

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 JOHN F. KENNEDY FEDERAL BUILDING BOSTON, MASSACHUSETTS 02203-0001

EG

Ę

SURFACE WATER QUALITY BUREA

 \mathbb{N}

1998

Π

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 5, 1998

WITED STATE

Mr. John P. Bohenko, City Manager Office of City Manager Portsmouth City Hall 1 Junkins Avenue Portsmouth, New Hampshire 03801

RE: Permit Reapplication NPDES Permit No. NH0100234 (Portsmouth POTW)

Dear Mr. Bohenko:

In accordance with Section 402 of the Clean Water Act (CWA), as amended, the U.S. Environmental Protection Agency (EPA), Region I, is considering issuing a Section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit to the City for its sewage treatment works. As you know, the City applied for renewal of a variance from the secondary treatment regulations found in 40 Code of Federal Regulations, Part 133 pursuant to Section 301(h) of the CWA. Section 301(h) of the CWA allows the Regional Administrator of EPA with State concurrence to issue a NPDES permit which modifies the requirements for five-day Biochemical Oxygen Demand (BOD, and Total Suspended Solids (TSS) to qualifying Publicly Owned Treatment Works (POTW) with a discharge to marine waters. One of the basic tenets of a 301(h) modified permit is that upon its effective date the POTW must be discharging effluent that has received at least "primary or equivalent treatment" as defined in 40 Code of Federal Regulations (CFR) Section 125.58(r). In that cite, "primary or equivalent treatment" is defined as "treatment by screening, sedimentation, and skimming adequate to remove at least 30 percent of the BOD, and TSS in the treatment works influent". It's the "30 percent removal" with respect to BOD_5 that the City's POTW is unable to meet on a consistent basis.

Review of the recent performance data at the City's POTW shows it has met the minimum 30 percent removal requirement for BOD_5 only 6 of the last 30 months. Under a Section 301(h) waiver, a POTW is required to meet the minimum removal requirements at all times. Monthly percent removal data for BOD_5 in 1996 shows it ranged from 13.9 to 46.2 percent with only 6 out of the 12 months meeting the minimum 30 percent removal. In 1997 performance was even worse, with a range of 15 to 29.6 percent with zero months meeting the minimum 30 percent removal. So far in 1998, performance has continued to be poor with a range of 21.9 to 29.9 percent for January through June, again with zero months meeting the minimum 30 percent removal.

August 5, 1998

Based on the City's recent record of demonstrated plant performance, EPA is very concerned that the City's treatment works, as presently configured and operated, seems incapable of consistently meeting a minimum 30 percent removal rate for BOD, thus not qualifying for a modified Section 301(h) permit. We have been informed by the City that the filtration process has been shut down due to recurring problems. Until filtration or some alternative treatment is reinstated, we believe that Portsmouth will not be eligible for a continued waiver. However, before EPA makes a final determination as to whether or not a modified Section 301(h) permit is justified or whether we should instead issue a permit based on Part 133 Secondary Treatment Regulations we want to give the City an opportunity to respond. When the City made its Section 301(h) waiver application request in 1993, it implied, through its application, that the POTW could meet the waiver's minimum 30 percent removal requirement on the permit's effective Consequently, the City's response should address, at a date. minimum, the following areas.

- Reason(s) why the City's POTW has been unable to achieve a minimum 30 percent removal rate for BOD₅ over the last 30 months. Be as specific as possible.
- B. Explain what steps the City has been and is taking to achieve a BOD₅ removal rate sufficient to comply with a modified Section 301(h) permit, on a consistent basis, including associated time frames for any anticipated construction activities.
- C. What assurances can the City give EPA and the State that whatever corrective action the City takes relative to upgrading its existing system that action will produce effluent of sufficient quality to comply with a modified Section 301(h) permit on a consistent basis thus avoiding a repeat of this situation in the future?
- D. Does the City believe it's technically feasible for the existing facilities to meet, on a consistent basis, a minimum 30 percent removal rate for BOD₅? If so, include the City's reasons, being as specific as possible, for holding that opinion.
- E. Given the apparent inability of this POTW to meet a 30 percent removal rate for BOD₅ over the last 30 months, is the City considering designing a treatment plant to meet Secondary Treatment Regulations (40 CFR Part 133) instead of trying to retrofit its primary treatment works to meet the minimum 30 percent removal requirements for a modified Section 301(h) permit?

F. Submit copies of any recent engineering reports done by the City or its consultant(s) that are related to the above matter.

It appears from a review of this POTW's past history that trying to meet the requirements of a Section 301(h) waiver has been an outstanding issue for some time. If, as it appears, this POTW cannot be configured and operated in such a manner as to meet those waiver requirements, EPA will have no choice but to reissue the City's NPDES permit based on Secondary Treatment Standards (Part 133). If we can be of any assistance in this matter, please call me at (617) 565-3129.

Sincerely,

Frederick B. Day

Frederick B. Gay, Environmental Engineer New Hampshire NPDES Permit Coordinator

CC: Carl DeLoi, Manager, New Hampshire State Program Unit Eric Hall, EPA-Water Technical Unit Mr. Harry Stewart, Director, NHDES-WD Mr. Paul Currier, Administrator, NHDES-WD, SWQB John R. Bush, Administrator, NHDES-WD, WWEB Jacques A. Parent, NHDES-WD, SWQB Jeffrey G. Andrews, NHDES-WD, SWQB George Neill, NHDES-WD, WWEB David S. Allen, City Engineer, Portsmouth