

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.: **MA0028835**

NAME AND ADDRESS OF APPLICANT:

**Atlantic-Acton Realty L.P.**  
**c/o David A. Capobianco, General Partner**  
**205 Newbury Street**  
**Framingham, MA 01701**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Powder Mill Plaza Wastewater Treatment Plant**  
**Route 62**  
**Acton, MA 01720**

RECEIVING WATER: **Assabet River (Concord River Watershed -MA82)**

CLASSIFICATION: **Class B - Warm Water**

**I. PROPOSED ACTION AND PERMIT HISTORY**

The above named applicant acquired the subject property in 1994. It has applied to the U.S. Environmental Protection Agency for issuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. This permit will expire five (5) years from the effective date.

The facility was issued an NPDES permit on June 29, 1984 which expired on June 29, 1989. On June 15, 1993, the Massachusetts Department of Environmental Protection (MADEP) conducted an inspection of the facility and discovered that a timely reapplication had not been submitted to EPA by the prior owner. EPA issued an Administrative Order (AO) on August 2, 1993 requiring the permittee to take the steps necessary to obtain a new NPDES permit. The AO also included interim effluent limits and operating requirements.

A permit application was received on July 9, 1993, and an updated application was submitted on May 25, 1994 when the facility was sold to Atlantic-Acton Realty Limited Partnership. Another updated application was submitted on August 25, 2004.

Draft permits were released for public comment on January 2, 2002 and on August 25, 2005. Final permits were not issued on either occasion; the major comments received on each draft

permit concerned the effluent limitation for total phosphorus and whether the facility would be upgraded to meet the proposed effluent limitations or the discharge eliminated via a tie-in to the Town of Acton wastewater treatment facilities.

This draft permit includes a monthly average total phosphorus limit of 0.2 mg/l and a compliance schedule which requires either termination of the discharge or upgrading of the treatment facility to achieve the effluent limitation within 30 months of the effective date of the permit.

**II. TYPE OF FACILITY, AND DISCHARGE LOCATION**

The wastewater treatment facility is engaged in the collection and treatment of wastewater from a retail shopping center. The discharge is from a secondary wastewater treatment system which uses chlorine tablets for disinfection. The treated effluent is discharged to the Assabet 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	Assabet 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.

**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**

Powder Mill Plaza is a retail shopping center with a combination of uses: a supermarket, restaurant and retail stores. Wastewater generated at the shopping center is treated at an on-site, package-type, activated sludge wastewater treatment plant (WWTP) which provides secondary treatment. Effluent from the WWTP is then discharged to the Assabet River, a Class B water (Figure 1). The design flow for the facility is 12,000 gallons per day.

Facility

The activated sludge treatment system consists of two identical treatment trains. Influent is pumped into the plant and to the flow equalization tanks. The influent BOD is high (~ 600-800 mg/l) and the pH is low (~ 5.0 S.U.). Neutralization is accomplished via an automatic pH control system. The activated sludge is aerated using fine bubble diffusion. The wastewater enters the final clarifier and then the effluent is disinfected using chlorine tablets and then dechlorinated using tablets. The final effluent is discharged to the Assabet River.

Sludge is aerobically digested and then hauled off site by a licensed hauler.

## **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 Judgment (BPJ) to establish effluent limitations, in accordance with Section 402 (a)(1) of the CWA and 40 CFR Section 125.3. Section 301(b)(1) of the Clean Water Act ("CWA"), requires that publicly owned treatment works ("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. EPA has used BPJ to determine that the secondary treatment regulations apply to this facility because it is designed to treat sanitary wastewater like a POTW except this facility is privately owned.

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, the Assabet River, is classified as Class B - Warm Water Fishery in the Massachusetts Surface Water Quality Standards, 314 CMR 4.05(3)(b). 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.

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify those waterbodies that are not expected to meet surface water quality standards after the implementation of technology-based controls and, as such require the development of total maximum daily loads (TMDL). The Massachusetts Year 2002 Integrated List of Waters (Section 303(d) List), lists this segment, MA82B-07, as a water requiring a TMDL for nutrients, organic enrichment/low dissolved oxygen and pathogens. The Assabet River TMDL for Total Phosphorus was approved by EPA on September 23, 2004. The TMDL did not model total phosphorus contributions from the minor wastewater treatment facilities which discharge to the Assabet River. However, the Waste Load Allocation (WLA) did establish limits for the Middlesex School (MA0102466) and MCI-Concord (MA0102245). The WLA did not, however, address the discharge from Powder Mill Plaza because the facility was anticipated to be connecting to the Acton POTW.

#### **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 flow is the lowest observed mean river flow for 7 consecutive days, recorded over a 10 year recurrence interval.

The design flow for the Powder Mill Plaza WWTF is 12,000 gallons per day (0.012 mgd) or 0.0186 cubic feet per second (cfs). The 7Q10 flow at the USGS Maynard gage is 15.1 cfs as reported by USGS in its Streamstats file and cited in the TMDL study (p. 13). The Maynard POTW is located downstream of the USGS gage, and therefore, is not included in the 7Q10 value. The average summertime discharge flow from the Maynard POTW is 1.5 cfs. Hence, the total 7Q10 flow of the Assabet River at the point of discharge for Powder Mill Plaza is 16.6 cfs (or 10.7 million gallons per day). The calculated dilution factor is 893:1. However, it should be noted that the Assabet River is an effluent-dominated stream at 7Q10 conditions, because of the combined flow from the four upstream POTWs.

$$\text{Available Dilution} = \frac{\text{Design Flow} + 7\text{Q10 Flow}}{\text{Design Flow}}$$

$$\text{Available Dilution} = \frac{0.0186 \text{ cfs} + 16.6 \text{ cfs}}{0.0186 \text{ cfs}}$$

$$\text{Available Dilution} = 893$$

#### **DESIGN FLOW**

The design flow rate for the facility is 12,000 gpd (0.012 million gallons per day). The draft permit maintains the average monthly flow limit of 12,000 gallons per day (gpd) from the previous permit.

## OUTFALL 001 - CONVENTIONAL POLLUTANTS

Biological Oxygen Demand (BOD<sub>5</sub>) - The discharge is similar to a Publicly Owned Treatment Works (POTWs) which are subject to the secondary treatment requirements set forth at 40 CFR 133.102 (a)(1), (2) and 40 CFR 122.45 (f). In the absence of specific national standards for non-POTW secondary treated domestic wastewater discharges, limitations may be established on a case-by-case basis using Best Professional Judgment (BPJ) pursuant to Section 401 (a) (1) of the CWA. The secondary treatment limitations are monthly average BOD<sub>5</sub> concentration of 30 mg/l, and a weekly average concentration of 45 mg/l. The maximum daily concentration shall be reported. The mass limitations for BOD<sub>5</sub> are based on 12,000 gallon per day design flow. The sampling frequency has been increased to weekly due to the sensitivity of the receiving waters.

Total Suspended Solids (TSS) - The discharge is similar to a Publicly Owned Treatment Works (POTWs) which are subject to the secondary treatment requirements set forth at 40 CFR 133.102 (b)(1), (2) and 40 CFR 122.45 (f). In the absence of specific national standards for non-POTW secondary treated domestic wastewater discharges, limitations may be established on a case-by-case basis using Best Professional Judgment (BPJ) pursuant to Section 401 (a) (1) of the CWA. The secondary treatment limitations are monthly average TSS concentration of 30 mg/l, and a weekly average concentration of 45 mg/l. The maximum daily concentration shall be reported. The mass limitations for TSS are based on 12,000 gallon per day design flow. The sampling frequency has been increased to weekly due to the sensitivity of the receiving waters.

### BOD<sub>5</sub> and TSS Mass Loading Calculations:

Calculations of maximum allowable loads for average weekly, and average monthly BOD<sub>5</sub> 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 average 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.

$$(\text{Concentration limit}) [45] \times 8.34 (\text{Constant}) \times 0.012 (\text{design flow}) = 4.5 \text{ lb/day}$$

$$(\text{Concentration limit}) [45] \times 3.79 (\text{Constant}) \times 0.012 (\text{design flow}) = 2 \text{ kg/day}$$

$$(\text{Concentration limit}) [30] \times 8.34 (\text{Constant}) \times 0.012 (\text{design flow}) = 3 \text{ lb/day}$$

$$(\text{Concentration limit}) [30] \times 3.79 (\text{Constant}) \times 0.012 (\text{design flow}) = 1.4 \text{ kg/day}$$

Eighty-Five Percent (85%) BOD<sub>5</sub> 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 (3)(b) 4.

The proposed limits in the draft permit are 200 colony forming units (cfu)/100 ml average monthly and 400 cfu/100 ml maximum daily. The bacteria limits require the use of year-round disinfection. The monitoring frequency for fecal coliform has been increased to twice (2) per week because this segment of the Assabet is listed as impaired by pathogens. Also, the facility uses chlorine tablets for disinfection and given the difficulty in ensuring consistent levels of residual chlorine using this method, it is necessary to assure the facility is achieving adequate bacterial kill. Furthermore, the twice per week fecal coliform bacteria samples must be collected concurrent with the collection of one of the two daily samples for total residual chlorine.

Oil and Grease - The interim limits in the AO included a limit of 15 mg/l maximum daily for oil and grease. Based on review of DMR data for the past 24 months, the facility does not have reasonable potential for exceeding the limit the water quality standard. The requirement was included in the previous permit and then carried forward in the AO when oil and grease was a State certification requirement.

#### **OUTFALL 001 - NON-CONVENTIONAL POLLUTANTS**

Total Residual Chlorine (TRC) - Chlorine is a toxic chemical. DMRs show a chlorine residual ranging between 0 and 0.9 mg/l over the last twenty-four (24) months.

The water quality standards for chlorine defined in the 2002 EPA National Recommended Water Quality Criteria for freshwater are 19 ug/l, acute and 11 ug/l, chronic. Given the dilution factor of 893, total residual chlorine limits based on criteria have been calculated as 16.9 mg/l, maximum daily and 9.8 mg/l, average monthly. However, the draft permit includes a total residual chlorine limitation of 1 mg/l, maximum daily in compliance with the Massachusetts' Implementation Policy for the Control of Toxic Pollutants in Surface Waters, February 23, 1990, which limits the maximum discharge of TRC to 1 mg/l.

As previously stated, the facility uses chlorine tablets for disinfection. In August 2005, the facility added dechlorination tablets to the treatment process to assure that the total residual chlorine did not cause toxicity. The TRC since August 2005 have been significantly lower. EPA proposes to maintain the sampling frequency at once per day, five days per week for total residual chlorine. Two of the total residual chlorine samples per week must be collected concurrently with the twice per week fecal coliform bacteria sample.

Total Residual Chlorine Limitation Calculations:

(acute criteria \* dilution factor) = Acute (Maximum Daily)  
(19 ug/l x 893) = 16967 ug/l = 16.9 mg/l

(chronic criteria \* dilution factor) = Chronic (Monthly Average)  
(11 ug/l x 893) = 9823 ug/l = 9.8 mg/l

Phosphorus –

*Background:*

As previously stated, this segment of the Assabet River is listed as an impaired water requiring the completion of a TMDL for nutrients, organic enrichment/low dissolved oxygen and pathogens. In 2002, a draft permit and fact sheet were prepared and public noticed. Prior to issuing the final permit, it came to EPA's attention that the permittee was in negotiations with the Town of Acton to tie-in flows from Powder Mill Plaza to the Acton POTW. Anticipating the termination of the surface water discharge, EPA did not re-issue the permit and the interim limits in the 1993 AO remained in effect. The elimination of this surface water discharge was also anticipated by MassDEP in the Assabet River TMDL and Waste Load Allocation Study for total phosphorus, and therefore, the discharge/load was not included in the modeling or resulting allocations. However, negotiations between Atlantic-Acton Realty and the Town of Acton did not result in an agreement.

In August 2004, Atlantic-Acton Realty negotiations with Acton regarding the tie-in had not progressed and the permittee updated its NPDES permit application. A draft permit and fact sheet were public noticed on August 25, 2005. In comments submitted by the permittee, during the public comment period, EPA was advised that Atlantic-Acton Realty had resumed negotiations with the Town of Acton and was actively working toward ceasing the discharge. On November 28, 2005, the permittee and the Town of Acton entered into a Memorandum of Agreement allowing for the commencement of the design process and construction of an extension sewer to the Acton POTW which will culminate in the cessation of the Powder Mill Plaza discharge to the Assabet River.

This revised draft permit includes a bifurcated schedule with one option leading to achieving the effluent limitations for total phosphorus described below through the design, construction and operation of facility improvements and the other alternative would result in the elimination of the surface water discharge via a tie-in with the Acton POTW. The details and milestones of each schedule can be found in the draft permit in footnote #7.

Pending compliance with either the effluent limits pursuant to Schedule A, or the elimination of the discharge pursuant to Schedule B, the permittee is required to monitor the effluent for total phosphorus once per month, and orthophosphorus sampling is not required. If the discharge is maintained pursuant to Schedule A, the effluent limit for total phosphorus will go into effect 30 months after the effective date of the permit, and the monitoring frequencies for total phosphorus and orthophosphorus shall be increased to the frequency required in Part 1.A. of the draft permit.

*Derivation of Limits*

The Massachusetts Surface Water Quality Standards (314 CMR 4.00) do not contain numerical criteria for total phosphorus. The criteria for nutrients is found at 314 CMR 4.05(5)(c), which

states that nutrients “shall not exceed the site specific limits necessary to control accelerated or cultural eutrophication”. The Water Quality Standards also require that “any existing point source discharges containing nutrients in concentrations which encourage eutrophication or the growth of weeds or algae shall be provided with the highest and best practicable treatment to remove such nutrients (314 CMR 4.05). MassDEP has established that a monthly average total phosphorus limit of 0.2 mg/l represents highest and best practical treatment (HBPT) for POTWs.

EPA has produced several guidance documents which contain recommended total phosphorus criteria for receiving waters. The 1986 Quality Criteria of Water (“the Gold Book”) recommends in-stream phosphorus concentrations of 0.05 mg/l in any stream entering a lake or reservoir, 0.1 mg/l for any stream not discharging directly to lakes or impounds, and 0.025 mg/l within the lake or reservoir.

More recently, EPA has released “Ecoregional Nutrient Criteria”, established as part of an effort to reduce problems associated with excess nutrients in water bodies in specific areas of the country. The published criteria represent conditions in waters in each specific ecoregion which are minimally impacted by human activities, and thus representative of waters without cultural eutrophication. Acton is within Ecoregion XIV, Eastern Coastal Plains. The total phosphorus criteria for this Ecoregion XIV is 24 ug/l (0.024 mg/l) and can be founded in the Ambient Water Quality Criteria Recommendations, Information Supporting the Development of State and Tribal Nutrient Criteria, Rivers and Streams in Ecoregion XIV, published in December 2000 (“Ecoregional Nutrient Criteria”).

The Assabet River TMDL yielded allowable phosphorus concentration limits of 0.1 mg/l for the four major POTW discharges to the main stem of the Assabet River. [Is this dilution factor correct for the large POTWs (to which the 0.1 mg/l is applicable)?] The TMDL assumed no discharge from the Powder Mill Plaza WWTF, based on the planned tie-in to the Acton POTW.

EPA is establishing a phosphorus effluent limitation of 0.2 mg/l for the Powder Mill Plaza discharge in accordance with 314 C.M.R. § 4.04(5), which requires that discharges containing nutrients in concentrations which encourage eutrophication or growth of weeds or algae be provided with the highest and best practical treatment to remove such nutrients. A discharge concentration of 0.2 mg/l for the Powder Mill Plaza WWTF would result in an instream total phosphorus concentration of 0.0002 mg/l ((0.2 mg/l)/893), a level which will not cause or contribute to violations of applicable water quality standards in the receiving waters. See, e.g., Gold Book; Ecoregional Nutrient Criteria, at page 14; and TMDL at page 40.

In addition to the seasonal total phosphorus limit of 0.2 mg/l, the permit contains a total phosphorus limit of 1.0 mg/l during November through March. The winter period limitation on phosphorus is necessary to ensure that the higher levels of phosphorus discharged in the winter period do not result in the accumulation of phosphorus in the sediments. The limitation assumes that the dissolved fraction of the total phosphorus will pass through the system given the short detention time of the impoundments and the lack of plant growth during the winter period.

A monitoring requirement for orthophosphorus (dissolved phosphorus) has been included for the winter period in order to ensure that EPA’s assumptions regarding the particulate fraction remain valid.

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Total Ammonia Nitrogen, as N - Ammonia is a toxic pollutant which may be harmful to aquatic organisms. EPA is required to limit any pollutant that is or may be discharged at a level that caused, or has reasonable potential to cause, or contribute to an excursion above any water quality criterion [40 CFR 122.44 (d)(1)(vi)]. The water quality standards for ammonia are referenced in the National Recommended Water Quality Criteria: 2002 and are defined in the 1999 Update of Ambient Water Quality for Ammonia. Given the concern with nutrients in the Assabet River, a monitoring only requirement has been established.

#### **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 minor discharge having a dilution ratio greater than 20:1 but less than 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 a year (annually) and that each test includes the use of a single species, Ceriodaphnia, in accordance with EPA Region I protocol to be found in permit Attachment A.

As a condition of this permit, the testing requirements may be reduced if certain conditions are met. The permit provision anticipates that the permittee may wish to request a reduction in the WET testing. After two consecutive WET tests, demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may submit a written request to the EPA seeking a review of toxicity test results. The EPA will review the test results and pertinent information to make a determination. The permittee is required to continue testing at the frequency and species specified

in the permit until the permit is either formally modified or until the permittee receives a certified letter from the EPA indicating a change in the permit conditions.

**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 Powder Mill Plaza Wastewater Treatment Plant has an aerobic digester for sludge. The remaining digested sludge is trucked off-site to the Fitchburg POTW for final treatment and disposal.

**VII. ANTI-BACKSLIDING**

Anti-backsliding, as defined at 40 CFR §122.44(l)(1), and Section 402(o) of the CWA 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. ANTIDegradation**

The Massachusetts Anti-degradation Policy is found at Title 314 CMR 4.04. All existing uses of the unnamed tributary of the Assabet River must be protected. This draft permit has discharge limits as or more stringent than the previous permit. There has been no change in the outfall location.

**IX. MONITORING AND REPORTING**

The permittee is obliged to monitor and report sampling results to EPA and the MADEP within the time specified in the permit. The effluent monitoring requirements have been established to yield data representative of the discharge by the authority under Section 308(a) of the CWA in accordance with 40 CFR 122.441(j), 122.44, and 122.48.

The remaining general conditions of the permit are based primarily on the NPDES regulations 40 CFR 122 through 125 and consist primarily of management requirements common to all permits.

**X. 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.

**XI. 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.

**XII. 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, Municipal Permits Branch, 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.

**XIII. 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  
Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
One Congress Street, Suite-1100 (CMP)  
Boston, MA 02114-2023  
Telephone: (617) 918-1539

June 14, 2006  
Date

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

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**Author**

Waste Load Allocation was not established for this discharge, a total phosphorus limit of 0.2 mg/l is consistent with the requirements of 314 C.M.R. § 4.04(5), and is the same limit set for the other two minor discharges.

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