

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND
1 CONGRESS STREET, SUITE 1100
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.: **MA0101753**

NAME AND ADDRESS OF APPLICANT:

**Town of West Bridgewater
Board of Selectman
65 North Main Street
West Bridgewater, MA 02379**

**Town of West Bridgewater
School Committee
2 Spring Street
West Bridgewater, MA 02379**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Howard School Wastewater Facility
70 Howard Street
West Bridgewater, MA 02379**

RECEIVING WATER: **Town River (Taunton River Watershed - MA62)**

CLASSIFICATION: **Class B - Warm Water**

I. PROPOSED ACTION

The above named applicants have applied to the U.S. Environmental Protection Agency for re-issuance of their National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. The current permit expired on February 14, 1991. An application was submitted May 29, 2002. This permit, after it becomes effective, will expire five (5) years from the effective date.

II. TYPE OF FACILITY, AND DISCHARGE LOCATION

The facility is engaged in the collection and treatment of wastewater. The discharge is from the Wastewater Treatment System. The effluent is discharged to the Town River (See Figure 1).

The facility's discharge outfall is listed below:

<u>Outfall</u>	<u>Description of Discharge</u>	<u>Outfall Location</u>
001	Treated Effluent	Town River

III. DESCRIPTION OF THE DISCHARGE

A quantitative description of the effluent parameters based on recent discharge monitoring reports (DMRs) is shown on Attachment A of this fact sheet. Additional effluent data can be found in Attachment B of this fact sheet.

IV. LIMITATIONS AND CONDITIONS

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

V. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATION DERIVATION**A. PROCESS DESCRIPTION**

The Howard School Wastewater Facility was designed to provide wastewater treatment and disinfection for wastewater from the Howard School, an elementary school. The treatment system consists of a septic tank, dosing pump, underdrained sand filter bed and chlorination chamber. Effluent is discharged through an approximately 1500 foot outfall to the Town River. According to the 1977 NPDES application, the facility design flow was 0.025 mgd. In 1981, a re-application reported the design flow as 0.005 mgd. The following process description is from the application materials submitted by the permittee. A schematic diagram of the treatment facilities is shown in Figure 2.

Since the Howard School facility was completed in 1975, additional facilities have been tied into the system. In the mid 1970's, failures of the subsurface disposal systems at the Spring Street School and the High School led to the treated discharge from these treatment facilities being tied into the Howard School outfall. Around 1988, the police station was renovated and its discharge tied into the Howard School treatment facility. Shortly thereafter, failure of the subsurface disposal system was identified at the West Bridgewater Public Library, and then in 1999, a similar problem occurred at the fire station. The discharges from both of these treatment systems were tied into the Howard School treatment facility.

Presently, the Howard School treatment facility serves the Howard School, the police station, the fire station and library. In addition, flow from the Spring Street School and the high school is discharged through the Howard School outfall. The Town is currently building a senior center, which they also plan to tie into the Howard School treatment facility. The tie-in of the senior center is not anticipated to increase flows, as the services to be offered by the senior center are currently located in the Spring Street School which currently discharges to the Howard School Wastewater Facility.

The Spring Street School is currently used as a day care rental space, kindergarten classes, senior center activities and the Superintendent of Schools office. Wastewater from the Spring Street School is treated in a septic tank located adjacent to the school. Outflow from the septic tank is pumped via two force mains to two distribution boxes to a sand filter located adjacent to the High School. Overflow from the sand filter then flows to a chlorination and detention tank. Effluent then flows by gravity sewer to the Howard School outfall and then flows via gravity sewer to the Town River.

West Bridgewater High School is located adjacent to the Spring Street School. Wastewater from the High School flows to a septic tank. Effluent is then pumped to an underdrained sand filter (a different sand filter than the Spring Street School). Effluent then flows from the High School sand

filter and under the Spring Street School Sand Filter to the same chlorine contact chamber as the Spring Street School effluent. Chlorine is added via a connection to the maintenance area located at the rear of the High School. Dye-testing was performed on April 25, 2002 by the town's consultant. The testing confirmed the above description, however, the testing did not conclusively yield evidence as to whether or not the sand filter was short circuiting. Effluent is then combined with the Spring Street School discharge and flows to the chlorine contact chamber and discharges by gravity sewer to the Howard School outfall and then via gravity sewer to the Town River. The gravity line crosses Howard Street and through the Police/Fire Stations parking lot.

Wastewater from the Police Station enters a sewage ejector pump tank and then is transported by force main to the Howard School treatment facility. Wastewater from the Fire Station flows to a separate septic tank with dual pumps which sends the wastewater to the Howard School septic tank located across a brook. The septic tank at the Howard School treats wastewater from the Howard School, the library and the fire and police stations. Effluent then goes to a pump wet well to an underdrained sand filter bed, the overflow from which flows to a detention and chlorination chamber. The treated effluent then flows by gravity sewer to the Town River. At a manhole located on the site of the proposed senior center is a manhole at which the flows from the Spring Street School and the high school combine with the flows from the police and fire stations, the library and the Howard School. Monitoring related to this NPDES permit shall be conducted at this location pending confirmation that no other sources are tied in after this point.

Treated effluent is discharged into the Town River on the opposite side of West Center Street. A flow meter was installed at the point of discharge. The discharge is located just upstream of a canoe launch and fish ladder.

The application indicates a design flow of 9,000 gpd. The requested flow was not based on actual discharge flow, but on per capita wastewater estimates from MA Title V regulations, adjusted downward by 1/3. During the period while the application was being prepared and submitted, the permittee has submitted monthly DMRs as required. Flows reported in the DMRs, which is the combined water use of the municipal buildings which discharge through the outfall, indicate that flows are less than 5,000 gpd. Therefore, EPA has retained the existing maximum daily flow limit. If a surface water discharge is the recommended treatment option following the completion of a comprehensive wastewater planning study, EPA will reevaluate the flow limit at the permittee's request.

EPA is issuing this permit with the understanding that the Town of West Bridgewater is currently undergoing a comprehensive evaluation of wastewater treatment options under the guidance of MADEP. The permittee will work with the MADEP to develop a schedule of compliance to achieve the effluent limits in the permit. EPA anticipates that the schedule will include interim limits achievable by the existing facility. If the ultimate disposal option for this discharge continues to be a surface water discharge, EPA reserves the right to reopen this permit and re-evaluate monitoring frequency.

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Overview of Federal and State Regulations

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 Act (see 40 CFR 125 Subpart A)

to meet Best Practicable Control Technology Currently Available (BPT), Best Conventional Control Technology (BCT) for conventional pollutants and Best Available Technology Economically Achievable (BAT) for toxic pollutants.

EPA regulations require NPDES permits to contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve federal or state water quality standards.

Under Section 301(b)(1)(C) of the Clean Water Act (CWA), discharges are subject to effluent limitations based on Water Quality Standards. The Massachusetts Surface Water Quality Standards include the requirements for the regulation and control of toxic constituents and also require that EPA criteria established pursuant to Section 304(a) of the CWA shall be used unless site specific criteria are 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 or attained.

In the absence of technology-based guidelines, EPA is authorized to use Best Professional Judgement (BPJ) to establish effluent limitations, in accordance with Section 402 (a)(1) of the CWA and 40 CFR Section 125.3.

The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) 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 [40 CFR §122.44(d)]. An excursion occurs if the projected or actual instream 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.

2. Water Quality Standards; Designated Uses; Outfall 001

The receiving water, Town River, has been classified as Class B - Warm Water in the Massachusetts Surface Water Quality Standards, 314 CMR 4.05(4)(a). Class B waters are designated as a habitat for fish, other aquatic life, and wildlife, and for primary and secondary contact recreation. They shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. The waters should have consistently good aesthetic value.

A warm water fishery is defined in the Massachusetts Surface Water Quality Standards (314 CMR 4.02) as waters in which the maximum mean monthly temperature generally exceeds 20° Celsius during the summer months and are not capable of supporting a year-round population of cold water stenothermal aquatic life.

Available Dilution

Water quality based limitations are established with the use of a calculated available dilution. Title 314 CMR 4.03(3)(a) requires that effluent dilution be calculated based on the receiving water 7Q10. The 7Q10 is the lowest observed mean river flow for 7 consecutive days, recorded over a 10-year recurrence interval. Additionally, the 7Q10 flow is used to calculate available effluent dilution.

The maximum flow is 5,000 gallons per day (0.005 mgd) or 0.008 cubic feet per second. The drainage area contributing to the Town River at the point of discharge is approximately 52 square

miles. The United States Geological Survey Gazetteer lists the drainage area of the Town River at the State Route 18, Bridgewater as 55.6 square miles and the 7Q10 flow as 2.7 cfs. Therefore, the estimated 7Q10 for the Town River at the point of discharge is 2.5 cfs or 1.6 mgd. The dilution factor for this discharge is 320.

$$\frac{2.7 \text{ cfs}}{55.6 \text{ sq. miles}} = \frac{x}{52 \text{ sq. miles}}$$

$$x = \frac{(2.7 \text{ cfs})(52 \text{ sq miles})}{55.6 \text{ sq. miles}}$$

$$x = 2.5 \text{ cfs}$$

$$\frac{\text{River flow (7Q10)}}{\text{Daily average design effluent flow}} = \text{Dilution Factor}$$

$$\frac{1.6 \text{ mgd}}{0.005 \text{ mgd}} = 320$$

FLOW

Flow - The draft permit maintains the flow limit of 5,000 gallons per day (gpd) from the previous permit. Although the permittee has requested a flow increase to 9,000 gpd, data submitted on DMRs does not indicate the need for an increase at this time. EPA believes that since the Town is currently exploring comprehensive wastewater planning, it is not necessary to increase the flow and trigger an anti-degradation review of the permit. However, if at the conclusion of the planning process, it is determined that a surface water discharge is the recommended alternative, EPA will reconsider the flow increase request. At that time, the permittee will also have the alternatives information necessary for anti-degradation review.

OUTFALL 001 - CONVENTIONAL POLLUTANTS

Biological Oxygen Demand (BOD₅) - The draft permit carries forward the average monthly and average weekly limits in the previous permit. The limits are based on the requirements set forth at 40 CFR 133.102 (b)(1), (2) and 40 CFR 122.45 (f). The secondary treatment limitations are monthly average BOD₅ concentrations of 30 mg/l, weekly average concentrations of 45 mg/l. A maximum daily BOD₅ concentration of 50 mg/l has been changed to a report-only requirement. The mass limitations for BOD are based on 5,000 gallon per day design flow.

Total Suspended Solids (TSS) - The draft permit carries forward the average monthly, average weekly and maximum daily limits in the previous permit. The limits are based on the requirements set forth at 40 CFR 133.102 (b)(1), (2) and 40 CFR 122.45 (f). The secondary treatment limitations are monthly average TSS concentrations of 30 mg/l, weekly average concentrations of 45 mg/l. A maximum daily TSS concentration of 50 mg/l has been changed to a report only requirement. The mass limitations for TSS are based on 5,000 gallon per day design flow.

BOD₅ and TSS Mass Loading Calculations:

Calculations of maximum allowable loads for average weekly, and average monthly BOD₅ and TSS are based on the following equation:

$$L = C \times DF \times 8.34 \text{ or } L = C \times DF \times 3.79 \text{ where:}$$

L = Maximum allowable load in lbs/day.

C = Maximum allowable effluent concentration for reporting period in mg/l. Reporting periods are average monthly and weekly.

DF = Design flow of facility in MGD.

8.34 = Factor to convert effluent concentration in mg/l and design flow in MGD to lbs/day.

3.79 = Factor to convert effluent concentration in mg/l and design flow in MGD to kgs/day.

$$\text{(Concentration limit) [45] X 8.34 (Constant) X 0.005 (design flow) = 1.9 lb/day}$$

$$\text{(Concentration limit) [45] X 3.79 (Constant) X 0.005 (design flow) = 0.85 kg/day}$$

$$\text{(Concentration limit) [30] X 8.34 (Constant) X 0.005 (design flow) = 1.3 lb/day}$$

$$\text{(Concentration limit) [30] X 3.79 (Constant) X 0.005 (design flow) = 0.57 kg/day}$$

Eighty-Five Percent (85%) BOD₅ and TSS Removal Requirement - the provisions of 40 CFR §133.102(3) requires that the 30 day average percent removal for BOD and TSS be not less than 85%.

pH - The draft permit includes proposed pH limitations which are required by state water quality standards, and are at least as stringent as pH limitations set forth at 40 CFR 133.102(c). Class B waters shall be in a range of 6.5 through 8.3 standard units and not more than 0.5 standard units outside of the background range. There shall be no change from background conditions that would impair any use assigned to this class.

Fecal Coliform Bacteria - The numerical limitations for fecal coliform are based on state certification requirements under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53 and 124.55. These limitations are also in accordance with the Massachusetts Surface Water Quality Standards 314 CMR 4.05 (4)(a)4.a.

The proposed limits in the draft permit are 200 colony forming units (cfu)/100 ml average monthly and 400 colony forming units (cfu)/100 ml maximum daily. The monitoring frequency for fecal coliform has been increased to once (1) per week and must be collected concurrent with sampling for Total Residual Chlorine. Samples shall be collected at the sewer manhole, in which flows from the Spring Street School and the High School combine with the flows from the police station, fire station, library and the Howard School, located on the property of the proposed senior center.

Settleable Solids - The monitoring requirements for settleable solids have been removed from this permit. They are no longer required as a condition for state certification under Section 403 of the CWA.

OUTFALL 001 - NON-CONVENTIONAL POLLUTANTS

Total Residual Chlorine (TRC) - Chlorine is a toxic chemical. DMRs show a chlorine residual ranging between 0.04 and 1.0 mg/l over a 6 month period. Currently, the discharge is currently only disinfected on a seasonal basis, April 1 through October 15.

The draft permit includes total residual chlorine limitations which are based on state water quality standards [Title 314 CMR 4.05(5)(e)] and *the State's Implementation Policy for the Control of Toxic Pollutants in Surface Waters, February 23, 1990*. Chlorine compounds produced by the chlorination of wastewater can be extremely toxic to aquatic life. As such, the permittee should evaluate chlorination alternatives such as ultraviolet disinfection, as well as state of the art chlorination facilities which enable adequate control over chlorine dosing levels. Given the limitation of grab samples for ensuring that chlorine limits are complied with at all times, future permits may require continuous chlorine monitoring to assure that toxic levels are not discharged to the receiving water.

The water quality standards for chlorine defined in the 1998 EPA National Recommended Water Quality Criteria for freshwater are 19 ug/l daily maximum and 11 ug/l monthly average in the receiving water. Given the dilution factor of 320, total residual chlorine limits have been calculated as 6.1 mg/l maximum daily and 3.5 mg/l average monthly. However, the State's Water Quality Standards requires that surface waters be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife, and the State has interpreted this standard in its Implementation Policy for the Control of Toxic Pollutants in Surface Waters, February 23, 1990 to limit the maximum effluent concentration of total residual chlorine to 1 mg/l in any discharge. Therefore, a limit of 1 mg/l is included as the maximum daily limit. Sampling must be conducted concurrent with the per week Fecal Coliform Bacteria sample and is continued at five (5) times per week.

The discharge is located immediately upstream of War Memorial Park, a public park in which the Town River serves as the centerpiece. A canoe launch is located near the outfall. There is also a fish ladder which has been installed for an established herring run which returns to the river annually. The seasonal disinfection period has been extended to the period of March 1 through November 30.

Total Residual Chlorine Limitations:

(acute criteria * dilution factor) = Acute (Maximum Daily)
 $(19 \text{ ug/l} \times 320) = 6080 \text{ ug/l} = 6.1 \text{ mg/l}$

(chronic criteria * dilution factor) = Chronic (Monthly Average)
 $(11 \text{ ug/l} \times 320) = 3520 \text{ ug/l} = 3.5 \text{ mg/l}$

Total Phosphorus - National Nutrient Criteria recommends that total phosphorus not exceed 50 ug/l or 0.05 mg/l in any stream which flows into a lake or reservoir. Phosphorus interferes with water uses and reduces instream dissolved oxygen. The Town River immediately downstream of the discharge is impounded by a dam. The Water Quality Survey of the Taunton River Basin (DEQE, 1986) is the most recent assessment report which quantifies nutrient concentrations in the Town River. A maximum instream total phosphorus concentration of 0.19 mg/l was reported. Data provided by the permittee indicates total phosphorus concentrations in the discharge between 2.96-4.39 mg/l. At these effluent concentrations, the discharge would contribute about 9 to 14 ug/l to the in-stream concentration of total phosphorus at the permitted flow and under 7Q10 flow conditions. We have, therefore, not included an effluent limit in this permit since it is not clear that the discharge causes or contributes to a violation of water quality standards. However, increasing the

flow limit to 9,000 gpd, as has been proposed by the permittee, would probably necessitate a limit of 1 mg/l in order to ensure that the discharge does not cause or contribute to a violation of water quality standards.

The draft permit includes weekly monitoring for total phosphorus. If, following the completion of the planning study, a surface water discharge is the chosen option, EPA will re-evaluate the need for a phosphorus limit of 1mg/l. Furthermore, if a flow increase is made a more stringent phosphorus limit may be necessary in accordance with the anti-degradation provisions of the Massachusetts Surface Water Quality Standards, 314 CMR 4.04.

Copper - Certain metals in water can be toxic to aquatic life. There is a need to limit toxic metal concentrations in the effluent where aquatic life may be impacted. An evaluation of the reasonable potential of toxicity on the concentration of metals in the effluent shows there is a no reasonable potential of toxicity for copper.

EPA is required to limit any pollutant or pollutant parameter 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.

Calculation of reasonable potential for copper:

Copper data was taken from a sampling analysis that was submitted as part of the application process. Three rounds of samples were collected weekly in March 2002 and analyzed for copper. Federal Register, December 10, 1998, National recommended Water Quality Criteria is used with a hardness of twenty-five (25).

Water Quality Criteria for hardness-dependent metals:

$$\text{Acute criteria (dissolved)} = \exp\{ m_a [\ln(\text{hardness})] + b_a \} (\text{CF})$$

m_a = pollutant specific coefficient

b_a = pollutant specific coefficient

h = hardness

\ln = natural logarithm

CF = pollutant specific conversion factor used to convert total recoverable to dissolved metal

$$\text{Chronic criteria (dissolved)} = \exp\{ m_c [\ln(\text{hardness})] + b_c \} (\text{CF})$$

m_c = pollutant specific coefficient

b_c = pollutant specific coefficient

h = hardness

\ln = natural logarithm

CF = pollutant specific conversion factor used to convert total recoverable to dissolved metal

Reasonable potential calculation of acute limit for copper:

$$m_a = 0.9422 \quad b_a = -1.700 \quad \text{CF} = 0.960 \quad h = 25$$

$$\text{Acute criteria (dissolved)} = \exp \{ 0.9422 [\ln (25)] + -1.700 \} * (0.960) = 3.64 \text{ ug/l}$$

$$\text{Acute criteria (total)} = \exp \{ 0.9422[\ln(25)] + -1.7 \} = 3.79$$

$$\text{Dilution factor} = 320$$

$$\text{Effluent limitation for dissolved copper} = 3.64 \text{ ug/l} * 320 = 1165 \text{ ug/l} = 1.165 \text{ mg/l}$$

$$\text{Effluent limitation for total recoverable copper} = 1165 \text{ ug/l}/0.96 = 1213 \text{ ug/l}^* = 1.2 \text{ mg/l}$$

Reasonable potential calculation of chronic limit for copper:

$$m_c = 0.8545 \quad b_c = -1.702 \quad CF = 0.960 \quad h = 25$$

$$\text{Chronic criteria (dissolved)} = \exp \{0.8545 [\ln(25)] + -1.702\} * (0.960) = 2.74 \text{ ug/l}$$

$$\text{Chronic criteria (total)} = \exp \{0.8545 [\ln(25)] + -1.702\} = 2.86 \text{ ug/l}$$

$$\text{Dilution factor} = 320$$

$$\text{Effluent limitation for dissolved copper} = 2.86 * 320 \text{ ug/l} = 915.2 \text{ ug/l} = 0.915 \text{ mg/l}$$

$$\text{Effluent limitation for total recoverable copper} = 915.2 \text{ ug/l} / 0.96 = 953.3 \text{ ug/l} = 0.953 \text{ mg/l}$$

* The conversion factor is used to determine total recoverable metal. EPA Metal Translator Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion (EPA-823-B96-007) is used as the basis for using the criteria conversion factor. National guidance requires that permit limits be based on total recoverable metals and not dissolved metals. Consequently, it is necessary to apply a translator in order to develop a total recoverable permit limit from a dissolved criteria. The translator reflects how a discharge partitions between the particulate and dissolved phases after mixing with the receiving water. In the absence of site specific data on how a particular discharge partitions in the receiving water, a default assumption is equivalent to the criteria conversion factor used in accordance with the Translator Guidance.

The acute allowable receiving water concentration is 1.2 mg/l which is far greater than 0.02 - 0.07 mg/l, the range of effluent concentration for copper reported in the March 2002 permit application. There is not a reasonable potential that copper being discharged in the effluent will exceed the water quality criteria.

The chronic allowable receiving water concentration is 0.953 mg/l which is far greater than 0.02 - 0.07 mg/l, the range of effluent concentration for copper reported in the March 2002 permit application. There is not a reasonable potential that copper being discharged in the effluent will exceed the water quality criteria.

Copper should be sampled as part of Whole Effluent Toxicity (WET) testing. If copper is determined to be a problem as a result of WET testing, effluent limits for copper will be set in the future.

OUTFALL 001 - WHOLE EFFLUENT TOXICITY (WET)

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, and in accordance with EPA national and regional policy, the draft permit includes chronic and acute toxicity limitations and monitoring requirements. (See e.g. "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants", 50 Fed. Reg. 30,784 (July 24, 1985); see also, EPA's "Technical Support Document for Water Quality-Based Toxics Control", September, 1991.)

Pursuant to EPA Region I policy, a discharge having a dilution ratio between 20:1 and 1000:1 requires acute toxicity testing once per year. 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.

VI. SLUDGE CONDITIONS

Section 405(d) of the CWA requires that EPA develop technical regulations regarding the use and disposal of sewage sludge. These regulations are found at 40 CFR part 503 and apply to any facility engaged in the treatment of domestic sewage. The CWA further requires that these conditions be implemented through permits.

The Howard School Wastewater Complex is composed of a number of septic tanks. Each of the tanks are pumped annually by Claude Dubord and Sons, Inc. The Complex generates 56,000 gallons of septage per year. The septage is trucked off-site for to treatment at Water Solutions Groups, Taunton, MA.

VII. ANTI-BACKSLIDING

Anti-backsliding as defined at 40 CFR §122.44(l)(1) requires reissued permits to contain limitations as stringent or more stringent than those of the previous permit unless the circumstances allow application of one of the defined exceptions to this regulation. Anti-backsliding does not apply when changes to limits are based on new information not available at the time of the previous permit reissuance [40 CFR §122.44(l)(2)(i)(B)(1)] or when limits are changed as a result of material and substantial additions or alterations to the permitted facility which occurred after permit issuance which justify the application of less stringent limitations, as defined at 40 CFR § 122.44(l)(2)(i)(A).

VIII. ANTI-DEGRADATION

The Massachusetts Anti-degradation Policy is found at Title 314 CMR 4.04. All existing uses of the Town River must be protected. This draft permit has discharge limits as or more stringent than the current permit with the exception of a maximum daily limit for BOD and TSS, which is now a report-only requirement and a limit for settleable solids which has been eliminated from the permit because MADEP no longer requires it as a condition for obtaining state certification. There has been no change in the outfall location.

IX. STATE PERMIT CONDITIONS

The NPDES Permit is issued jointly by the U. S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of the permit are, therefore, incorporated into and constitute

a discharge permit issued by the MADEP Commissioner who designates signature authority to the Director of the Division of Watershed Management pursuant to M.G.L. Chap. 21, §43.

X. STATE CERTIFICATION REQUIREMENTS

The staff of the Massachusetts Department of Environmental Protection ("MADEP") 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.

XI. PUBLIC COMMENT PERIOD 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, Office of Ecosystem Protection, MA Unit, One Congress Street, Suite-1100, Boston, Massachusetts 02114. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. Public hearings may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a 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 a 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.

XII. 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:

Michele Cobban Barden, Environmental Scientist
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December 4, 2003

Date

Linda M. Murphy, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency