Commonwealth of Massachusetts
Executive Office of Health & Human Services
Department of Mental Retardation

WRENTHAM DEVELOPMENTAL CENTER
P.O. Box 144, Wrentham, MA 02093
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Mitt Romney
Governor

Kerry Healey
Lieutenant Governor

Timothy Murphy
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Gerald J. Morrissey, Jr.
Commissioner

Diane Enochs
Asst. Commissioner

Nicholas J. D Aluisio
Facility Director

Received
5-22-06

06

May 16, 2006

Ms.Thelma Murphy
Regional Storm Water Coordinator
U.S. Environmental Protection Agency
Region 1
1 Congress Street – Suite 1100
Boston, MA 02114-2023

Dear Ms. Murphy:

RE: Submittal of Annual Storm Water Report
NPDES General Permit for Storm Water Discharges from Small MS4s
Permit # MAR042030; MA DEP BRP WM 08A NOI Transmittal # W035610
Wrentham Developmental Center, Wrentham, MA

In compliance with the NPDES General Permit for Storm Water Discharges from Small MSWs, the Wrentham Developmental Center (WDC) is submitting the 2006 Annual Storm Water Report.

WDC has complied with the terms of the joint EPA-DEP General Permit # MAR042030 and with all information and actions required by items A through F of the MA DEP Notice of Intent BRP WM 08A, Transmittal # W035610.

The following Annual Report contains all required information as outlined in Part IV, F-2, a through g of the general permit.

Regarding BMP ID # 6-01 (contract for catchbasin cleaning, inspection, and repair), Lloyd Truax & Company, Inc. of Foxboro, MA did clean and inspect the catchbasins at WDC on April 17-23, 2005 and April 28, 2006.

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Thelma Murphy
May 16, 2006

Regarding BMP ID # 6-03 (contract for cleaning of [streets] and parking areas), Consider It Done of Attleboro, MA did perform comprehensive cleaning/sweeping of the streets and parking areas at WDC on May 6, 9 and 10, 2005 and May 15-16, 2006.

Regarding BMP # 3-02 (Use test kits for pH, Nitrate [as Ammonia], and Phosphate during wet weather [events]), WDC did sample two of the three storm water outfalls leading to Meadow Brook during a heavy rain event on 9-15-05. These samples were analyzed at WDC's Wastewater Treatment Plant by a licensed operator using DEP approved test kits and methods commonly applied to the WWTP NPDES Permit required testing. These two outfalls represent storm water flows for approximately 75 % of the surface area covered by the storm water collection system at WDC. One remaining outfall to Meadow Brook represents perhaps 5 % of the total area drained by the storm water collection system at WDC. This third outfall, located south of the two primary outfalls, has been included with the other two outfalls in samples taken on 5-14-06 during the recent heavy rain event. Results of the 9-15-05 sampling are included with the enclosed annual report.

Please contact me at (508) 384-1656 if you have any questions or need additional information.

Sincerely,

Stephen Legendre
Director of Operations

SL: rstl

Enclosure

Cc: Mark Casella
N. D'Aluisio
J. Sites
B. Sullivan
U.S. Department of Environmental Protection, Water Technical Unit
Massachusetts Department of Environmental Protection,
Division of Water Management

2006 Annual Storm Water Report

Permittee: Commonwealth of Massachusetts
Department of Mental Retardation
Wrentham Developmental Center
P.O. Box 144 (131 Emerald Street)
Wrentham, MA 02093

Permit Type: NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems(MS4s)

Permit Number: USEPA # MAR042030; MA DEP # W035610

Reporting Compliance Date: May 1, 2006

In conformance with the reporting requirements identified in Part IV, section F-2 on page 27 of the General Permit, the Wrentham Developmental Center offers the following response:

a. **A self-assessment review of compliance with the permit conditions:**
WDC reviewed the terms of the joint USEPA-MA DEP General Permit and is in compliance with the permit conditions.

b. **An assessment of the appropriateness of the selected Best Management Practices (BMPs):**
Upon review of the selected BMPs, WDC interprets the currently implemented BMPs as appropriate for storm water management at the facility.

c. **An assessment of the progress towards achieving measurable goals:**
WDC has reviewed item F (Storm Water Management Program Time Frames document) of the MA DEP Notice of Intent BRP WM 08A, transmittal # W035610 and interprets the past year's storm water management activities at the facility as appropriate towards achieving the measurable goals

d. **A summary of results of any information that has been collected and analyzed. (This includes any type of data.):**
Regular inspections of the storm water outfalls revealed normal outfall conditions. Water quality sampling as per BMP 3-02 was conducted during a significant storm event on 9-15-05. Attached herein are the results of samples taken from the two outfalls contributing the most significant storm water flow to the only open water body at the facility, Meadow Brook.

e. **A discussion of activities for the next reporting cycle:**
WDC will implement the activities for the 2006/2007 reporting cycle as identified in item F (Storm Water Management Program Time Frames document) of the MA DEP Notice of Intent BRP WM 08A, transmittal # W035610.

f. **A discussion of any changes in identified BMPs or measurable goals:**
No changes in the identified best management practices (BMPs) or measurable goals are proposed at this time.

g. **Reference any reliance on another entity for achieving any measurable goals:**
WDC is not reliant on any other entity for achieving any of its measurable storm water management goals.

STORM WATER
Marion Moore Hall
OUTFALLS #1, #2
to Meadow Brook

P.H.

WORKSEET

Sample Date 9/15/05 Time 3:45 pm BY Stephen Legendre

Analysis Date 9/15/05 Time 4:15 pm By [illegible]

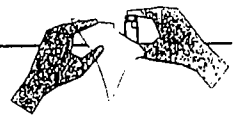
Calibration Check ✓ Sample type GRAB

	P.H.	Temp
OUTFALL # 1 ~~Influent~~	6.20	20 c
OUTFALL # 2 ~~Aeration #1~~	6.06	20 c
Secondary		
Effluent		
Downstream		

Comments: STORM WATER OUTFALLS #1, #2 Located behind MERRY MOORE HALL AT NORTH ST PARKING AREA.

AMMONIA NITROGEN TEST PROCEDURE: NESSLER METHOD

Read the 1200 Colorimeter Manual before proceeding. Carefully wipe tubes dry before inserting into the colorimeter chamber.



AMMONIA NITROGEN

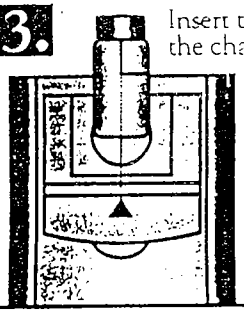
1.

Fill the Water Sample Collecting Bottle (0688) with sample water. This will be used to dispense sample water for the tests.

2.

Rinse and fill a colorimeter tube (0290) to the 10 mL line with sample water. Cap and wipe dry.

3.



Insert the tube into the chamber, being sure to align the index line with the arrow on the meter. Close the lid. This tube is the blank or zero.

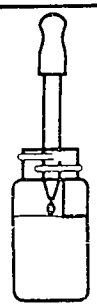
4.

Push the **READ** button to turn the meter on. Press the **ZERO** button and hold it for 2 seconds until *BLA* is displayed. Release the button to take a blank reading (0.0 ppm).

5.

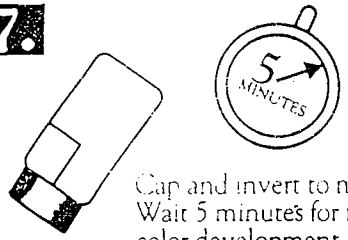
Remove tube from colorimeter. Add 8 drops of Ammonia Nitrogen Reagent #1 (V-4797). Cap and mix.

6.



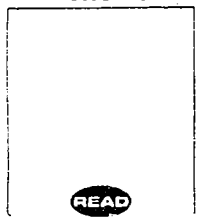
Use 1.0 mL pipet (0354) to add 1.0 mL of *Ammonia Nitrogen Reagent #2 (V-4798).

7.



Cap and invert to mix. Wait 5 minutes for full color development. Wipe tube dry.

8.



Align the index line with the arrow on the meter, insert tube into chamber. Close the lid. Push the **READ** button. Record results as ppm Ammonia Nitrogen (NH_3-N).

AMMONIA NITROGEN TEST

WORKSHEET

Sample Date 9/15/05 Time 3:45 pm By Stephen Legendre

Sample Location Marion Moore Hall Storm Water Outfalls to Meadow Brook Temp 20°C

24 Hour Compost Sample Grab Other

Analysis Date 9/16/05 Time 10:30 am By Richard Benoit

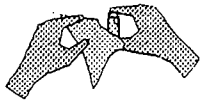
Test Results OUTFALL #1: 0.71 OUTFALL #2: 0.56 Duplicate Results

Comments:

Volume Used: 10 mL Filtered sample

Calculations

Read the 1200 Colorimeter Manual before proceeding. Carefully wipe tubes dry before inserting into the colorimeter chamber.

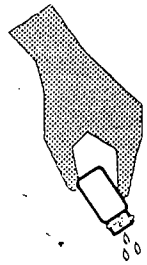


PHOSPHATE

1.

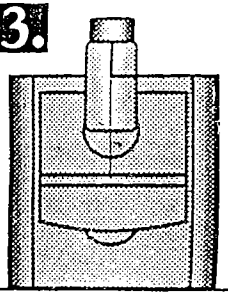
Fill the Water Sample Collecting Bottle (0688) with sample water. This will be used to dispense sample water for the tests.

2.



Rinse and fill a colorimeter tube (0290) to the 10 mL line with sample water. Cap and wipe dry.

3.

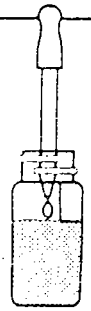


Insert the tube into the chamber, being sure to align the index line with the arrow on the meter. Close the lid. This tube is the sample blank or zero.

4.

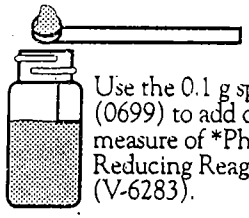
Push the **READ** button to turn the meter on. Press the **ZERO** button and hold it for 2 seconds until bLA is displayed. Release the button to take a blank reading (0.0 ppm).

5.



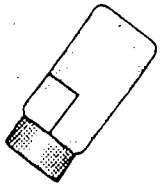
Remove tube from colorimeter. Use 1.0 mL pipet (0354) to add 1.0 mL of *Phosphate Acid Reagent (V-6282). Cap and mix.

6.



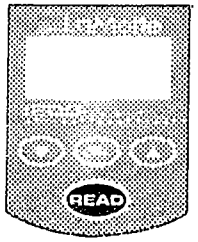
Use the 0.1 g spoon (0699) to add one measure of *Phosphate Reducing Reagent (V-6283).

7.



Cap and shake until powder dissolves. Wait 5 minutes for full color development. Solution will turn blue if phosphates are present. Wipe tube dry.

8.



Align the index line with the arrow on the meter, insert tube into chamber. Close the lid. Push the **READ** button. Record results as ppm Orthophosphate.

PHOSPHATE TEST

WORKSHEET

Sample Date 9/15/05 Time 3:45pm By Stephen Legendre

Sample Location Marion Moore Hall STORM WATER Outfalls to Meadow Brook Temp 20°C

24 Hour Compost Sample Grab Other

Analysis Date 9/16/05 Time 10:30 AM By Richard Benoit

Test Results OUTFALL #1 0.29 OUTFALL #2 0.23 Duplicate Results

Comments:

Volume Used: 10 mL Filtered sample

Calculations