UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ONE CONGRESS STREET- SUITE 1100 (CMP)
BOSTON, MASSACHUSETTS 02114 - 2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT No.MA0103233

NAME AND ADDRESS OF APPLICANT:

Town of Russell
200 Main Street, Russell, MA 01071-0131

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Woronoco Village Wastewater Treatment Plant
2 Bridge Street,
Woronoco, Massachusetts 01071

NAME OF RECEIVING WATER: Wards Brook a tributary to Westfield River to receiving water named Westfield River (Westfield River Basin, (Code 32 WEST))

CLASSIFICATION: B

I. Proposed Action, Type of Facility, Type of Discharge

The above named applicant has requested that the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MADEP) reissue its National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving waters. The discharge consists of treated sanitary waste water.

II. Description of Discharge

Maps showing the location of the facility and hydrological contour map are presented in Figures 1& 2.

III. Limitations and Conditions

The effluent limitations and monitoring requirements are found in the draft NPDES permit.

IV. Permit Basis & Explanation of Effluent Limitation Derivation

A. General Requirements

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without an NPDES permit, unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality based effluent limitations and other requirements, including monitoring and reporting.

This draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and any applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136.

EPA is required to consider a) technology - based requirements, b) water quality based requirements and c) all limitations and requirements in the current/existing permit, when developing permit limits. These requirements are described in the following paragraphs.

a. Technology Based Requirements

EPA is required to consider technology and water quality requirements when developing permit effluent limits. Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 402 and 301 (b) of the Clean Water Act (CWA). Under Section 301(b)(1)(B) of the CWA, POTWs must have achieved effluent limitations based upon secondary treatment by July 1, 1977. The secondary treatment requirements are set forth at 40 CFR Part 133, and include effluent limitations for BOD, TSS, and pH.

Section 301(b)(1)(B) of the CWA requires discharges to achieve any more stringent limitations, including those necessary to meet water quality standards, by July 1, 1977. The State of Massachusetts Surface Water Quality Standards (314 CMR 4.00) include requirements for the regulation and control of toxic constituents and also require the EPA criteria, established pursuant to Section 304 (a) of the CWA, shall be used unless a site specific criteria is established. The state will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained.

The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, and toxic) that is or may be discharged at a level that caused, has reasonable potential to cause, or contributes to an excursion above any water quality criterion. An excursion occurs if the projected or actual in-stream concentrations exceed the applicable criterion. In determining reasonable potential, EPA considers existing controls on point and non-point sources of pollution, variability of the pollutant in the effluent, sensitivity of the species to toxicity and, where appropriate, the dilution of the effluent in the receiving water.

b. Water Quality-Based Requirements

Under Section 301(b)(1)(C) of the CWA and EPA regulations NPDES permits must contain effluent limits more stringent than technology base limits where more stringent limits are necessary to maintain and achieve state of federal water quality standards.

Water quality standards consist of 3 parts: (1) beneficial designated uses for a water body or a segment of water body; (2) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s); and (3) anti-degradation requirements to ensure that once a use is attained it will not be degraded.

The Massachusetts Water Quality Standards, found at 314 CMR 4.00, include these elements. The State will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected, and maintained or attained. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section304(a) of the CWA, shall be used unless a site specific criteria is established.

c. State Certification Requirements

Under Section 401 of the CWA, EPA is required to obtain certification from the state in which the discharge is located which determines that all water quality standards, in accordance with Section 301(b)(1)(C) of the CWA, will be satisfied. Regulations governing state certification are set forth in 40 CFR § 124.53 and §124.55. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44 (d).

B. Water Quality Standards and Designated Uses

The Westfield River has been designated as Class B waters by the Massachusetts Department of Environmental Protection (MADEP). The Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations ("CMR") 4.05(3) (b) state that Class B waters are designated as habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation.

The objective of the Federal Clean Water Act (CWA) is to restore and maintain the chemical physical and biological integrity of the nation's waters. To meet this goal the CWA requires states to develop information on the quality of their water resources and report this information to the U.S. Environmental Protection Agency (EPA) the U.S. Congress and the public. To this end the EPA released guidance on November 19, 2001, for the preparation of an integrated "List of Waters" that could combine reporting elements of both § 305 (b) and 303(d) of the CWA. The integrated list format allows the states to provide the status of all their assessed waters in one multi part list. States choosing this option must list each water body or segment in one of the following five categories:

1) Unimpaired and not threatened for all designated uses; 2) Unimpaired waters for some uses and not assessed for others; 3) Insufficient information to make assessments for any uses;
4) Impaired or threatened for one or more uses but not requiring the calculation of a Total Maximum Daily Load (TMD); and 5) Impaired or threatened for one or more uses and requiring a TMDL.

The segment of the Westfield River where the Woronoco discharge is located is classified in the State's Integrated List of Waters as a Category 4c water, impaired by exotic species from non-pollutant sources.

C. Facility Information

The Woronoco Wastewater Treatment Plant design data describes the facility as an intermittent sand filter facility with a design capacity of 20,000 gallons per day of sanitary waste, with ultraviolet light disinfection. The system is a separate sanitary system serving 253 inhabitants of the Woronoco Village.

D. Proposed Permit Effluent Limitations and Conditions.

The draft NPDES permit for the Woronoco facility, authorizes the discharge of treated sanitary wastewater subject to effluent limitations and applicable water quality standards and requirements, developed and implemented for publicly owned treatment system discharge(s) in accordance with Section 304 (d) (1) of the CWA. The effluent parameters in the draft permit are discussed in more detail below. The sections are divided according to the effluent characteristic being regulated.

Flow

The flow limit contained in the existing permit has been retained. The limit in the draft permit is an annual average, rather than a monthly average. This change has been made to be consistent with the facility design flow, which is given as a long-term average. Discharge monitoring reports (DMRs) submitted by the Town show that the facility consistently achieves the limit.

BOD and TSS

The proposed permit maintains the same concentration (mg/l) limits for BOD and TSS as contained in the existing permit. These limits are based on secondary treatment requirements, in accordance with Section 301 (b)(1)(B) of the Clean Water Act and 40 CFR Part 133. The maximum daily requirement for BOD and TSS are not included in the draft permit because they are no longer required as a condition for obtaining state certification. Monthly average and weekly average BOD and TSS mass (lbs per day) limits have been added to ensure that there is no degradation of receiving waters due to the change in the flow limit from a monthly average to an annual average.

pH

The pH limits are based on the Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations ("CMR"), Inland Water, Class B at 4.05 (3)(b) 3. These standards require that the pH of the receiving water be in the range of 6.5 to 8.3 standard units and no more than 0.5 units outside the background range. There shall be no change from background conditions that would impair any use assigned to this Class. The water quality criteria have been adopted as discharge limitations based on certification requirements under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53 and 124.55.

Fecal Coliform

The draft permit's fecal coliform limits are a monthly geometric mean of 200 organisms per 100 milliliters (ml) and a maximum daily discharge of 400 organisms per100 ml, and are based on the Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations ("CMR"), Inland Water, Class B at 4.05 (3)(b) 4. These standards require that the fecal coliform count in the receiving water shall not exceed a geometric mean 200 organisms per 100 ml in any representative set of samples nor shall more than 10% of the samples exceed 400 organisms per 100 ml. The water quality criteria have been adopted as effluent limitations based on certification requirements under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53 and 124.55. The fecal coliform limits are in effect from April 1 to October 31 each year.

Whole Effluent Toxicity

Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on water quality standards. The Massachusetts Surface Water Quality Standards include the following narrative statement and requires that EPA criteria established pursuant to Section 304(a)(1) of the CWA be used as guidance for interpretation of the following narrative criteria: All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.

National studies conducted by the EPA have demonstrated that domestic sources contribute toxic constituents. These constituents include metals, chlorinated solvents, aromatic hydrocarbons and others. The Region's current policy is to include toxicity testing requirements in all permits, while Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts.

Based on the potential for toxicity resulting from domestic sewage, in accordance with EPA national and regional policy, and in accordance with MADEP policy, the draft permit includes acute toxicity limitations and monitoring requirements. (See Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants, 50 Fed. Reg. 30,784 (July 24, 1985); EPA's Technical Support Document for Water Quality-Based Toxics Control", September, 1991; and MADEP's Implementation Policy for the Control of Toxic Pollutants in Surface Waters (February 23, 1990).

Pursuant to EPA and MADEP policy, a discharge having a dilution factor greater than 100 (the dilution factor for this discharge is 744, see Attachment B) requires acute toxicity testing and an effluent LC50 limit of 50%. The principal advantages of biological techniques are: (1) the effects of complex discharges of many known and unknown constituents can be measured only by biological analyses; (2) bioavailability of pollutants after discharge is best measured by toxicity testing including any synergistic effects of pollutants; and (3) pollutants for which there are inadequate chemical analytical methods or criteria can be addressed. Therefore, toxicity testing is being used in conjunction with pollutant specific control procedures to control the discharge of toxic pollutants.

The draft permit requires that the permittee conduct acute WET testing for the Outfall 001 effluent once per year and that each test include the use of Ceriodaphnia in accordance with EPA Region I protocol to be found in permit Attachment A.

Sludge Requirements

In February 1993, the EPA promulgated standards for the use and disposal of sewage sludge. The regulations were promulgated under the authority of §405(d) of the Clean Water Act (CWA). Section 405 (f) of the CWA requires that these regulations be implemented through permits. This permit is intended to implement the requirements set forth in the technical standards for the use and disposal of sewage sludge, commonly referred as the Part 503 regulations.

Currently the Woronoco WWTP disposes of its sludge at the Westfield WWTP for final process and disposal. The annual volume of liquid sludge sent to the Westfield facility is approximately 2.27 metric tons. The sludge disposal practice is reported to be permanent.

V. State Certification Requirements

The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit. EPA has requested permit certification by the state pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

VI. Public Comment Period, Public Hearing, and Procedures for Final Decision

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Municipal Permits Branch, Office of Ecosystem Protection (CMP), One Congress Street, Suite 1100, Boston, Massachusetts 02114-2023. Any person, prior to such date, may submit a request in writing to EPA and the state agency for a public hearing to consider the draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

VII. EPA Contact

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Victor Alvarez
Municipal Permits Branch, Office of Ecosystem Protection - CMP
One Congress Street, Suite 1100
Boston, Massachusetts 02114 -2023
Telephone: (617) 918-1572

03/08/05	Linda M. Murphy, Director
Date	Office of Ecosystem Protection
	U.S. Environmental Protection Agency

ATTACHMENT B

NPDES Permit No. MA 0103233
Woronoco Village, Russell, Massachusetts
Low Flow Dilution

State Reported:

Gage 01181000 West Branch Westfield River: DA = 94, the 7Q10 = 5.6 cfs
Gage 01180500 Middle Branch, outlet of Littleville Res: DA = 52.8 the 7Q10 = 0.73 cfs
Gage 01179500 Westfield River downstream Knightville Dam = 161, the 7Q10 = 10.9 cfs
Gage 01183500 Westfield River at Westfield: DA = 497. At 7Q10 = 77.3 cfs

Plant Effluent Flow: 0.02 MGD x 1.547 = 0.031cfs ; Estimated river 7Q10 = 23.97 cfs
Dilution Factor: (23.97 + 0.031/0.031) = 774.22 ; Dilution ratio: 23.97/0.31 = 773.22:1

TOXICITY REQUIREMENTS:

1 Sample/year; 1specie; Acute end point. Limit LC50. 50%

DISINFECTION:

Disinfection of the treated effluent is by Ultraviolet light.

ATTACHMENT C

MA0103233 WORONOCO VILLAGE W W T F - WESTFIELD RIVER
ONE TIME/YEAR/ TAA3B LC50 STAT 48HR ACU CERIODAPHN 50%

09/30/00 10/10/00 E00 00 >100
09/30/01 10/11/02 E00 >100
09/30/02 10/05/02 E00 00 >100
09/30/03 10/09/03 E00 00 >100

TAA6C LC50 STAT 48HR ACU PIMEPHALES 50%
DAILY MN
09/30/00 10/10/00 E00 00 >100
09/30/01 10/11/02 E00 >100
09/30/02 10/05/02 E00 00 >100
09/30/03 10/09/03 E00 00 >100

001A TREATED WASTEWATER BOD, 5-DAY
MO AVG WKLY AVG
DAILY MX 05/31/02 06/14/02 E00 00 4.8
5.8 5.8 01/31/00 02/23/99 E00 00 5.6
6.4 7.3 02/29/00 03/14/00 E00 00
5.8 9.4 13.4 03/31/00 04/07/00 E00 00
2.9 6.0 8.0 04/30/00 05/09/00 E00 00
11 14.2 15.8 05/31/00 06/16/00 E00 00
5.2 7.7 9.6 06/30/00 07/12/00 E00 00
5.9 6.1 6.5 07/31/00 08/16/00 E00 00
5.4 9.5 20.3 08/31/00 09/13/00 E00 00
3.0 4.9 5.7 09/30/00 10/10/00 E00
00 5.0 6.0 8.3 10/31/00 11/08/00
E00 00 3.4 4.6 5.8 11/30/00
12/14/00 E00 00 3.4 4.4 5.3 12/31/00
01/12/01 E00 00 3.8 9.4 17.6
01/31/01 02/12/01 E00 00 4.6 7.2
8.6
02/28/01 03/15/01 E00 00 3.3 7.1
12.2 03/31/01 04/18/01 E90 00 43
10.7 12.8 04/30/01 05/14/01 E00 00 4.5
4.8 5.5 05/31/01 06/12/01 E00
4.5 6.2 8.0 06/30/01 07/13/01 E00 00
3.1 4.0 4.9 07/31/01 08/15/01 E00 00
3.8 4.2 4.6 08/31/01 09/06/01 E00 00
3.8 5.3 9.0 09/30/01 10/11/02 E00
2.1 4.1 4.9
10/31/01 11/14/01 E00 00 4.1 4.7
5.8 11/30/01 12/13/01 E00 00 4.2 6.1
8.1 12/31/01 01/14/02 E00 4.9
8.8 11.2

01/31/02 02/14/02 E00 00 11.1 25.2
25.2 02/28/02 03/13/02 E00 00 8.2
12.0 12.0 03/31/02 04/09/02 E00 00 4.8
5.3 5.3 04/30/02 05/18/02 E00 00
7.2 9.9 9.9
06/30/02 07/15/02 E00 00 6.0 10.4
10.4 07/31/02 08/15/02 E90 78
13.8 13.8
08/31/02 09/13/02 E00 00 5.7 8.4
8.4 09/30/02 10/05/02 E00 00 5.1 5.7
5.7

10/31/02 05/06/03 E00 00 6.0 9.6
9.6 11/30/02 12/16/02 E00 00 4.8 5.5
5.5 12/31/02 01/10/03 E00 00 5.4
6.4 6.4
01/31/03 02/12/03 E00 00 6.3 8.4
8.4 02/28/03 03/17/03 E00 00 8.5
14.2 14.2 03/31/03 04/07/03 E00 00 5.9
6.8 6.8 04/30/03 05/14/03 E00 00
5.6 6.8 6.8 05/31/03 06/16/03 E00 00
4.4 5.8 5.8 06/30/03 07/15/03 E00 00
5.8 6.8 6.8 07/31/03 08/15/03 E00 00
7.2 9.9 9.9 08/31/03 09/12/03 E00 00
4.7 5.0 5.0 09/30/03 10/09/03 E00 00
4.6 4.8 4.8
PH 6.5
8.3 MINIMUM
MAXIMUM 01/31/00 02/23/99 E90 25 5.5
7.0 02/29/00 03/14/00 E90 04 6.3
7.0 03/31/00 04/07/00 E90 17
5.7 6.6 04/30/00 05/09/00 E90 16
5.7 6.9 05/31/00 06/16/00 E90 17
5.7 6.8 06/30/00 07/12/00 E90 30
5.1 6.3 07/31/00 08/16/00 E90 28
5.2 6.9 08/31/00 09/13/00 E90 17
5.8 6.8 09/30/00 10/10/00 E90 29
5.6 6.5 10/31/00 11/08/00 E90
31 5.5 6.2 11/30/00 12/14/00
E90 30 5.3 6.0 12/31/00
01/12/01 E90 09 5.7 6.9
01/31/01 02/12/01 E90 01 6.4
6.8
02/28/01 03/15/01 E90 03 6.3
6.9 03/31/01 04/18/01 E00 00 6.5
7.0 04/30/01 05/14/01 E90 05 6.4
7.9 05/31/01 06/12/01 E90 26 5.4
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06/30/01 07/13/01 E90 11 6.3
6.8 07/31/01 08/15/01 E90 12 6.1
6.8 08/31/01 09/06/01 E90 12 6.3
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6.9 12/31/01 01/14/02 E90 6.1
6.8

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6.7 09/30/02 10/05/02 E90 07 6.4
7.1 10/31/02 05/06/03 E90 10 6.1
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11/30/02 12/16/02 E90 10 6.3
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6.7 05/31/03 06/16/03 E00 00
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6.5 6.7
08/31/03 09/12/03 E00 00 6.5
6.8 09/30/03 10/09/03 E90 01 6.4
6.6
00530 SOLIDS,TOTAL SUSPENDED 30 45
50 MO AVG WKLY
AVG DAILY MX
01/31/00 02/23/99 E00 00 4.8 5.8
7.6 02/29/00 03/14/00 E00 00 4.9 5.5
6.0 03/31/00 04/07/00 E00 00 4.1
4.4 4.6 04/30/00 05/09/00 E00 00 6.2
7.0 8.9 05/31/00 06/16/00 E00 00
4.5 5.1 6.0 06/30/00 07/12/00 E00 00
3.6 4.5 5.1 07/31/00 08/16/00 E00 00
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4.0 5.2 6.6 09/30/00 10/10/00 E00 00
5.3 7.1 10.9 10/31/00 11/08/00 E00 00
2.1 4.7 6.9 11/30/00 12/14/00 E00 00
4.3 4.7 5.6 12/31/00 01/12/01 E00
00 4.2 5.7 8.8
01/31/01 02/12/01 E00 00 4.0 4.7
5.3 02/28/01 03/15/01 E00 00 4.9 7.7
12.8 03/31/01 04/18/01 E00 00 5.8
6.5 7.9 04/30/01 05/14/01 E00 00 4.1
4.6 5.8 05/31/01 06/12/01 E00 00
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2.8 4.2 5.3 08/31/01 09/06/01 E00
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10/31/01 11/14/01 E00 00 4.6 5.1
5.5 11/30/01 12/13/01 E00 00 4.3 6.3
10.9 12/31/01 01/14/02 E00 2.3
4.2 5.1

01/31/02 02/14/02 E00 00 6.2 13.3
13.3 02/28/02 03/13/02 E00 00 5.9 6.8
6.8 03/31/02 04/09/02 E00 00 4.7
5.6 5.6 04/30/02 05/18/02 E00 00 5.8
8.8 8.8 05/31/02 06/14/02 E00 00
5.6 6.6 6.6 06/30/02 07/15/02 E00 00
5.0 5.5 5.5 07/31/02 08/15/02 E00
5.8 7.5 7.5
08/31/02 09/13/02 E00 00 5.9 8.6
8.6 09/30/02 10/05/02 E00 00 4.7 6.1
6.1 10/31/02 05/06/03 E00 00 5.9
8.4 8.4
11/30/02 12/16/02 E00 00 4.3 6.8
6.8 12/31/02 01/10/03 E00 00 5.0 5.6

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    5.6
      01/31/03      02/12/03  E00  00                            5.7      6.2
6.2          02/28/03      03/17/03  E00  00                            5.8      7.3
    7.3          03/31/03      04/07/03  E00  00                            4.7
7.2      7.2          04/30/03      05/14/03  E00  00                            5.3
    6.6      6.6          05/31/03      06/16/03  E00  00
5.2      6.5      6.5          06/30/03      07/15/03  E00  00
    7.3      15.4     15.4         07/31/03      08/15/03  E00  00
        5.5      7.7      7.7
      08/31/03      09/12/03  E00  00                            4.8      5.2
5.2          09/30/03      10/09/03  E00  00                            4.7      7.0
    7.0
     50050 FLOW, IN CONDUIT OR THRU TREA  0.02
                                          MO AVG
          01/31/00      02/23/99  E00  00    0.008
              02/29/00      03/14/00  E00  00    0.009
                  03/31/00      04/07/00  E00  00    0.009
                      04/30/00      05/09/00  E00  00    0.006
                          05/31/00      06/16/00  E00  00    0.006
                              06/30/00      07/12/00  E00  00    0.005
                                  07/31/00      08/16/00  E00  00    0.004
                                      08/31/00      09/13/00  E00  00    0.004
                                          09/30/00      10/10/00  E00  00    0.008
                                              10/31/00      11/08/00  E00  00
0.006                                                   11/30/00      12/14/00  E00
00    0.005                                                   12/31/00      01/12/01
E00  00    0.006
      01/31/01      02/12/01  E00  00    0.007
          02/28/01      03/15/01  E00  00    0.007
             03/31/01      04/18/01  E00  00    0.007
                 04/30/01      05/14/01  E00  00    0.006
                     05/31/01      06/12/01  E00  00    0.006
      06/30/01      07/13/01  E00  00    0.006
          07/31/01      08/15/01  E00  00    0.006
              08/31/01      09/06/01  E00  00    0.006
                  09/30/01      10/11/02  E00        0.006
      10/31/01      11/14/01  E00  00    0.005
          11/30/01      12/13/01  E00  00    0.005
              12/31/01      01/14/02  E00        0.006

      01/31/02      02/14/02  E00  00    0.005
          02/28/02      03/13/02  E00  00    0.006
              03/31/02      04/09/02  E00  00    0.006
                  04/30/02      05/18/02  E00  00    0.006
                      05/31/02      06/14/02  E00  00    0.006
      06/30/02      07/15/02  E00  00    0.005
          07/31/02      08/15/02  E00        0.006
      08/31/02      09/13/02  E00  00    0.005
          09/30/02      10/05/02  E00  00    0.007
      10/31/02      05/06/03  E00  00    0.006
         11/30/02      12/16/02  E00        0.006
      12/31/02      01/10/03  E00  00    0.006

      01/31/03      02/12/03  E00  00    0.007
          02/28/03      03/17/03  E00  00    0.012
              03/31/03      04/07/03  E00  00    0.012
                  04/30/03      05/14/03  E00  00    0.007
                      05/31/03      06/16/03  E00  00    0.005
                          06/30/03      07/15/03  E00  00    0.005
```

07/31/03 08/15/03 E00 00 0.004
08/31/03 09/12/03 E00 00 0.005
09/30/03 10/09/03 E00 00 0.006

COLIFORM, FECAL GENERAL 200 200
400 MO AVG WKLY
AVG DAILY MX 04/30/00 05/09/00 E00 00 0
0 0 05/31/00 06/16/00 E00 00 0
15.8 53 06/30/00 07/12/00 E00 00
0 0 0 07/31/00 08/16/00 E00 00
0 0 0 08/31/00 09/13/00 E00 00
0 0 0 09/30/00 10/10/00 E00 00
0 2 8 10/31/00 11/08/00 E00 00
0 0 0
04/30/01 05/14/01 E00 00 0 0 0
05/31/01 06/12/01 E00 00 0 22.8
90 06/30/01 07/13/01 E00 00 0 0
0 07/31/01 08/15/01 E00 00 0
0.3 1 08/31/01 09/06/01 E00 00 0
0 0 09/30/01 10/11/02 E00
0 0 0
10/31/01 11/14/01 E00 00 0 0 0

04/30/02 05/18/02 E00 00 0 0 0
05/31/02 06/14/02 E00 00 0.2 1
1 06/30/02 07/15/02 E00 00 0 0
0 07/31/02 08/15/02 E00 0.8
4 4
08/31/02 09/13/02 E00 00 0.8 3 3
09/30/02 10/05/02 E00 00 0 0
0 10/31/02 05/06/03 E00 00 0 0
0
04/30/03 05/14/03 E00 00 0.3 1 1
05/31/03 06/16/03 E00 00 0 0
0 06/30/03 07/15/03 E90 01 124
620 620 07/31/03 08/15/03 E00 00 0
0 0 08/31/03 09/12/03 E00 00
0 0 0 09/30/03 10/09/03 E00 00
0 0 0
BOD, 5-DAY % REMOVAL 85
MO AVG
01/31/00 E 02/14/00 E00
02/29/00 E 03/14/00 E00
03/31/00 E 04/07/00 E00
04/30/00 E 05/09/00 E00
05/31/00 E 06/16/00 E00
06/30/00 E 07/12/00 E00
07/31/00 E 08/16/00 E00
08/31/00 E 09/13/00 E00
09/30/00 E 10/10/00 E00
10/31/00 E 11/08/00 E00
11/30/00 E 12/14/00 E00
12/31/00 E 01/12/01 E00

01/31/01 8 02/12/01 E00
02/28/01 C 03/15/01 E00
03/31/01 8 04/18/01 E00
04/30/01 9 05/14/01 E00
05/31/01 9 06/12/01 E00

```
06/30/01 E    07/13/01  E00
07/31/01      08/15/01  E41
    08/31/01 E    09/06/01  E00
09/30/01 E    10/11/02  E00
10/31/01 E    11/14/01  E00
11/30/01 E    12/13/01  E00
12/31/01 E    01/14/02  E00


02/28/02      03/13/02  E41
    03/31/02 E    04/09/02  E00
04/30/02 E    05/18/02  E00
05/31/02 8    06/14/02  E00
06/30/02 E    07/15/02  E00
07/31/02 E    08/15/02  E00
08/31/02 E    09/13/02  E00
09/30/02 E    10/05/02  E00
10/31/02 E    11/08/02  E00
11/30/02 E    12/16/02  E00
12/31/02 E    01/10/03  E00


01/31/03 E    02/12/03  E00
02/28/03 9    03/17/03  E00
03/31/03 9    04/07/03  E00
04/30/03 E    05/14/03  E00
05/31/03 E    06/16/03  E00
06/30/03 E    07/15/03  E00
07/31/03 E    08/15/03  E00
08/31/03 E    09/12/03  E00
09/30/03 E    10/09/03  E00

SOLIDS,SUSPENDED %       85
                            MO AVG
01/31/00 E    02/14/00  E00
02/29/00 E    03/14/00  E00
03/31/00 E    04/07/00  E00
04/30/00 E    05/09/00  E00
05/31/00 E    06/16/00  E00
06/30/00 E    07/12/00  E00
07/31/00 E    08/16/00  E00
08/31/00 E    09/13/00  E00
09/30/00 E    10/10/00  E00
10/31/00 E    11/08/00  E00
11/30/00 E    12/14/00  E00
12/31/00 E    01/12/01  E00

01/31/01 8    02/12/01  E00
02/28/01 C    03/15/01  E00
03/31/01 8    04/18/01  E00
04/30/01 9    05/14/01  E00
05/31/01 9    06/12/01  E00
06/30/01 E    07/13/01  E00
07/31/01      08/15/01  E41  00
    08/31/01 E    09/06/01  E00
```