

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),

CPL Management, LLC

is authorized to discharge from the facility located at

Renaissance Manor of Westfield  
Wastewater Treatment Plant  
37 Feeding Hills Road  
Westfield, MA 01085

to receiving water named

Westfield River

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

This permit shall become effective on June 1, 2008

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date of the permit.

This permit consists of 7 pages in Part I including effluent limitations, monitoring requirements, 25 pages in Part II, including General Conditions and Definitions, Attachment A, Freshwater Acute Toxicity Test Procedures and Protocols and Attachment B, EPA Region 1 NPDES Permit Sludge Guidance.

**Signed this 31<sup>st</sup> day of MARCH, 2008**

**/S/ SIGNATURE ON FILE**

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Director  
Office of Ecosystem Protection  
Environmental Protection Agency  
Boston, MA

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

## Renaissance Manor of Westfield

## PART I

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001, to the Westfield River. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTICS		EFFLUENT LIMITS			MONITORING REQUIREMENTS <sup>3</sup>		
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE
FLOW <sup>2</sup>	*****	*****	0.0125 MGD	*****	Report MGD	CONTINUOUS	RECORDER
BOD <sub>5</sub> <sup>4</sup>	2.5 lbs/Day 1.13 kgs/Day	3.75 lbs/Day 1.71 kgs/Day	30 mg/l	45 mg/l	Report mg/l	1/WEEK	8-HOUR COMPOSITE <sub>5</sub>
TSS <sup>4</sup>	2.5 lbs/Day 1.13 kgs/Day	3.75 lbs/Day 1.71 kgs/Day	30 mg/l	45 mg/l	Report mg/l	1/WEEK	8-HOUR COMPOSITE <sub>5</sub>
pH RANGE	6.5 - 8.3 SU (SEE PERMIT PAGE 4 OF 9, PARAGRAPH I.A.1.b.)					3/WEEK	GRAB
TOTAL CHLORINE RESIDUAL <sup>1,7</sup> (April 1- October 31)	*****	*****	1.0 mg/l	*****	1.0 mg/l	3/WEEK	GRAB
<i>E. coli</i> <sup>1,6</sup> (April 1- October 31)	*****	*****	126 cfu/100 ml	*****	409 cfu/ 100 ml	2/WEEK	GRAB
TOTAL PHOSPHORUS (April 1- October 31)	*****	*****	Report mg/l	*****	Report mg/l	2/MONTH	GRAB
WHOLE EFFLUENT TOXICITY <sup>8, 9, 10</sup>	Acute LC <sub>50</sub> ≥ 50%					2/YEAR	8-HOUR COMPOSITE <sub>5</sub>

Footnotes:

1. Required for State Certification.
2. Report monthly average and the maximum daily effluent flow for each operating date. The limit is a monthly average, which shall be reported as an average of the flow for each reporting month.
3. All required effluent samples, except **E. coli** bacteria and total residual chlorine, shall be collected at the overflow of the final settling basin. **E. coli** and total residual chlorine shall be collected at the end of the chlorine contact chamber. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP.

A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented in correspondence appended to the applicable discharge monitoring report.

All samples shall be tested using the analytical methods found in 40 CFR Part 36, or alternative methods approved by EPA in accordance with the procedures in 40 CFR Part 136.

4. Sampling required for influent and effluent.
5. An 8-hour composite sample will consist of at least eight (8) grab samples taken during one consecutive 8-hour period which includes peak flow periods [e.g. 0800-1600], either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
6. **E.coli** bacteria limitations and monitoring requirements are in effect from April 1- October 31. The monthly average limit for **E.coli** bacteria is expressed as a geometric mean. **E.coli** bacteria monitoring shall be conducted concurrently with a total residual chlorine sample
7. Total residual chlorine [TRC] monitoring is required whenever chlorine is added to the treatment process (i.e. TRC sampling is not required if chlorine is not added for disinfection or other purpose). The limitations are in effect from April 1 thorough October 31.

The minimum level (ML) for total residual chlorine is defined as 20 ug/l. This value is the minimum level for chlorine using EPA approved methods found in the most currently approved version of Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 20 ug/l, compliance/non-compliance will be determined based on the ML. Sample results of 20 ug/l or less shall be reported as zero on the discharge monitoring report.

8. The permittee shall conduct acute toxicity tests two times per year. The permittee shall test the daphnid, **Ceriodaphnia dubia**, only. Toxicity test samples shall be collected during the months of May and August. The test results shall be submitted by the last day of the month following the completion of the test. The results are due June 30 and September 30, respectively. The tests must be performed in accordance with test procedures and protocols specified in Attachment **A.Freshwater Acute Toxicity Test Procedures and Protocol** of this permit.

After submitting two years and a minimum of four consecutive sets of WET tests 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.

Test Dates in the months of :	Submit results by:	Test Specie	Acute Limit LC <sub>50</sub>
May August	June 31 September 30	<i>Ceriodaphnia dubia</i> (daphnid)	≥ 50 %

9. The LC<sub>50</sub> is the concentration of effluent, which causes mortality to 50% of the test organisms. Therefore, a 50% limit means that a sample of 50% effluent (with 50% dilution water) 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 either follow procedures outlined in Attachment A, Toxicity Test Procedure and Protocol, Section IV., DILUTION WATER in order to obtain an individual approval for use of an alternate dilution water, or the permittee shall follow the Self-Implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. This guidance is found in Attachment G of NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs) which is sent to all permittees with their annual set of DMRs and may also be found on the EPA, Region I web site at <http://www.epa.gov/region1/enforcementandassistance/dmr2005.pdf>. If this guidance is revoked, the permittee shall revert to obtaining individual approval as outlined in Attachment A. Any modification or revocation to this guidance 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 A.

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 nor greater than 8.3 at any time.
- c. The discharge shall not cause objectionable discoloration of the receiving waters.
- d. The effluent shall not contain a visible oil sheen, foam, or 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. If the permittee uses chlorine for disinfection, they shall minimize the use of chlorine while maintaining adequate bacterial control.
- g. The results of sampling for any parameter done in accordance with EPA approved methods above its required frequency must also be reported.

## 2. TOXIC CONTROLS

- 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.

## 3. NUMERICAL EFFLUENT LIMITATIONS FOR TOXICANTS

EPA or MassDEP 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) contained in Part II of this permit.

Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes DEP Regional Office telephone numbers). The reporting form and instruction for its completion may be found on-line at <http://www.mass.gov/dep/water/approvals/surffms.htm#sso>.

## 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. **Alternate Power Source**  
In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR Part 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. See Attachment B, EPA Region 1 NPDES Permit Sludge Compliance Guidance. 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 this 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. SCHEDULE OF COMPLIANCE

Within eighteen (18) months of the effective date of the permit, the permittee shall have completed construction of the necessary upgrades to the wastewater treatment facility, and attain compliance with the final effluent limits for total residual chlorine and **e.coli** bacteria beginning April 1, 2010.

During the interim period, the permittee shall report the average monthly and maximum daily total

residual chlorine concentrations and **e.coli** bacteria levels in the effluent. Monitoring of the discharge shall be done in accordance with the requirements of Part I A.1. of the permit.

#### F. MONITORING AND 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 DMRs and all other reports required herein, shall be submitted to the EPA and the Commonwealth 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  
Western Regional Office - Bureau of Resource Protection  
436 Dwight Street- 4th floor  
Springfield, MA 01103

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

#### G. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) 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 MassDEP 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.