

AB-007  
8-1-90

DATE:  
SUBJECT: Review of Draft NPDES Permits  
FROM: Gerald C. Potamis, Chief, Industrial Permits Section  
TO: Steve Silva, Chief, Planning and Standards Section

The following draft NPDES permit is being prepared for issuance/reissuance. Please review to insure compatibility with water quality.

Date Comments Due:

Permit Number: NH000 1473  
Name: PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
SCHILLER STATION Type of Discharge  
Location PORTSMOUTH, N. H.  
Receiving Water PISCATAQUA Major Basin  
RIVER Minor Basin  
Flow

Basis for permit limits (See attached fact sheet or statement of basis)

Permit Limits

BOD 5

S.S.

SEE PREVIOUS PERMIT

P.

NH3

D.O.

OTHER

Planning & Standards Section Comments

Permit Acceptable

Potential Problem

Major Revision Required

NPDES INDUSTRIAL RATING WORKSHEET

Total Permit Rating Points Summary Sheet

1. Updated Rating Summary:

Section A	30
Section B	30
Section C	20
Section D	0
Section E	15
Total Points	95

2. Major/Minor Verification (enter number of points below):

	Current Rating	Updated Rating
Major (> 80 points)	✓	✓
Minor (< 80 Points)		
Discretionary Major (Add 500 points to Minor Total)		

3. If a Minor is made a Discretionary Major, then explain the reason for the designation:

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Permit Engineer \_\_\_\_\_ Date \_\_\_\_\_

12-5-89

NPDES INDUSTRIAL PERMIT RATING WORKSHEET

Discretionary Addition

Regular Addition

Deletion

Ceased Direct Discharge

NPDES Permit No. NH010101473

Facility Name PSNH SCILLER STATION

City PORTSMOUTH

Receiving Water \_\_\_\_\_

Segment (If Designated) \_\_\_\_\_

Water Quality Limiting  Yes  No

In Compliance With Water Quality Standards  Yes  No

Public Water Supply  Yes  No

Current Classification Status  Major  Status Code

Minor

1. Toxic Pollutant Potential

FCS SIC Code 49111 Primary SIC Code 49111

Other SIC Codes

Industrial Subcategory Used \_\_\_\_\_

Industrial Subcategory Code  (Code 00 if no subcategory)

Toxicity Group =  I (00 points)

II (10 points)

III (20 points)

IV (30 points)

V (40 points)

VI (50 points)

A. Toxic Pollutants Points = 30A

Toxicity Group Code

2. Flow/Streamflow Volume

Wastewater Type

Type I  Flow < 5 mgd (00 points)

Flow 5 to 10 mgd (10 points)

Flow > 10 to 50 mgd (20 points)

Flow > 50 mgd (30 points)

Type II  Flow < 1 mgd (10 points)

Flow 1 to 5 mgd (20 points)

Flow > 5 to 10 mgd (30 points)

Flow > 10 mgd (50 points)

Type III  Flow < 1 mgd (00 points)

Flow 1 to 5 mgd (10 points)

Flow > 5 to 10 mgd (20 points)

Flow > 10 mgd (30 points)

FLOW POINTS = 30

Alternate - Wastewater/Stream Flow Ratio

Alternate Code Checked on Optional Worksheet  
(Code 99 if not used)

(SEE PAGE 3)

Alternate Points = 30 B

B. Wastewater Flow Points (Larger of Flow Points or Alternate) = 30 B

3. Traditional Pollutants

BOD or          \*

- Daily Average Load =  1 < 100 lb/day (00 points)  
 2 100 to 1000 lb/day (10 points)  
 3 > 1000 to 3000 lb/day (20 points)  
 4 > 3000 lb/day (30 points)

BOD Code

COD

- Daily Average Load =  1 < 100 lb/day (00 points)  
 2 100 to 1000 lb/day (10 points)  
 3 > 1000 to 5000 lb/day (20 points)  
 4 > 5000 lb/day (30 points)

COD Code

Oxygen Demand Points (Larger of BOD or COD Points) = 0

\* Insert any alternate oxygen demand parameter used.

TSS

- Daily Average Load =  1 < 100 lb/day (00 points)  
 2 100 to 1000 lb/day (10 points)  
 3 > 1000 to 5000 lb/day (20 points)  
 4 > 5000 lb/day (30 points)

TSS Code

TSS Points = 0

Ammonia or          \*\*

- Daily Average Load =  1 < 300 lb/day (00 points)  
 (As NH<sub>4</sub>-N)  2 300 to 1000 lb/day (10 points)  
 3 > 1000 to 3000 lb/day (20 points)  
 4 > 3000 lb/day (30 points)

Ammonia Code

Ammonia Points = 0

\*\* Insert any alternate nitrogen parameter used

Optional NPDES Permit Rating Worksheet  
Alternate Wastewater/Stream Flow Ratio Criteria

NPDES No. \_\_\_\_\_

Total Wastewater Flow \_\_\_\_\_ (mgd)

Type Wastewater (I, II or III) \_\_\_\_\_

Streamflow (7-day low flow occurring once in 10 years)  
\_\_\_\_\_ (cfs) \_\_\_\_\_ (mgd)

Wastewater flow / stream flow ratio \_\_\_\_\_

Determine the above data from the NPDES permit rating worksheet and from streamflow data. Compute the wastewater flow / stream flow ratio. Check the appropriate blank below, record the code checked in the code box and record the points checked in the Alternate Points blank. Then transfer the Alternate Code and Alternate Points to page 2 of the NPDES Permit Rating Worksheet.

Wastewater Type -

Type I or III

- 41 Flow < 1 mgd (00 points)  
 42 Flow > 1 mgd and > 10% of receiving water low flow (10 points)  
 43 Flow > 1 mgd and > 50% of receiving water low flow (20 points)

Type II

- 51 Flow < 0.5 mgd (00 points)  
 52 Flow > 0.5 mgd and > 10% of receiving water low flow (20 points)  
 53 Flow > 0.5 mgd and > 50% of receiving water low flow (30 points)

Alternate Code Checked

\_\_\_\_\_ Alternate Points (SEE PAGE 2)

Temperature (Heat Load)

(Compute only for flows > 10 mgd and when temperature limits are specified in the permit).

Not Computed

Temperature Differential ( $\Delta T$ ) = Permit Limits (Max. Temp.) - 70°

Heat Load = Cooling Water Flow (mgd)  $\times \Delta T \times 0.00834$   
=  $\frac{192.6}{1495} \times \frac{25}{(AT \cdot F)}$   $\times 0.00834$  = 40.2 billion BTU

- Heat Load =  < 4 billion BTU (00 points)
- 4 to 10 billion BTU (10 points)
- > 10 billion BTU (20 points)

Heat Load Code

Heat Load Points = 20

C. Total Traditional Pollutant Points = 200  
(Sum of Oxygen Demand, TSS, Ammonia and Heat Load Points)

4. Potential Public Health Impacts

Is the receiving water to which wastewater is discharged or a water body to which it is tributary used for a municipal water supply within 50 miles downstream?

- No (0 points)
- Yes

Toxicity Group

- \_\_\_\_\_ I, II or III (00 points)
- \_\_\_\_\_ IV (10 points)
- \_\_\_\_\_ V (20 points)
- \_\_\_\_\_ VI (30 points)

Public Health Code

D. Public Health Points = 0

5. Water Quality Factors

Have (or will) one or more of the effluent limitations assigned to the discharge been based on water quality factors in the receiving stream rather than technology or effluent guidelines or has a wasteload allocation been assigned to the discharge? Alternately, has the receiving water been designated as water quality limiting?

- Yes (15 points) [ONS, PH, TSS, COD & Fecal Coll.]
- No (00 points)

Water Quality Limiting Code

Is the receiving water in compliance with applicable water quality standards? [TOD, Fecal Coll.]

- Yes (00 points)
- No (10 points)

Water Quality Standards Code

E. Total Water Quality Points = 15  
(Sum of Water Quality Limiting and Water Quality Standards Points)

6. Total Permit Rating Points

Add Toxic Pollutant Points (A) + Wastewater Flow Points (B) + Traditional Pollutant Points (C) + Public Health Points (D) + Water Quality Points (E)

NOTE: If permit is a discretionary addition, add 500 points to total

TOTAL RATING POINTS ASSIGNED TO THE PERMIT = 210

Total Rating Points Previously Assigned to the Permit (if any) = \_\_\_\_\_

7. Processing Record

PCS information recorded by _____	Date _____
Permit application data recorded by _____	Date _____
Permit data recorded by _____	Date _____
Public water supply determination by _____	Date _____
Water quality determination by _____	Date _____
Coding entered in the computer by _____	Date _____
Errors revised by _____	Date _____
Corrected coding in computer by _____	Date _____

8. Permit Expiration Date \_\_\_\_\_