Public Service
of New Hampshire

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The Northeast Utilities System

May 31, 2001

D17407

Ms. Lori A. Sanville, Environmental Inspector
NH Department of Environmental Services
Water Division - Wastewater Engineering Bureau
P.O. Box 95, 6 Hazen Drive
Concord, New Hampshire 03302-0095

Reference: NPDES Inspection Worksheet (C10882), LA Sanville to AG Palmer dated May 18, 2001.

Dear Ms. Sanville:

Merrimack Station
NPDES Permit No. NH0001465

Public Service of New Hampshire has reviewed the deficiencies identified on the worksheet (see Reference) for Merrimack Station from your May 8, 2001, NPDES inspection. Corrective actions have been entered onto the form which is attached, along with supporting documentation. PSNH believes each of the issues is fully addressed by this response.

Please contact Allan G. Palmer, Senior Engineer, at 634-2439 if you have followup questions.

Very truly yours,

John M. MacDonald
Vice President

Instructions for completing the NPDES Inspection Worksheet

Permittee: Describe all steps taken to correct the deficiencies identified by the inspector. This description should also include the dates the deficiencies were corrected or the anticipated correction date. If necessary, use additional paper. When the form is completed, the responsible official for the municipality or industry must sign and date the form. Submit the original form and all additional paperwork to DES within 30 days from the date of the inspection. Keep the first copy for your records. If the submitted response is acceptable to DES, we will close out the inspection and no further action, other than continued compliance, is required by the permittee. If DES identifies the same deficiencies in future inspections, DES may immediately proceed with enforcement.

DES must receive the completed form no later than 30 days after the inspection. To ensure that DES receives the completed form within the allowed time frame, postmark accordingly. If DES does not receive this completed form within the allowed time frame, DES may proceed with an appropriate enforcement action (NOF, LOD, AO, AOC, AF or AFC).

Please mail completed form to:

Inspector Name
NHDES/WD-WWEB
P.O. Box 95
6 Hazen Drive
Concord, NH 03302-0095

ABBREVIATIONS

NOF – Notice of Findings
LOD – Letter of Deficiency
AO – Administrative Order
AF – Administrative Fine
AOC – Administrative Order by Consent
AFC – Administrative Fine by Consent

NPDES INSPECTION WORKSHEET

06/18/01

Facility Name: Merrimack Station | Inspection Date: 05/8/01 | Worksheet Due Date: 06/08/01

NPDES No.: NH0001465

Permittee Representative Name, Title & Phone: Alan Palmer Senior Engineer 634-2439

Check all categories that were checked during the inspection:

- [x] Permit
- [x] Effluent/Receiving Water
- [x] Records/Reports
- [x] Facility Site Review
- [x] Flow Measurement
- [ ] Self Monitoring
- [ ] Compliance Schedules
- [x] Laboratory
- [x] Operations/Maintenance
- [x] Sludge Handling/Disposal
- [ ] Pretreatment
- [x] Storm Water
- [ ] SSO/CSO
- [ ] P2
- [ ] Other

Identified Deficiencies: (To be completed by inspector)	**Corrective Actions:** Use additional paper if necessary: (To be completed by permittee) (Refer to instructions on the back of this page)
①The october 2000 DMR had a daily max result of 190.9 MGD with an allowable limit of 187.2 MGD for 002A and a daily max of 71.2 MGD with an allowable limit of 69.1 for 001A. Both of these parameters were noted as "excess flow due to daylight savings adjustment on 10/28". The number of exceedance box showed zero for both 001A and 002A. This box needs to coincide with the actual number of violations. In this case, 1 violation for 001A and 1 for 002A.	1. The permit defines a daily discharge as "any 24-hour period that reasonably represents the calendar day". The DMRs reported flows based on 25-hour operation which obviously exceeds a reasonable representation of a 24-hour period. The reported flows should have been 68.4 MGD and 183.3 MGD, which are both within permit limits. In the future, Merrimack Station will report in accordance with the permit definition for the two affected days (April and October).
②The incubator where total suspended solids are dried is not having temperature	2. As of 5/11/01, the bench sheet for TSS for outfall 003A and the instrument calibration (continued of Page 2 of 2)

The above-noted items are deficiencies found during an NPDES inspection. The DES inspector explained all the deficiencies completely and to my understanding. I understand I have thirty (30) days to complete the corrective action section of this form and have the responsible official sign and return the form to DES. Complete responses must include a description of the corrective action, and the date the action was completed or a proposed date that the action will be completed. Upon DES receipt of an acceptable response, DES will close out the inspection. If DES does not receive an acceptable response within 30 days, DES may proceed with enforcement. Action taken by DES does not preclude subsequent action that EPA may take for these or any other violations.

Inspector Signature: Jeri Asanville — Date: 5/14/01

Permittee Representative Signature: X Alan Palmer — Date: 5/18/01

I certify that all responses and dates are true and accurate:

Responsible Official Signature: Robert M. MacDonald

Title: VP - Operations. — Date: 5/31/01

Original Copy – Permittee/DES | 1st Copy – Permittee | 2nd Copy – DES | 01/01

Continuation Sheet for NPDES INSPECTION WORKSHEET

Facility Name: Merrimack Station | Inspection Date: 05/08/01 | NPDES No.: NH0001465

Identified Deficiencies: (To be completed by inspector)	Corrective Actions: Use additional paper if necessary: (To be completed by permittee) (Refer to instructions on the back of page 1)
measured on the day it is used for NPDES monitoring. 40CFR 122.41(e) requires adequate laboratory controls and appropriate quality assurance procedures. Proper quality assurance can not be verified if the oven temperature is not checked during the test.	schedule were revised to include an oven temperature reference (see Attachments). Oven temperature is now recorded during each total suspended solids analysis.
(3) During the month of March 2001, the instantaneous flow meter was off from the portable meter by as much as 0.5 su. The plant personnel stated standard operating procedures for this item was for calibration to occur when the two meters had a difference of 0.2 SU. On 3/5, 3/6, 3/7, 3/8, 3/9, 3/12, 3/15, 3/16, 3/19, and 3/20 the meters were off between 0.30 and 0.50 su and no record of calibration was shown. Plant SOPs should be followed.	3. As of 5/11/01, the daily rounds log and calibration schedule were revised to include a pH calibration reference (see Attachments). The weir pH meter is now calibrated on each day that the difference between the two meters exceeds 0.2 SU. A training review sheet is also enclosed to show that the chemists are familiar with the operating procedure.

The above-noted items are deficiencies found during an NPDES inspection. The DES inspector explained all the deficiencies completely and to my understanding. I understand I have thirty (30) days to complete the corrective action section of this form and have the responsible official sign and return the form to DES. Complete responses must include a description of the corrective action, and the date the action was completed or a proposed date that the action will be completed. Upon DES receipt of an acceptable response, DES will close out the inspection. If DES does not receive an acceptable response within 30 days, DES may proceed with enforcement. Action taken by DES does not preclude subsequent action that EPA may take for these or any other violations.

Kori A. Sanville — Inspector Signature — 5/14/01 — Date

X — Permittee Representative Signature — 5/18/01 — Date

I certify that all responses and dates are true and accurate:

Responsible Official Signature

VP - OPERATIONS — Title — 5/31/01 — Date

Original Copy – Permittee/DES | 1st Copy – Permittee | 2nd Copy – DES | 01/01

Checked by: _____

OUTFALL 003A (WEIR)

TOTAL SUSPENDED SOLIDS

(Method EPA 160.2)

NPDES PERMIT # NH0001465

COLLECTION

Temp method EPA 170.1
pH method EPA 150.1

Date: _____ pH: _____
Time: _____ FS: _____
Initials: _____ Foam: _____
Temp: _____ O/G(vis): _____

O/G, FS, Foam, pH and temp taken at time of collection (*within 15 min.*).

ANALYSIS

(All sample analysis on this form reflect the collection data in the section "Collection".)

Date: _____ Q/C Known: _____
Time: _____ Observed: _____
Analyst: _____ Deviation: _____
Oven Temperature: _____ Dup. Dev.: _____

	Blank	Known	Sample	Duplicate
T. Dry Weight:	_____ g	_____ g	_____ g	_____ g
- Filter Wt:	_____ g	_____ g	_____ g	_____ g
= Difference:	_____ g	_____ g	_____ g	_____ g
Sample vol. in L (/):	_____ L	_____ L	_____ L	_____ L
= :	_____ g	_____ g	_____ g	_____ g
- Blank:		_____ g	_____ g	_____ g
X1000 (mg/g):	_____ mg/L	_____ mg/L	_____ mg/L	_____ mg/L

Comments:

INSTRUMENT CALIBRATION SCHEDULE

I. ATOMIC ABSORPTION SPECTROPHOTOMETER (Perkin Elmer Model 460)

A. Cleaned and calibrated semi-annually by A. I. S.(service contract)
B. Lamp and wavelength peaked before each analysis set.
C. Quality control samples run before each analysis set and recorded in QA/QC file.

II. ANALYTICAL BALANCE (Sartorius model A200S)

A. Cleaned and calibrated quarterly by in plant I&C Technicians.
B. Calibration weight check at two weights monthly before NPDES sampling and recorded on bench sheet.

III. DRYING OVEN (Fisher Model 496)

A. Temperature calibration quarterly by in plant I&C Technicians. (Maintenance Management System PM)
B. Temperature settings checked before each use and recorded on bench sheet.

IV. THERMOMETERS

A. Checked against NIST calibrated thermometer at two temperatures before NPDES sample collection in accordance with EPA Method 170.1, recorded on bench sheet.
B. NIST calibrated thermometer is sent out for calibration yearly by Ever Ready Thermometer Co., Inc. , Certificate inserted.

V. PH METERS (Merrimack Station)

A. WTF EPA Lab Bench Meter - Orion model # 611
   1. Standardized daily in accordance with EPA method 150.1 and Manufactures calibration procedure(inserted). Record 7.0 buffer reading on *WTF Daily Rounds Log.* If not 6.95 to 7.05 recalibrate.

B. BACKUP Lab Bench Meter - Orion model # 701A
   1. Backup to the WTF EPA lab meter.

C. WEIR (003A)- L&N model #7082 (Insitu)
   1. Check daily against lab bench meter when chemical analyst is on site. If readings do not agree within (+/- 0.2 su) recalibrate and record in calibration record book.

   2. Standardized monthly in accordance with EPA method 150.1 and Manufactures calibration procedure(inserted).Record 7.0 buffer reading in calibration record book. If not 6.95 to 7.05 recalibrate.

WASTE TREATMENT DAILY ROUNDS LOG

DATE MK-1 MODULES

DAY MK-2

ANALYST WEATHER

pH CAL (PORT)
BUFFER #10 =
BUFFER #4 =
BUFFER #7 =

METHODS
Fe = HACH
pH = EPA 150.1
TEMP = EPA 170.1
SOLIDS = VISUAL
FOAM = VISUAL
OIL/GREASE = VISUAL

	TIME	TEMP	Fe	PORT pH
BASIN 1				
BASIN 2				
BASIN 3				
OIL SEP OUT				

SOLIDS/FOAM/OIL/GREASE
0 = NONE VISABLE
1 = TRACE AMOUNTS
2 = MORE THAN TRACE AMOUNTS

	TIME	TEMP	PORT pH	INSIT pH	D.O.	SOLIDS	FOAM	OIL/GRSE	STK-FLO	COMP-FLO
RIVER										
CANAL										
*WEIR										
BSN DISC										
BSN OVFL										
TUNL OUT										
CULVERT										
ASH PND										

*** If pH of EPA lab bench pH meter and the Weir Insitu pH meter differ by more than 0.2su, Recalibrate and record in Calibration record book.**

LEACHATE TANKS	TK OUTAGE	GAL	REMAIN	RAIN	RAIN pH	DRIVER	IN	OUT
#1								
#2								

EYE WASH \ EMERGENCY SHOWER STATIONS (FLUSH & CHECK TEMPERATURE WEEKLY

ACID TANK _____ PUMP HOUSE UP _____ PUMP HOUSE DOWN _____

NOTES

BASIN #1: _____

BASIN #2: _____

BASIN #3: _____

MERRIMACK STATION
CHEMICAL LAB
TRAINING REVIEW

Date: 5/11/01

Subject: **Calibration of WWTF pH meters**
Discussion included the need for recalibrating the Weir insitu meter if the pH differential between the NPDES bench meter and the Weir insitu is greater than 0.2su
Also all calibrations need to be documented in the WWTF Calibration record book.

References: EPA Method 150.1
Merrimack Station NPDES Compliance manual (Instrument Calibration Schedule)
WWTF Daily Rounds Log

Attendees:

Dave Fradette - Working Foreman Chemical	David A Fradette
Paul Martineau - Chemical Analyst I	Paul M Martineau
Mike Cote - Chemical Analyst I	Michael A Cote
Ken Kroh - Chemical Analyst I	Ken Kroh
Jerry Kraft - Chemical Analyst Ib	Gerald Kraft