

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

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

is authorized to discharge from the facility located at

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

to receiving water named

Assabet River (Concord River Watershed -MA82)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective 60 days after signature.

This permit and the authorization to discharge expires at midnight, five (5) years from the effective date.

This permit consists of 9 pages in Part I including effluent limitations, monitoring requirements, Attachments A and B and 35 pages in Part II including General Conditions and Definitions.

Signed this 5th day of June

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

| 1.A. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001 , treated effluent to the Assabet River. Such discharge shall be limited and monitored as specified below. | | | | | | | | |
|---|---|----------------|----------------|---------------------------|----------------|----------------|-------------------------|--------------------------------|
| EFFLUENT CHARACTERISTIC | EFFLUENT LIMITS | | | | | | MONITORING REQUIREMENTS | |
| | Mass Limitations | | | Concentration Limitations | | | | |
| PARAMETER | AVERAGE MONTHLY | AVERAGE WEEKLY | MAXIMUM DAILY | AVERAGE MONTHLY | AVERAGE WEEKLY | MAXIMUM DAILY | MEASUREMENT FREQUENCY | SAMPLE ² TYPE |
| FLOW | *** | *** | *** | 0.012 MGD ¹ | *** | REPORT MGD | CONTINUOUS | RECORDER |
| BOD ₅ ³ | 3 lbs/Day | 4.5 lbs/Day | REPORT lbs/Day | 30 mg/l | 45 mg/l | REPORT mg/l | 1/WEEK | 24-HOUR COMPOSITE ⁴ |
| TSS ³ | 3 lbs/Day | 4.5 lbs/Day | REPORT lbs/Day | 30 mg/l | 45 mg/l | REPORT mg/l | 1/WEEK | 24-HOUR COMPOSITE ⁴ |
| pH RANGE ⁵ | 6.5 - 8.3 SU SEE PERMIT PAGE 5 OF 9, PARAGRAPH I.A.1.b. | | | | | | 1/DAY, 5 DAYS/WEEK | GRAB |
| FECAL COLIFORM BACTERIA ^{5,6} | *** | *** | *** | 200 cfu/100 ml | *** | 400 cfu/100 ml | 2/WEEK | GRAB |
| TOTAL RESIDUAL CHLORINE | *** | *** | *** | REPORT | *** | 1.0 mg/l | 1/DAY, 5 DAYS/WEEK | GRAB |
| OIL AND GREASE | *** | *** | *** | *** | *** | 15 mg/l | 2/MONTH | GRAB |
| TOTAL PHOSPHORUS ⁷ (April 1 - October 31) | *** | *** | *** | 0.2 mg/l | *** | REPORT | 1/WEEK | 24-HOUR COMPOSITE ⁴ |
| TOTAL PHOSPHORUS ⁷ (November 1 - March 31) | *** | *** | *** | 1.0 mg/l | *** | REPORT | 1/ MONTH | 24-HOUR COMPOSITE ⁴ |
| ORTHOPHOSPHORUS ⁷ (November 1 - March 31) | *** | *** | *** | REPORT | *** | REPORT | 1/ MONTH | 24-HOUR COMPOSITE ⁴ |
| TOTAL AMMONIA, as Nitrogen | *** | *** | *** | REPORT | *** | *** | 1/MONTH | 24-HOUR COMPOSITE ⁴ |
| WHOLE EFFLUENT TOXICITY ^{8,9,10} | Acute LC ₅₀ ≥ 100% | | | | | | 1/YEAR | 24-HOUR COMPOSITE ⁴ |

*All sampling shall be representative of the effluent that is discharged through outfall 001 to the Assabet River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable

discharge monitoring report that is submitted to EPA and MADEP.

Footnotes:

1. For flow, report maximum and minimum daily rates and total flow for each operating date.
2. All required effluent samples shall be collected prior to mixing with other sources. Any change in sampling location must be reviewed and approved in writing by EPA and MADEP. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. All samples shall be 24-hour composites unless specified as a grab sample in 40 CFR §136. Sampling must be representative and done at the same time each day.
3. Sampling required for influent and effluent.
4. A 24-hour composite sample will consist of at least twenty-four (24) grab samples taken during one day (e.g. 0700 Monday to 0700 Tuesday).
5. Required for State Certification.
6. Fecal coliform bacteria monitoring will be conducted year round. Fecal coliform bacteria discharges shall not exceed a monthly geometric mean of 200 colony forming units (cfu) per 100 ml, nor shall they exceed 400 cfu per 100 ml as a daily maximum. This sampling shall be conducted concurrently with sampling for Total Residual Chlorine.
7. In order to comply with the permit limits, the permittee shall take the following actions with regard to Total Phosphorus:

Within nine (9) months of the effective date of the Permit, or thirty (30) days from completion of the public bidding process for the proposed tie-in to the Acton POTW, whichever is sooner, the Permittee shall submit to EPA and DEP in writing a final decision to cease discharging in accordance with 40 CFR 122.47(b)(3)(i). The final decision shall be evidenced by a firm public commitment as required by 40 CFR 122.47(b)(iv)(4). If the decision is to continue discharging, then the permittee shall comply with Schedule A below. If the decision is to cease discharging, then the Permittee shall comply with Schedule B below.

Pending compliance with the limits pursuant to Schedule A or elimination of the discharge pursuant to Schedule B, the permittee shall monitor the effluent monthly for total phosphorous (no orthophosphorous sampling required) and report the average monthly and maximum daily concentration. If the discharge is maintained pursuant to Schedule A, the monitoring frequency for total phosphorous and orthophosphorous shall be performed in accordance with the requirements in Part 1.A. on page 2 of the permit beginning on the date of completion of construction and initiation of operation included in item d. of Schedule A (i.e. 30 months from the effective date of the permit, unless modified).

Schedule A

a. Within twelve (12) months of the effective date of the Permit, the Permittee shall submit to EPA and DEP a status report relative to the design and construction of the Facility improvements required to achieve the total phosphorus limits. The status report shall include, without limitation, (i) a list of the municipal, state and/or federal regulatory approvals deemed by the Permittee to be necessary for completion of the facility upgrade, (ii) the status of any applications filed with respect thereto, and

(iii) the anticipated date(s) of any additional required filings. The Permittee shall make reasonable best efforts to obtain required permits and approvals as soon as possible.

b. Within eighteen (18) months of the effective date of the Permit, the Permittee shall submit to EPA and DEP an additional status report relative to the design and construction (including required permits and approvals) of the Facility improvements required to achieve the total phosphorus limits. EPA will consider a modification to extend the compliance schedule upon a demonstration of "good cause" as set forth in 40 CFR 122.62(4) (i.e. event over which the Permittee has little or no control and for which there is no reasonably available remedy). Conversely, EPA will also consider a modification to shorten the compliance schedule pursuant to 40 CFR 122.62(a)(2) if new information warrants such a change.

c. Within twenty-four (24) months of the effective date of the Permit, the Permittee shall initiate construction of the Facility improvements required to achieve the total phosphorus limits.

d. Within thirty (30) months of the effective date of the Permit, the Permittee shall complete construction and initiate operation of the Facility improvements required to achieve the total phosphorus limits and shall achieve such limits.

Schedule B

a. Within twelve (12) months of the effective date of the Permit, the Permittee shall submit to EPA and DEP a status report relative to the design and construction of the Facility improvements required to cease the discharge. The status report shall include, without limitation, (i) a list of the municipal, state and/or federal regulatory approvals deemed by the Permittee to be necessary to complete the connection to the Acton POTW, (ii) the status of any applications filed with respect thereto, and (iii) the anticipated date(s) of any additional required filings. The Permittee shall make reasonable best efforts to obtain required permits and approvals as soon as possible.

b. Within eighteen (18) months of the effective date of the Permit, the Permittee shall submit to EPA and DEP an additional status report relative to the design and construction (including required permits and approvals) of the Facility improvements required to cease the discharge. EPA will consider a modification of the compliance schedule upon a demonstration of "good cause" as set forth in 40 CFR 122.62(4) (i.e. event over which the Permittee has little or no control and for which there is no reasonably available remedy). Conversely, EPA will also consider a modification to shorten the compliance schedule pursuant to 40 CFR 122.62(a)(2) if new information warrants such a change.

c. Within thirty (30) months of the effective date of the Permit, the Permittee shall cease discharging.

8. The permittee shall conduct acute toxicity tests once (1) per year. Once per year the permittee shall perform an acute test using *Ceriodaphnia dubia*. Toxicity test samples shall be collected during the second week of the month of September. The test results shall be submitted by the last day of the month following the completion of the test. The results are due October 31st. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

After submitting a **minimum** of two (2) consecutive sets of WET test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the WET testing requirements. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the WET testing requirement

has been changed. If WET testing is reduced, the permittee must submit WET test results as a requirement of the permit reapplication.

9. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
10. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment B**, Section IV., DILUTION WATER in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment B**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment B**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment B**.

The "Guidance" is included in Attachment G of the *NPDES Permit Program Instructions for the Discharge Monitoring (DMR) Forms* available at <http://www.epa.gov/region1/enforcementandassistance/dmr.html> and is not intended as a direct attachment to this permit.

Part I.A.1. (Continued)

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
 - b. The pH of the effluent shall not be less than 6.5 S.U. nor greater than 8.3 S.U. at any time.
 - c. The discharge shall not cause objectionable discoloration of the receiving waters.
 - d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
 - e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.
 - f. The results of sampling for any parameter above its required frequency must also be reported.
2. All POTWs must provide adequate notice to the Director of the following:
- a. Any substantial change in the volume or character of pollutants being introduced into the treatment system;
 - b. For purposes of this paragraph, adequate notice shall include information on:
(1) the quantity and quality of effluent introduced into the treatment system; and

(2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment system.

3. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

4. Numerical Effluent Limitations for Toxicants

EPA or DEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Part I A.1. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternate power source with which to sufficiently operate its treatment works

(as defined at 40 CFR §122.2).

D. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.
2. The permittee shall comply with the more stringent of either the state or federal (40 CFR part 503), requirements.
3. The requirements and technical standards of 40 CFR Part 503 apply to facilities which perform one or more of the following use or disposal practices.
 - a. Land application - the use of sewage sludge to condition or fertilize the soil
 - b. Surface disposal - the placement of sewage sludge in a sludge only landfill
 - c. Sewage sludge incineration in a sludge only incinerator
4. The 40 CFR Part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g. lagoons- reed beds), or are otherwise excluded under 40 CFR 503.6.
5. The permittee shall use and comply with the attached compliance guidance document to determine appropriate conditions. Appropriate conditions contain the following elements.
 - General requirements
 - Pollutant limitations
 - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
 - Management practices
 - Record keeping
 - Monitoring
 - Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year

| | |
|-------------------------|------------|
| less than 290 | 1/ year |
| 290 to less than 1500 | 1 /quarter |
| 1500 to less than 15000 | 6 /year |
| 15000 + | 1 /month |

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.
8. The permittee shall submit an annual report containing the information specified in the guidance by **February 19**. Reports shall be submitted to the address contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for

the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such case, the permittee is required only to submit an annual report by **February 19** containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

E. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
Central Regional Office - Bureau of Resource Protection
627 Main Street
Worcester, Massachusetts 01608

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

F. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MADEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MADEP pursuant to M.G.L. Chap.21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event

any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.