storm water runoff. Town staff in charge of day to day operations at these facilities will receive training in methods to minimize pollutant exposure to storm water as provided in BMP 6L. The properties listed in Table 1 will be covered by the operation and maintenance program.

Table 1 – Town Owned or Operated Facilities

Whipple Avenue Compost Facility Burrillville Police Department Champlin Recreation Hall Burrillville Assembly Theater/Town Common **Burrillville Recreation Center** Spring Lake Beach Harrisville Fire Department (FD) Pascoag FD Nasonville FD **Oakland Mapleville FD** Wallum Lake FD Town Hall in Harrisville Jesse M. Smith and Pascoag Libraries Burrillville High School Burrillville Elementary School Austin T Levy Elementary School W. L. Callahan Elementary School Steere Farm Elementary School

The O&M Plan will include identification of structural BMPs owned and operated by the Town, procedures for inspection and cleaning of drainage structures and structural BMPs, erosion measures along roadway shoulders, remediation of discharges causing scour at outfalls, development of a regular street sweeping schedule, and procedures for proper disposal of waste removed from MS4s and waste from other municipal operations, including accumulated sediments, floatables and other debris.

The Town will implement procedures to ensure that any new flood management projects undertaken by the Town of Burrillville are assessed for potential water quality impacts and existing projects are assessed for incorporation of additional water quality protection devices or practices as feasible.

Burrillville will develop procedures for implementing proper erosion and sediment and water quality controls for all construction projects undertaken by the Town including roadway repaying and flood control projects.

The Planning Department will oversee the BMPs and will be responsible for compiling and submitting the annual report. The individual departments responsible for each task are identified in the BMP descriptions below. The annual report will

include an evaluation of the BMPs implemented in the previous year and the success of the practice.

Best Management Practices – Implementation Plan

The Town of Burrillville will implement the following BMPs to achieve compliance with the requirements of Measure 6:

Source Control

6A) Street Sweeping Schedule	
Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Sediment and sand, litter
Description:	The Town currently sweeps all streets once per year. RIPDES requirements state that all streets within the regulated area must be swept once per year at a minimum.
Measurable Goals:	Year 1-5: The Town will continue to sweep all streets and municipal
	lots at least once per year (in regulated area).
6B) Waste Oil Igloo	
Responsible Party:	Department of Public Works
Target Audience:	Residents of Burrillville
Target Pollutant Sources:	Oil
Description:	The Town collects waste oil at the DPW facility.
Measurable Goals:	Year 1-5: The town will continue to collect waste oil at the DPW facility and report volume collected by RIRRC.
6C) Salt Shed	
Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Salt, nutrients
Description:	The Town has submitted a NPS grant application to construct a salt shed. Construction is contingent on approval of grant application.
Measurable Goals:	Year 1-3: The Town will construct a salt shed to minimize exposure to precipitation.
6D) Vehicle Washing	
Responsible Party:	Department of Public Works
Target Audience:	Town Vehicle Operators
Target Pollutant Sources:	Wash waters

Description:	The Town presently does not have a covered wash area for vehicles. The Town is evaluating the opportunity to construct a new DPW Garage on Town owned land near the WWTP. The new facility would include vehicle wash facilities. In the interim, the Town will adopt procedure consistent with Phase II Regulations
Measurable Goals:	Establish Policy for vehicle wash down which separates wash water from potential contact with storm water.

Operations and Maintenance

6E) Catch Basin Cleaning Schedule		
Responsible Party:	Department of Public Works	
Target Audience:	N/A	
Target Pollutant Sources:	Sediment, trash	
Description:	The Town currently contracts all catch basin cleaning. The contractor is paid on a per item basis and has kept records of required cleaning frequencies. RIPDES regulations require that all catch basins be inspected annually, and cleaned as necessary, unless a lesser frequency can be justified based on at least two consecutive years of inspections.	
Measurable Goals:	Year 1-2: The Town will continue to contract catch basin cleaning at established frequencies; Year 1-2: Inspect 100% of catch basins; use data to support or amend existing cleaning frequency. Year 3-5: Implement amended cleaning schedule	

6F) Procedures for Identifying Structural BMPs Owned by the Town

Responsible Party:	Department of Public Works/Planning Department
Target Audience:	N/A
Target Pollutant Sources:	all
Description:	The town does not have a record of structural storm water management BMPs that it may own at this time. The town will inventory recent subdivisions to determine if structural BMPs have been conveyed to the Town as part of road acceptance. A list describing the BMP and its location will be developed. The Town will provide an inspection and maintenance schedule for each town-owned structural BMP.
Measurable Goals:	Year 1: Inventory, locate and inspect existing town-owned structural controls,

6G) Maintenance/Inspection of Storm Drains and Structural/Non-Structural Controls

Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Sediment and sand, salt

Description:	The Town will develop and implement maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers.
Measurable Goals:	Year 1: The Town will assess existing controls, maintenance activities, schedules and long-term inspection procedures; Draft expanded/revised procedures Year 2:Finalize procedures Year 3-5: Implement procedures; Document activities

6H) Procedures for Minimizing Road Shoulder Erosion

Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Sediment
Description:	The DPW is unaware of serious road shoulder erosion within the Tayur As north of the road maintenance program.
	inspections will be made of sloping roadways within the urbanized area to assess road side erosion.
Measurable Goals:	Year 1-5 Inspect roads in urbanized zone. Develop and implement stabilization measures as needed. Document and report activities.

6I) Procedures to Identify & Report Known Discharges Causing Erosion

Responsible Party:	Department of Public Works
Target Audience:	N/A
Target Pollutant Sources:	Sediment
Description:	The DPW is unaware of serious scour at MS4 outfalls causing erosion within the Town. As part of the Outfall mapping and inspection task (BMP 3D) scour at outfalls will be assessed.
Measurable Goals:	Year 1-5 Inspect outfalls in urbanized zone. Report problem areas to RIDEM. Coordinate proposed corrective measures. Document and report activities.

6J) Procedures to Address Water Quality in Flood Management Projects

Responsible Party:	Public Works
Target Audience:	N/A
Target Pollutant Sources:	Suspended sediment, floatables, etc
Description:	The Town will institute a policy to ensure water quality BMPs are considered in new flood control projects. Any existing facilities will also be inspected to determine if water quality retrofits are warranted.
Measurable Goals:	Year 1 Develop and publish policy, Year 2-5. Document and report any activities.

6K) Procedures to Implement Erosion & Sediment Controls on Town Construction Projects

Responsible Party:	Department of Public Works
Target Audience:	N/A

Target Pollutant Sources:	Sediment
Description:	The DPW currently employs E&S at Town managed
	construction sites. These activities will now be included in annual reports to the RIDEM
Measurable Goals:	Year 1-5 Continue to implement E&S controls. Document and report activities.

Training

6L) Employee Training	
Responsible Party:	Department of Public Works/RIDEM
Target Audience:	Municipal Employees including but not limited to: DPW,
	Police, Fire, School Department, Parks and Recreation, Water
	Department
Target Pollutant Sources:	Any/all potential pollutants resulting from municipal
C C	operations including hazardous waste, sediment, vehicle
	washing, etc.
Description:	The Town will develop and implement an employee training
	program to prevent and reduce storm water pollution from
	activities such as park and open space maintenance, fleet and
	building maintenance, new construction and land
	disturbances, and storm water system maintenance.
Measurable Goals:	Year 1: Assess who, when, and what topics; Create schedule and
	checklist; Sample / test training
	Year 2-5: Fully implement training

Stormwater Pollution Prevention Plans for Facilities

6M) Stormwater Pollution Prevention Plan (SWPPP) for DPW Facility

/	
Responsible Party:	Department of Public Works
Target Audience:	DPW Employees
Target Pollutant Sources:	Any/all potential pollutants resulting from municipal
2	operations including hazardous waste, sediment, vehicle
	washing, etc.
Description:	A SWPPP was prepared for the DPW facility located at 65
-	Union Avenue in Burrillville.
Measurable Goals:	Year 1-5: Implement SWPPP; Document activities.

6K) Spill Prevention Control and Countermeasure (SPCC) Plan

Responsible Party:	Department of Public Works
Target Audience:	DPW Employees
Target Pollutant Sources:	Oil and gasoline
Description:	The DPW has identified the need to prepare a SPCC Plan for
-	the Garage.
Measurable Goals:	Year 1-5: Implement SPCC; Document activities

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6L) Waste Disposal Procedures from Municipal Operations

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Responsible Party:	Department of Public Works		
Target Audience:	N/A		
Target Pollutant Sources:	Sediment and sand, salt, litter		
Description:	The Town will develop and implement procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris).		
Measurable Goals:	Year 1: Assess existing waste disposal procedures; Brainstorm new procedures; Develop draft procedures Year 2:Finalize and implement revised procedures. Year 3-5: Implement procedures; Document activities.		

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Additional Requirements

Cooperation with Interconnected MS4s

The operator must attempt to work cooperatively with other interconnected MS4s.

Endangered Species Act

The Endangered Species Act (ESA) of 1973 requires EPA to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) that NPDES permits authorizing discharges to waters of the U.S., issued by the EPA, are not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species, or adversely modify or destroy critical habitat of such species.

The Rhode Island Natural Heritage Program (NHP) monitors the status of rare or declining species of plants and animals. The NHP has cataloged approximately 49 species of plants and animals in Burrillville. Species are assigned one of several status categories. The Federally Endangered and Federally Threatened species are given the highest status, followed by State Endangered, State Threatened, State Interest, Species of Concern and State Extirpated species. There are no known Federally Endangered or Federally Threatened species in Burrillville. However, there are a number of state-listed species in the Town.

Polygons depicting the location of rare species habitats are provided on GIS coverage hosted by the RIGIS: A figure depicting rare species habitat is provided on the following page.

In the urbanized area, there are polygons along the Nipmuc River west of Graniteville and south of the Slatersville Reservoir.

There are many areas in less developed section of Burrillville including:

™ A Great Blue Heron rookery within a wetland system in the Buck Hill Management Area.

- [™] The Pulaski/Washington State Forest Complex provides a large, relatively undisturbed forest habitat for several rare birds and amphibians.
- ™ Screech Hole Bog in the northeast corner of the Town has an important fen community.
- [™] The Cedar Swamp Pond and Croff Farm Brook complex is one of the most significant areas of biological diversity in Rhode Island.

The Town is unaware of any MS4 discharges into the protected areas listed above. The Town will notify the RIPDES Program in its annual report if a discharge is determined to a Natural Heritage Area is identified.

Essential Fish Habitat

Essential fish habitat is not present within the Town of Burrillville.

Discharges to Water Quality Impaired Waters

If the RIDEM designates the MS4 as a regulated small MS4 and notifies the MS4 operator that discharges from the MS4 require non-structural or structural storm water controls based on an approved TMDL or other water quality determination that identifies provisions for discharges that contribute to a violation of water quality standards or are significant contributors of pollutants to waters of the State:

- ™ The operator must determine the land areas contributing to the discharges identified in the approved TMDL or other water quality determination by the RIDEM (sub watershed boundaries as determined from USGS topographic maps or other appropriate means).
- [™] The operator must ensure that the SWMPP addresses all contributing areas and addresses the impacts identified by the RIDEM.
- [™] The operator must provide the following information regarding progress towards meeting the provisions that includes:
 - Identification of the discharge(s). Provide a tabular description of the discharges identified in the approved TMDL or other water quality determination by RIDEM that includes location (latitude/longitude), size and type of conveyance (e.g. 15" diameter concrete pipe), any existing discharge data (flow data and water quality monitoring data).

- A description of the TMDL provisions or provisions of other water quality
 determination specific to the discharge.
- ® A description of any BMP(s) that have been implemented or will be implemented to address the provisions and pollutant(s) of concern identified by the RIDEM. The BMPs must be tailored to address the pollutant(s) of concern and findings of the TMDL or other water quality determination by RIDEM. The operator shall assess the six minimum control measure BMPs and additional controls currently being implemented or that will be implemented in the SWMPP and describe the rationale for the selection of controls. The rationale must include the location of the discharge(s), receiving waters, water quality classifications, and any other relevant information that the municipality may have (e.g. land use).
- If additional structural storm water controls or measures are necessary to meet the provisions of an approved TMDL or other water quality determination by RIDEM, the operator of the MS4 must also prepare and submit a Scope of Work (SOW) document describing the process and rationale that will be used to select BMPs and measurable goals to ensure that the TMDL provisions or other provisions identified by the RIDEM will be met. The SOW document must:
 - ® Document how all remaining discharges within the contributing area not identified in the approved TMDL or other water quality determination by the RIDEM, or system mapping, will be identified and assessed.
 - B Document how the drainage or sub-catchment area(s) from discharge(s) identified in the approved TMDL or other water quality determination by the RIDEM will be determined. Include sub-catchment area(s) from remaining discharges within contributing area that have not been identified in the approved TMDL or other water quality determination by the RIDEM.
 - Document the process that will be used to identify interconnections within the system as well as how the permittee will work cooperatively with operators/owners of the interconnected system.
 - As appropriate, identify any structural BMPs that address the pollutants of concern, areas to site potential BMPs, permitting requirements or restrictions, potential costs, preliminary and final engineering requirements or the steps taken to determine this information if not known.
- ™ The operator must provide measurable goals for the development and/or implementation of the six minimum measures and additional structural and non-structural BMPs that will be necessary to address provisions for the control of storm water in the provisions identified by the RIDEM.
- [™] Development and implementation of any amendments made to the six minimum control measures within regulated areas and/or development and implementation of

the six minimum control measures to contributing areas that were previously not regulated, must begin at the time of submittal of the NOI/SWMPP or revised SWMPP.

- ™ Development and implementation of storm water control measures from the MS4 that are additional to the six minimum control measures must be started upon receipt of written approval from the RIDEM based on a review of the SOW and implementation schedule.
- If the operator of an unregulated MS4 has not previously submitted a SWMPP, the operator of the MS4 must submit an NOI and SWMPP including amended BMPs, measurable goals, and the SOW if applicable, within one hundred and eighty (180) days of notification from the RIDEM in accordance to the schedules of Part I.C.2 of this permit, and address the TMDL provisions or other provisions of a water quality determination identified by the RIDEM as described in Part IV.D of this permit to obtain authorization for discharges previously not authorized. If the operator has previously submitted a SWMPP and has been authorized to discharge, the operator must submit only an amended SWMPP and the SOW, if applicable, to maintain authorization or to obtain authorization for discharges previously not authorized.
- TM Upon approval, the Scope of Work document will be considered a part of the SWMPP and is subject to the Program Evaluation requirements of Part IV. E., the Record Keeping requirements of Part IV. F., the Reporting requirements of Part IV. G., and all other applicable requirements of this permit.

Impaired Waters within Burrillville

The RIDEM has not completed any TMDL for surface water resources within the Town of Burrillville.

Three water bodies in Burrillville have been identified as impaired waters, as listed in the Rhode Island 2002 303(d) List of Impaired Waters, prepared by the Department of Environmental Management, finalized March 2003. The names of these water bodies and the impaired locations are summarized in Table 2.

Name	RIDEM Waterbody ID	Description	Group	Pollutants of Concern
Clear River	RI0001003R-01A	Below WWTF	2	Biodiversity, Cd, Cu, Pb
Slatersville Reservoir	RI0001002L-09	Entire impoundment	2	Cu, Pb
		Entire impoundment	4	Pathogens, Phosphorus
Keach Brook	RI0001002R-13B			Biodiversity, Cd, Pb

Table 2 – Water Quality Impaired Waters in Burrillville 6

Category 1: TMDL Underway

Category 2: TMDL Planned

Category 3: Dissolved Metals Data Needed

Category 4: Insufficient Date Available. These waters need further monitoring to determine if there are Water Quality Standard violations. Category 5: TMDL or Equivalent Control Action Developed.

The Town does not own an MS4 that discharges to Keach Brook. This brook is located entirely in the state-owned Casimir Pulaski State Forest in a section without improved roads. The Town will not prepare a plan to implement BMPs in this natural area.

The Clear River flows out of Wallum Lake through the villages of Pascoag, Harrisville and Oakland before merging with the Chepachet River to become the Branch River in Glendale and into Nasonville before reaching the Slatersville Reservoir. Tucker Brook flows through the village of Mohegan then joins the Branch River in Nasonville. There are known raw sewage discharges into the Branch River from these five villages. The Town of Burrillville has agreed to bond the 5.1 million dollar cost of extending sewers into the villages of Nasonville, Glendale and Mohegan over the next three years to mitigate this condition. Certainly the greatest incremental improvements to water quality will be achieved through this activity.

At present, it is estimated that more than 50 homes discharge raw sewage into the Branch River up-stream of the Slatersville Reservoir. Interestingly, the Clear River is not listed for pathogens. The implementation of BMPs such as public education and sampling for illicit discharges appears somewhat futile in these areas until after sanitary sewer service has been established.

Methods of reducing the dissolved metal concentration of Cadmium, Copper and Lead through the BMP program are not well understood at this time. The WWTF has a problem with dissolved copper apparently leached from domestic plumbing. Semimetallic brake pads are thought to be a significant source in highway runoff. Covering salt pipes, reducing vehicle washing near storm drain systems, and identification of

⁶ Source State of Rhode Island 2002 303(d) List of Impaired Waters Final March 2003

potential significant contributors are early steps that may be taken before TMDL studies are complete.

National Register of Historic Places Properties

Though not specifically mentioned in the Rhode Island General Permit, the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of EPA's issuance of NPDES General Permits. According to the listing on the National Register of Historic Places there are two Historic Districts in Burrillville, Rhode Island.

Table 3 – Historic Districts in Burrillville

Resource Name	Streets	Listed
Harrisville Historic District	Wood and Sherman Rds., East Ave, Main, Chapel, School, and River Sts	1984-03-21
Oakland Historic District	Victory Hwy.	1987-09-09

Source: National Register of Historic Places (http://www.nr.nps.gov)

A figure depicting other known locations of historically significant features listed on the RIGIS database is provided on the next page. Since the outfalls within the Town have not yet been accurately located, it is not known if any discharges potentially affect any historic resources in Burrillville. Once all outfall locations within the Town have been identified, a letter will be sent to the Rhode Island Historical Commission to verify that storm water discharge related activities will not result in an adverse effect on any known archeological resource or historic properties of National Significance.

5

Evaluation and Assessment

Program Evaluation Requirements

- ™ The operator must annually evaluate the compliance of the SWMPP with the conditions of this permit. If the permittee is required to implement, requirements for the control of storm water identified in an approved TMDL, the operator must identify compliance with the approved scope of work and schedules. If the schedules are not being met, the operator must provide an explanation as well as an amended schedule. If any or all of the storm water control measures have been implemented, assess whether the storm water control measures are being met or if additional measures are necessary.
- [™] The operator annually must evaluate the appropriateness of the selected BMPs and efforts towards achieving the Measurable Goals. The SWMPP may be changed in accordance with the following provisions:
 - Changes adding (but not subtracting or replacing) components, controls or requirements to the SWMPP may be made at any time upon written notification to RIDEM.
 - ® Changes replacing an ineffective or infeasible six minimum control measure BMP, specifically identified in the SWMPP, with an alternative BMP may be requested at any time. Unless denied, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented sixty (60) days from submittal of the request. If the request is denied, the Director shall send a written explanation of the denial. Changes replacing an ineffective or infeasible storm water control specifically identified in the SWMPP or in an approved Scope of Work document to meet the requirements of an approved TMDL, may be requested at any time, however, written approval from the RIDEM must be received prior to implementing changes.
 - ® Modification requests, must include the following information:
 - Analysis of why the BMP is ineffective or not feasible (e.g., cost prohibitive).
 - Expectations on the effectiveness of the replacement BMP.

- Analysis of how the replacement BMP is expected to achieve the goals of the BMP to be replaced.
- Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Part V. of this permit.
- ® The Director may require changes to the SWMPP as needed to:
 - Meet the minimum requirements of Part IV of this permit.
 - Address impacts on receiving water quality caused or contributed by discharges from the MS4.
 - Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements.
 - Include such other conditions deemed necessary to comply with the goals and requirements of the CWA.
 - Include a revised scope of work and implementation schedule necessary to comply with the TMDL requirements.

Any changes requested by the Director shall be in writing and shall set forth the time schedule for the operator to develop the changes and amend the SWMPP and to offer the opportunity to propose alternative program changes to meet the objective of the requested modification.

Record Keeping

The Town of Burrillville is required to keep records of all activities performed in accordance with their Storm Water Management Plan, such as public education and participation programs, illicit discharge detection progress, formulation of both construction and post-construction ordinances and municipal operation and maintenance programs. The Town must keep all records for a minimum of five years, and must submit copies of records to RIDEM, if required, and must make records available for public review and copying.

Reporting

Burrillville must submit a report to the RIDEM each year containing the following information:

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- ™ Self-assessment review of compliance with the permit conditions.
- [™] Assessment of the appropriateness of the selected BMPs.
- [™] Assessment of the progress towards achieving the measurable goals.
- [™] Assessment of the progress towards meeting the requirements for the control of storm water identified in an approved TMDL.
- ™ Summary of results of any information that has been collected and analyzed. This includes any type of data.
- [™] Discussion of activities to be carried out during the next reporting cycle.
- [™] Discussion of any proposed changes in identified BMPs or measurable goals.
- [™] Date of annual notice and copy of public notice.
- [™] Summary of public comments received in the public comment period of the draft annual report and planned responses or changes to the program.
- Planned municipal construction projects and opportunities to incorporate water quality BMPs, low impact development as well as activities to promote infiltration and recharge.
- ™ Newly identified physical interconnections with other small MS4s.
- ™ Coordination of activities planned with physically interconnected MS4s.
- ™ Summary of the extent of the MS4 system mapped, actions taken to detect and address illicit discharges including: the number of illicit discharges detected, illicit discharge violations issued, and violations that have been resolved. Number and summary of all enforcement actions referred to RIDEM.
- ™ Summary of the number of site inspections conducted for erosion and sediment controls, inspections that have resulted in an enforcement action, and violations that have been resolved. Number and summary of all enforcement actions referred to RIDEM.
- ™ Summary of the number of site inspections conducted for proper installation of post construction structural BMPs, inspections that have resulted in an enforcement action, and violations that have been resolved. Number and summary of all enforcement actions referred to RIDEM.

- [™] Summary of the number of site inspections conducted for proper operation and maintenance of post construction structural BMPs, inspections that have resulted in an enforcement action, and violations that have been resolved.
- ™ Reference any reliance on another entity for achieving any measurable goal.

Reports to RIDEM must be submitted at the following address:

R.I. Department of Environmental Management Office of Water Resources RIPDES Program 235 Promenade Street Providence, RI 02908 VHB

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Appendices

Attachment A – 5-Year Outline

Attachment B – Outfall Map as of March 18, 2004



Attachment C – SWPPP for DPW Facility

Attachment D – Outreach Materials

Attachment E – List of Town-Owned Catch Basins

Attachment F – No Exposure Waiver for Publicly Owned Treatment Facility



Attachment G – Existing Educational Materials

Attachment H – References Cited

Albert Veri & Assoc. July 1998 in the Burrillville Comprehensive Plan.

Beta Group, Inc. July 2002. *Town of Burrillville, Rhode Island Waste Water Facilities Plan,* Volume 1.

Burrillville Comprehensive Planning Commission. July 1998. Burrillville Comprehensive Plan.

New England Interstate Water Pollution Control Commission. January 2003. *Illicit Discharge Detection and Elimination Manual. A Handbook for Municipalities*.

Rector, Dean. 1981. Soil Survey of Rhode Island. USDA.

Town of Burrillville Rhode Island. June 2001. *Subdivision and Land Development Regulations*.

Town of Burrillville. 1999. Zoning. Municipal Code Corporation.105 pp.