

Vermont Department of Environmental Conservation Watershed Management Division 1 National Life Drive, Main-2 Montpelier VT 05620-3522 Agency of Natural Resources

[phone] 802-828-1535 [fax] 802-828-1544

August 27, 2015

Town of Chester Attn: David Pisha PO Box 370 Chester, VT 05143

RE: Discharge Permit No. 3-1177: Chester Wastewater Treatment Facility

Mr. Pisha,

Enclosed is your copy of Discharge Permits No. 3-1177 which has been signed on behalf of the Commissioner of the Department of Environmental Conservation. This permit authorizes the discharge of treated and disinfected wastewater from the Chester Wastewater Treatment Facility to the Williams River.

Please review the permit carefully and make note of the effluent limitations, monitoring requirements, and other special conditions. As proposed in the draft permit which was provided for comment, this permit contains several changes from the permit that currently authorizes your discharge. First, the requirements of EPA's Long Island Sound Nitrogen TMDL has been included in the permit (See Condition I.A.C) which requires the Town to monitor for Total Nitrogen, develop and implement a Nitrogen Optimization Plan, assess the adequacy of the Plan, and annually report the Total Nitrogen discharged from your facility. Second, due to the size of the Williams River and the instream waste concentration and the phosphorus concentration of your discharge a requirement to optimize the biological removal of phosphorus at the WWTF to ensure Water Quality Standards are met has been included. Third, since there has never been a Whole Effluent Toxicity (WET) test conducted on your discharge, the permit requires a WET test be conducted in August or September 2018 to confirm that your discharge does not have a potential to cause an instream toxicity. Finally Condition I.J. has been included in the permit and requires that the Town implement the Emergency Response Plan for the wastewater treatment facility, pump stations, and stream crossing approved by the Agency on August 7, 2008 be implemented and the Emergency Response Plan for the sewage collection system approved by the Agency on July 2, 2010.

With respect to the comments submitted on your behalf by Aldrich + Elliott, PC, we have the following responses.

- 1. In regards to the proposed expansion at Drew's LLC, as you are aware Drew's has applied for a Pretreatment Discharge Permit from this Program for the discharge of process wastewater to your WWTF. Based on the design of their proposed pretreatment treatment, it will need to be operated by personnel certified under the Vermont Water Pollution Abatement Facility Operator Certification Regulations. Also the Town will have the ability to review and comment on the draft pretreatment discharge permit for Drew's if you have additional concerns.
- 2. With respect to the discharge from Readex, (aka Newsbank) causing excessive concentrations of silver in the WWTF's sludge and impacting the Town's options for sludge disposal there is no

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silver standard for the land application of sludge. Also according to our records Chester uses the Glens Falls, NY facility and the Montpelier WWTF for sludge disposal and there have been no issues with these facilities accepting sludge from the Chester WWTF. Finally, recent discharge monitoring reports, January 2014 through June 2015 indicates that Newsbank is discharging less than 9,000 gallons per month to the Chester WWTF with a typical silver concentration of less than 1.5 mg/l. At this flow and silver concentration, it is unlikely that their discharge could result in an influent silver concentration at the Chester WWTF which could impact the proper operation of the treatment process.

- 3. The Fact Sheet has been corrected to reflect that the Nitrogen Removal Optimization Plan be developed and <u>submitted</u> by December 31, 2015. Please note that due to the extension of the public comment period and the time necessary to respond to comments on the draft permit, the Agency has modified Condition I.C to require the submittal of the Nitrogen Removal Plan by December 31, 2015. With respect to your request regarding that "equipment changes" be removed from the list of optimization methods to be evaluated, the Agency has changed this language to read "existing equipment modifications".
- In regards to your request to delay the implementation of a Phosphorus Optimization Plan until 4. December 31, 2018, the Agency cannot grant this extension as requested. The Agency acknowledges that the pretreatment system pending installation at Drew's may initially impact the quality of the WWTF's influent and possibly your treatment process but based on their proposed treatment system, Drew's discharge should become consistent and improve the quality of the WWTF's influent. With respect to your citation of the low effluent phosphorus concentration used to support your request, the Agency is highly suspicious of the June 2014 and March 2015 effluent phosphorus concentrations. Specifically, it is highly unlikely that a treatment process such as the Chester WWTF (SBR without chemical addition or filtration for phosphorus removal) can reliably produce total phosphorus effluent concentrations of 0.34 mg/l and 0.3 mg/l. We also are aware that at the current phosphorus loadings, the WWTF is not causing a violation of Water Quality Standards in the receiving water. However the facility is only discharging at $\sim 60\%$ of its design flow and based on instream modeling at design effluent flows and realistic phosphorus effluent concentrations, this discharge could contribute a significant phosphorus load to the Willams River. Therefore to ensure that the facility's discharge does not cause or contribute to increased loading to the receiving water, a Phosphorus Optimization Plan is required to prevent increased phosphorus loadings at higher effluent flows. However we concur that the Phosphorus Optimization Plan should not be developed until Drew's LLC has established operations of their new pretreatment system and have extended the date for submission of this Plan until June 30, 2017.

If there are any questions regarding this permit please contact Randy Bean at our office.

Sincerely, Bust

Ernest F. Kelley, Manager Wastewater Management Program

attachments

cc Jeff Fehr, VT DEC WSMD Barry Goodrich, Town of Chester WWTF Jennie Auster, Aldrich + Elliot, PC

AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATERSHED MANAGEMENT DIVISION ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2nd FLOOR MONTPELIER, VT 05620-3522

Permit No.: 3-1177 PIN: NS95-0139 NPDES No.: VT0100081

Name of Applicant:

Town of Chester PO Box 370 Chester, VT 05143

Expiration Date:

March 31, 2020

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (10 V.S.A. chapter 47), the Vermont Water Pollution Control Permit Regulations as amended, and the federal Clean Water Act as amended (33 U.S.C. § 1251 *et seq*), the Town of Chester, Vermont (hereinafter referred to as the "Permittee") is authorized by the Secretary of Natural Resources (Secretary) to discharge from the Chester Wastewater Treatment Facility to the Williams River in accordance with the following conditions.

This permit shall become effective on the date of signing.

Alyssa Schuren, Commissioner Department of Environmental Conservation

August 27, 2015

By:

Ernest F. Kelley, Manager (Wastewater Management Program Watershed Management Division

I. SPECIAL CONDITIONS

EFFLUENT LIMITS А.

From the date of signing through March 31, 2020 the Permittee is authorized to discharge from S/N 001 - outfall, Chester 1. Wastewater Treatment Facility, to the Williams River, an effluent for which the characteristics shall not exceed the values listed below:

| | DISCHARGE LIMITATIONS | | | | | | | |
|---|----------------------------|--------------------|-------------------|----------------|----------------------|-------------------|--------------|---------------------------------------|
| EFFLUENT CHARACTERISTICS | Annual Average | Monthly Average | Weekly Average | Maximum Day | Monthly Average | Weekly Average | Maximum Day | Instantaneous Maximum |
| | | Mass (lbs/day) | | | Concentration (mg/L) | | | · · · · · · · · · · · · · · · · · · · |
| Flow | 0.175 MGD | | | | | | | |
| Biochemical Oxygen Demand (5-day, 20° C) (BOD ₅) | | 44 | 66 | | 30 | 45 | 50 | |
| Total Suspended Solids (TSS) | | . 44 | 66 | | 30 | 45 | 50 | |
| Total Nitrogen ^(1,2) | See Condition I.C below | | | | | | Monitor only | |
| Total Kjeldahl Nitrogen (TKN) | | | | | | | Monitor only | |
| Nitrate/Nitrite Nitrogen (NOx) | · | - | | | | | Monitor only | |
| Settleable Solids | | | | | | | | 1.0 ml/l |
| Total Phosphorus | | | | | | | Monitor only | |
| Escherichia coli Bacteria | | | | | | | | 77/100 ml |
| pH | | | | | Between | n 6.5 and 8.5 sta | ndard units | |

Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrate/Nitrite Nitrogen (NOx). See Total Nitrogen monitoring report form WR43-TN. (1)

(2)

- 2. The effluent shall not have concentrations or combinations of contaminants including oil, grease, scum, foam, or floating solids which would cause a violation of the Vermont Water Quality Standards.
- 3. This discharge shall not cause or contribute to a violation of the Vermont Water Quality Standards in the receiving water.
- 4. The effluent shall not cause visible discoloration of the receiving waters.
- 5. The monthly average concentrations of Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) in the effluent shall not exceed 15 percent of the monthly average concentrations of BOD₅ and TSS in the influent into the Permittee's wastewater treatment facilities. For the purposes of determining whether the Permittee is in compliance with this condition, samples from the effluent and the influent shall be taken with appropriate allowance for detention times.
- 6. If the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the permitted flow limitation, the Permittee shall submit to the Secretary projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
- 7. Any action on the part of the Agency of Natural Resources in reviewing, commenting upon or approving plans and specifications for the construction of wastewater treatment facilities shall not relieve the Permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Agency, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.
- 8. The permittee shall clean the quartz sleeves of the ultraviolet light disinfection system at a frequency which assures that effective disinfection is maintained and shall replace the ultraviolet light disinfection lamps as necessary to maintain compliance with the E. coli bacteria effluent limitation. The dates and description of the ultraviolet light disinfection system maintenance shall be included on the monthly Discharge Monitoring Report.

B. WASTE MANAGEMENT ZONE

In accordance with 10 V.S.A. § 1252, this permit hereby establishes a waste management zone that extends from the outfall of the Chester Wastewater Treatment Facility in the Williams River downstream 1.0 miles.

C. TOTAL NITROGEN

1. **Optimization Plan**

By December 31, 2015, the permittee shall develop and submit to the Agency for review and approval a Nitrogen Removal Optimization Evaluation Plan (the Plan) for the evaluation of alternative methods of operating the existing wastewater treatment facility to optimize the removal of nitrogen. The methods to be evaluated include, but are not limited to: operational, process, or existing equipment modifications designed to enhance nitrification and denitrification (seasonal and year-round); incorporation of anoxic zones; septage receiving policies and procedures; and side stream management. The Permittee shall implement these recommended operational changes to produce a mass discharge of total nitrogen (TN) lower than the existing mass loading of TN. The baseline annual average daily total nitrogen load discharge from this facility is estimated to be **approximately 16 lbs/day**.

This Plan shall be developed by a qualified professional with experience in the operation and/or design of municipal wastewater treatment facilities in conjunction with the Chief Operator of the facility.

This Plan shall be provided to the Agency for review and approval prior to implementation and shall be revised upon the Agency's request or by the Permittee to address equipment or operational changes.

Implementation of the Plan shall commence within 30 days of its approval by the Agency.

2. Plan Evaluation

Within one year following the implementation of the Plan, the permitee shall evaluate the effectiveness of the Plan. The evaluation shall be conducted by a qualified professional with experience in the operation and/or design of municipal wastewater treatment facilities in conjunction with the Chief Operator of the facility. The results of the Evaluation shall be submitted to the Agency for review and approval within 60 days of its completion and shall be revised at the Agency's request. Actions to implement the approved nitrogen removal optimization practices, if any, shall be initiated within 90 days of the Department's approval.

3. Reporting

Annually, beginning with the December 2016 Discharge Monitoring Report (DMR) form (WR-43), the permittee shall submit a report to the Agency, as an attachment to the DMR that documents the annual average daily Total Nitrogen discharged (in pounds per day) from the facility, summarizes nitrogen removal optimization and efficiencies, and tracks trends relative to the previous year.

Total Nitrogen (TN) = Total Kjeldahl Nitrogen (TKN) + Nitrite/Nitrate (NO_x).

The Total Nitrogen pounds per day, annual average, shall be based on the sum of the Total Monthly Pounds of TN discharged for the calendar year and shall be calculated as follows:

- Determine the Total Monthly TN in pounds: Total Monthly TN pounds = (Monthly Average TN concentration (mg/l) x Total Monthly Flow (mgd)) x 8.34
- 2. Calculate the TN, pounds per day, annual average: (Sum of the Total Monthly TN pounds for each month of the calendar year)/365 days

4. Wasteload Allocation

This permit does not establish a formal Waste Load Allocation for the facility nor does it convey any right to ownership of the facility's estimated baseline annual average total nitrogen load.

The Agency reserves the right to reopen and amend this permit to include an alternate Total Nitrogen limitation and/or additional monitoring requirements based on the monitoring data, the results of nitrogen optimization activities, or a formal Waste Load Allocation promulgated under Vermont's Waste Load Allocation Rule for Total Nitrogen in the Connecticut River Watershed based on the Long Island Sound Total Nitrogen TMDL.

D. TOTAL PHOSPHORUS

- 1. The permittee shall operate the wastewater treatment facility, to the extent feasible, to optimize the biological removal of phosphorus.
- 2. **By June 30, 2017,** the permittee shall develop and implement an operational Plan detailing the procedures to optimize phosphorus removal. This Plan shall be developed by a qualified professional with experience in the operation and/or design of municipal wastewater treatment facilities and biological nutrient removal in conjunction with the Chief Operator of the facility.
- 3. This Plan shall be provided to the Agency for review upon request and shall be revised upon the Agency's request or by the Permittee to address equipment or operational changes.
- 4. Based upon the results of the effectiveness of the phosphorus removal optimization plan and the monitoring required by Condition I.H.2. below, this permit may be amended to require additional effluent phosphorus monitoring or instream chemical and/or biological monitoring.

E. REAPPLICATION

If the Permittee desires to continue to discharge after the expiration of this permit, the Permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: September 30, 2019

F. OPERATING FEES

This discharge is subject to operating fees as required by 3 V.S.A. § 2822.

G. TOXICITY TESTING

The permittee shall conduct and submit the results of one, two-species (<u>Pimephales promelas</u>) and (<u>Ceriodaphnia dubia</u>), 48 hour acute Whole Effluent Toxicity (WET) test to the Agency as specified below.

- 1. In **August or September 2018**, the Permittee shall conducted the WET test on S/N 001 and the results shall be submitted to the Agency by no later than **November 15, 2018**.
- 4. Based upon the results of these tests or any other toxicity tests conducted on this discharge, this permit may be amended to require additional Whole Effluent Toxicity testing or a Toxicity Reduction Evaluation be conducted.
- 5. The whole effluent toxicity tests shall be conducted according to the procedures and guidelines specified in: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (most recent edition)*, USEPA document.

H. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to the test procedures published in the 40 C.F.R. Part 136.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge.

2. Effluent Monitoring

The Permittee shall monitor and record the quality and quantity of discharge(s) at S/N 001 - outfall, the Chester Wastewater Treatment Facility, according to the following schedule and other provisions:

| PARAMETER | MINIMUM FREQUENCY OF ANALYSIS | SAMPLE TYPE | |
|---|-------------------------------------|----------------------------------|--|
| Flow | Continuous | Daily Total, Max., Min. | |
| Biochemical Oxygen Demand (5-day, 20° C) (BOD ₅) | 1 x month | 24 hour composite ⁽¹⁾ | |
| Total Suspended Solids (TSS) | 1 x month | 24 hour composite ⁽¹⁾ | |
| Total Nitrogen | 1 x month | Calculated ⁽²⁾ | |
| Total Kjeldahl Nitrogen (TKN) | 1 x month | 24 hour composite $^{(1,2)}$ | |
| Nitrate/Nitrite Nitrogen (NO _x) | 1 x month | 24 hour composite $^{(1,2)}$ | |
| Settleable Solids | 1 x day | grab ^(3,4) | |
| Escherichia coli Bacteria | 2 x month | grab ^(3,4) | |
| Total Phosphorus | 1 x month | 24 hour composite ⁽¹⁾ | |
| pH | 1 x day | grab ^(3,4) | |

Until March 31, 2020

Samples shall be collected at the effluent sampling station prior to discharge to the Williams River.

- ⁽¹⁾ Composite samples for BOD5, TSS, TKN, NOx, and TP collect on the same day.
- ⁽²⁾ Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrate/Nitrite Nitrogen (NOx).
- ⁽³⁾ Settleable Solids, Escherichia coli Bacteria and pH samples shall be collected between during the period of peak flow.
- ⁽⁴⁾ Grab samples shall be collected in an alternating manner to be representative of each SBR cell discharged.
- 3. <u>Annually, by December 31</u>, the Permittee shall monitor S/N 001 and submit the results, including units of measurement, as an attachment to the Discharge Monitoring Report form (WR-43) for the month in which the samples were taken for the following parameters:

| Temperature | Ammonia (as N) | Dissolved Oxygen |
|--------------|------------------------|------------------|
| Oil & Grease | Total Dissolved Solids | |

Grab samples shall be used for temperature, ammonia, dissolved oxygen, and oil & grease. Total Dissolved Solids (TDS) shall be a composite sample. <u>Samples shall be representative</u> of the seasonal variation in the discharge.

4. Influent Monitoring

The Permittee shall monitor the quality of the influent according to the following schedule and other provisions.

| PARAMETER | MINIMUM FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--------------------------------|-------------------------------------|--|
| Influent BOD ₅ | 1 x month | 8 - hour composite, minimum ⁽¹⁾ |
| Influent TSS | 1 x month | 8 - hour composite, minimum ⁽¹⁾ |
| Total Nitrogen (TN) | 1 x quarter | Calculated ^(2,3) |
| Total Kjeldahl Nitrogen (TKN) | 1 x quarter | 8 - hour composite, minimum $^{(2,3)}$ |
| Nitrate/Nitrite Nitrogen (NOx) | 1 x quarter | 8 - hour composite, minimum $^{(2,3)}$ |

Samples shall be collected at the headworks, prior entering the SBR cell(s).

- ⁽¹⁾ Composite samples for BOD₅, TSS, TKN and NOx shall be taken during the hours of 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum period for the composite.
- (2) $TN = TKN + NO_x$
- ⁽³⁾ The influent TN (TKN & NO_x) sample shall be collected on the same day as an effluent TN (TKN & NO_x) sample.

5. Reporting

The Permittee is required to submit monitoring results on Discharge Monitoring Report form WR-43 (WR-43). Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the Permittee must submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources Department of Environmental Conservation Watershed Management Division One National Life Drive, Main Building, 2nd Floor Montpelier VT 05620-3522

All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates and the authorization is made in writing and submitted to the Secretary;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

In addition to the monitoring and reporting requirements given above, daily monitoring of certain parameters for operational control shall be submitted to the Secretary on the WR-43. Operations reports (reporting form WR-43) shall be submitted monthly.

6. Recording of Results

The Permittee shall maintain records of all information resulting from any monitoring activities required including:

- a. The exact place, date, and time of sampling or measurements;
- b. The individual(s) who perform the sampling or measurements;
- c. The dates and times the analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques and methods used including sample collection handling and preservation techniques;
- f. The results of such analyses.
- g. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- h. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.A. of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

7. Additional Monitoring

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

I. DRY WEATHER FLOWS

Dry weather flows of untreated municipal wastewater from any sanitary or combined sewers are not authorized by this permit and are specifically prohibited by state and federal laws and regulations.

J. OPERATION, MANAGEMENT, AND EMERGENCY RESPONSE PLANS

- 1. The permittee shall implement the Operation, Management, and Emergency Response Plan for the wastewater treatment facility, pump stations, and stream crossings as approved by the Agency on August 7, 2008.
- 2. The permittee shall implement the Operation, Management, and Emergency Response Plan for the wastewater collection system as approved by the Agency on July 2, 2010.

K. EMERGENCY ACTION - ELECTRIC POWER FAILURE

Within 30 days after the effective date of this permit, the Permittee shall indicate in writing to the Secretary that the discharge shall be handled in such a manner that, in the event the primary source of electric power to the wastewater treatment facilities (including pump stations) fails, any discharge into the receiving waters will attempt to comply with the conditions of this permit, but in no case shall the wastes receive less than primary treatment (or in the case of ultraviolet light disinfection systems, not less than secondary treatment) plus disinfection.

The Permittee shall either provide an alternative source of power for the operation of its wastewater treatment facilities, or demonstrate that the treatment facility has the capacity to store the wastewater volume that would be generated over the duration of the longest power failure that would have affected the facility in the last five years, excluding catastrophic events.

The alternative power supply, whether from a generating unit located at the wastewater treatment facility or purchased from an independent source of electricity, must be separate from the existing power source used to operate the wastewater treatment facility. If a separate unit located at the wastewater treatment facility is to be used, the Permittee shall certify in writing to the Secretary when the unit is completed and prepared to generate power.

The determination of treatment system storage capacity shall be submitted to the Secretary upon completion.

L. SEWER ORDINANCE

The Permittee shall have in effect a sewer use ordinance acceptable to the Secretary which, at a minimum, shall:

1. Prohibit the introduction by any person into the Permittee's sewerage system or wastewater treatment facilities of any pollutant which:

- a. is a toxic pollutant in toxic amounts as defined in standards issued from time to time under Section 307(a) of the Clean Water Act;
- b. creates a fire or explosion hazard in the Permittee's treatment works;
- c. causes corrosive structural damage to the Permittee's treatment works, including all wastes with a pH lower than 5.0;
- d. contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the Permittee's treatment works; or
- e. in the case of a major contributing industry, as defined in this permit, contains an incompatible pollutant, as defined in this permit, in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306, and/or 307 of the Clean Water Act.
- 2. Require 45 days prior notification to the Permittee by any person or persons of a:
 - a. proposed substantial change in volume or character of pollutants over that being discharged into the Permittee's treatment works at the time of issuance of this permit;
 - b. proposed new discharge into the Permittee's treatment works of pollutants from any source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants; or
 - c. proposed new discharge into the Permittee's treatment works of pollutants from any source which would be subject to Section 301 of the Clean Water Act if it were discharging such pollutants.
- 3. Require any industry discharging into the Permittee's treatment works to perform such monitoring of its discharge as the Permittee may reasonably require, including the installation, use, and maintenance of monitoring equipment and monitoring methods keeping records of the results of such monitoring, and reporting the results of such monitoring to the Permittee. Such records shall be made available by the Permittee to the Secretary upon request.
- 4. Authorize the Permittee's authorized representatives to enter into, upon, or through the premises of any industry discharging into the Permittee's treatment works to have access to and copy any records, to inspect any monitoring equipment or method required under subsection 3 above, and to sample any discharge into the Permittee's treatment works.

The Permittee shall notify the Secretary of any discharge specified in subsection 2 above within 30 days of the date on which the Permittee is notified of such discharge. This permit may be modified accordingly.

II. GENERAL CONDITIONS

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties pursuant to 10 V.S.A. chapters 47, 201, and/or 211. Any anticipated facility alterations or expansions or process modifications which will result in new, different, or increased discharges of any pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the Secretary of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

In addition, the Permittee shall provide notice to the Secretary of the following:

- a. any new introduction of pollutants into the treatment works from a source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants;
- b. except for such categories and classes of point sources or discharges specified by the Secretary, any new introduction of pollutants into the treatment works from a source which would be subject to Section 301 of the Clean Water Act if such source were discharging pollutants; and
- c. any substantial change in volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

The notice shall include:

- i. the quality and quantity of the discharge to be introduced into the system, and
- ii. the anticipated impact of such change in the quality or quantity of the effluent to be discharged from the wastewater treatment facility.

2. Noncompliance Notification

The Permittee shall give advance notice to the Secretary of any planned changes in the wastewater treatment facility or activity which may result in noncompliance with permit requirements.

In the event the Permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

- a. breakdown or maintenance of waste treatment equipment (biological and physicalchemical systems including, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),
- b. accidents caused by human error or negligence, or
- c. any unanticipated bypass or upset which exceeds any effluent limitation in the permit;
- d. violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or
- e. other causes such as acts of nature,

the Permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five days:

- i. cause of non-compliance
- ii. a description of the non-complying discharge including its impact upon the receiving water;
- iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
- iv. steps taken by the Permittee to reduce and eliminate the non-complying discharge; and
- v. steps to be taken by the Permittee to prevent recurrence of the condition of non-compliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

a. The Permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment and control facilities and systems (and related appurtenances) installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

- b. The Permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit; and
- c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Wastewater Treatment Facility Operator Certification Rule.

4. **Quality Control**

The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The Permittee shall demonstrate the accuracy of the flow measurement device weekly and report the results on the monthly report forms. The acceptable limit of error is $\pm 10\%$.

The Permittee shall analyze any additional samples as may be required by the Secretary to ensure analytical quality control.

5. Bypass

The bypass of facilities (including pump stations) is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. § 1268. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the activity in order to maintain compliance with the conditions of this permit.

6. **Duty to Mitigate**

The Permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

7. **Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, all calibration and maintenance of instrumentation records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, an records of all data used to complete the application for this permit shall be retained for a minimum of three years, and shall be submitted to the Secretary upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accordance with 10 V.S.A. chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization or order issued pursuant to 10 V.S.A. chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

9. Emergency Pollution Permits

Maintenance activities or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., § 1268. The Permittee shall notify the Secretary of the emergency situation by the next working day.

10 V.S.A. § 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters;
- (5) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of Natural Resources, Department of Environmental Conservation, One National Life Drive, Main Building, 2nd Floor, Montpelier VT 05620-3522.

B. RESPONSIBILITIES

1. Right of Entry

The Permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. to enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. to have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- c. to inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. to sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary **at least 30 days in advance of the proposed transfer date**. The notice to the Secretary shall include a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
 - i. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.

- ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.
- iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

3. Confidentiality

Pursuant to 10 V.S.A. § 1259(b):

"Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter."

Claims for confidentiality for the following information will be denied:

- a. The name and address of any permit applicant or permittee;
- b. Permit applications, permits, and effluent data; and
- c. Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

4. **Permit Modification, Suspension and Revocation**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including the following:

- a. violation of any terms or conditions of this permit;
- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance shall not stay any permit condition.

The Permittee shall provide to the Secretary, within a reasonable time, any information which the Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Secretary upon request, copies of records required to be kept by this permit.

5. Toxic Effluent Standards

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be modified or revoked and reissued in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under 10 V.S.A. § 1281.

7. Other Materials

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

- a. They are not:
 - i. designated as toxic or hazardous under provisions of Sections 307 and 311, respectively, of the Clean Water Act, or
 - ii. known to be hazardous or toxic by the Permittee, except that such materials indicated in (a) and (b) above may be discharged in certain limited amounts with the written approval of, and under special conditions established by, the Secretary or his designated representative, if the substances will not pose any imminent hazard to the public health or safety;
- b. The discharge of such materials will not violate the Vermont Water Quality Standards; and
- c. The Permittee is not notified by the Secretary to eliminate or reduce the quantity of such materials entering the watercourse.

8. Navigable Waters

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

9. Civil and Criminal Liability

Except as provided in, "Bypass" (Section II.A.5.), "Emergency Action - Electric Power Failures" (Section I. J.), and "Emergency Pollution Permits" (Section II.A.9.), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance. Civil and criminal penalties for non-compliance are provided for in 10 V.S.A. Chapters 47, 201, and 211.

10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

11. Property Rights

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

12. Other Information

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Secretary, it shall promptly submit such facts or information.

13. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

14. Authority

This permit is issued under authority of 10 V.S.A. §§ 1258 and 1259 of the Vermont Water Pollution Control Act, the Vermont Water Pollution Control Permit Regulation, and Section 402 of the Clean Water Act, as amended.

15. **Definitions**

For purposes of this permit, the following definitions shall apply.

Agency – The Vermont Agency of Natural Recoures.

Annual Average - The highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/l, lbs, or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

Average - The arithmetic means of values taken at the frequency required for each parameter over the specified period.

Bypass – The intentional diversion of waste streams from any portion of a treatment facility.

The Clean Water Act - The federal Clean Water Act, as amended (33 U.S.C. § 1251, *et seq.*).

Composite Sample - A sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

Daily Discharge - The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds, the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/l, the daily discharge is calculated as the average measurement of the pollutant over the day.

Department – The Vermont Department of Environmental Conservation.

Discharge – Any wastes, directly or indirectly, that are placed, deposited or emitted into waters of the state.

Grab Sample - An individual sample collected in a period of less than 15 minutes.

Incompatible Substance - Any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on the works or on water quality. This includes all pollutants required to be regulated under the Clean Water Act.

Instantaneous Maximum - A value not to be exceeded in any grab sample.

Major Contributing Industry - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

Maximum Day (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs, or gallons).

Mean - The mean value is the arithmetic mean.

Monthly Average - (Average monthly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

NPDES - The National Pollutant Discharge Elimination System.

Secretary - The Secretary of the Agency of Natural Resources

State Certifying Agency

Agency of Natural Resources Department of Environmental Conservation Watershed Management Division One National Life Drive, Main Building, 2nd Floor Montpelier VT 05620-3522

Waste – effluent, sewage or any substance or material, liquid, gaseous, solid or radioactive, including heated liquids, whether or not harmful or deleterious to waters.

Waste Management Zone – a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist due to the authorized discharge.

Weekly Average - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs, or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs, or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATERSHED MANAGEMENT DIVISION 1 NATIONAL LIFE DRIVE MONTPELIER, VERMONT 05620-3522

FACT SHEET (August 2015)

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

NPDES NO: VT010061 PERMIT NO: 3-1177 PROJECT ID NO: NS95-0139

NAME AND ADDRESS OF APPLICANT:

Town of Chester PO Box 370 Chester, VT 05143

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Chester Wastewater Treatment Facility 556 Elm Street Chester, VT 05143

RECEIVING WATER: Williams River

CLASSIFICATION: Class B with a waste management zone. Class B waters are suitable for swimming and other forms of water based recreation, irrigation of crops and other agricultural uses without treatment; good aesthetic value; aquatic biota and wildlife sustained by high quality aquatic habitat; and acceptable for public water supply with filtration and disinfection. A waste management zone is a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

I. <u>Proposed Action, Type of Facility, and Discharge Location</u>

The above named applicant applied on September 19, 2008 to the Vermont Department of Environmental Conservation for renewal of the permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to reissue the discharge permit. The facility is engaged in the treatment of municipal wastewater. The discharge is from the outfall of the Town of Chester Wastewater Treatment Facility to the Williams River. A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations, the discharge permit application, and the recent self-monitoring data.

III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations: Page 2 Monitoring Requirements: Pages 5, 6 and 7

IV <u>Receiving Water</u>

The receiving water for this discharge is the Williams River. It is designated as a Cold Water Fishery. At the point of discharge, the river has a contributing drainage area of approximately 52 square miles. The summer 7Q10 flow is at the point of discharge is 3.12 cfs and the Low Median Monthly summer flow is 10.8 cfs. At the permitted flow the discharge from the Chester Wastewater has a summer Instream Waste Concentration (IWC) at 7Q10 flows of 0.08 and an IWC at Low Median Monthly flows of 0.024. There are no permitted discharges upstream of this discharge.

V. Permit Basis and Explanation of Effluent Limitation Derivation

The Chester Wastewater Treatment Facility (WWTF) is a secondary wastewater treatment facility. The treatment system consists of headworks (rotary screen and aerated grit chamber), sequencing batch reactors (SBR) followed by a hydraulic surge tank and an ultraviolet light disinfection system. The treated effluent is discharged through an outfall pipe to the Williams River.

The wastewater treatment facility was originally built in 1972 as a secondary treatment facility with a chlorine disinfection system. In 2005, the facility was upgraded to SBR treatment technology and ultraviolet light disinfection.

The facility receives wastewater from a population of approximately 1800 people and a few commercial properties. There is one Significant Industrial User (SIU) connected to this WWTF, Drew's LLC, which discharges treated process wastewater from a specialty food manufacturing process. A review of sludge quality indicates that the sludge from this facility has low concentrations of metals and is well within the applicable standards.

Flow - The flow limitation remains at 0.175 MGD, annual average, based on the facility's design flow. Due to the hydraulic surge tank equalizing the discharges from the SBR system, the facility discharges in a semi- continuous manner.

Biochemical Oxygen Demand (BODs) - The effluent limitations for biochemical oxygen demand is unchanged from the current permit. The monthly average (30 mg/l) and weekly average (45 mg/l) are based on the effluent quality specified for secondary treatment in 40 CFR Part 133.102. The permit also includes a 50 mg/l, maximum day, BOD limitation. This limitation is applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. Specifically, the Agency implements this limitation to supplement the federal technology based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations. Mass limits (44 lbs/day, monthly average and 66 lbs/day, weekly average) are derived by multiplying the concentration limits by the permitted flow. Given the dilution and mixing within the river, the discharge does not have a potential to cause or contribute to a violations of the water quality standards. The BOD monthly monitoring requirement is unchanged from the previous permit.

Total Suspended Solids (TSS) - The effluent limitations for total suspended solids is unchanged from the current permit. The monthly average (30 mg/l) and weekly average (45 mg/l) are based the effluent quality specified for secondary treatment in 40 CFR Part 133.102. The permit also contains a 50 mg/l, maximum day, TSS limitation. This limitation is applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. Specifically, the Agency implements the limit to supplement the federal technology based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations. Mass limits (44 lbs/day, monthly average and 66 lbs/day, weekly average) are derived by multiplying the concentration limits by the permitted flow. Given the dilution and mixing within the river, the discharge does not have a potential to cause or contribute to a violations of the water quality standards. The TSS monthly monitoring requirement is unchanged from the previous permit.

pH – The pH limitation is proposed to remain at 6.5 - 8.5 Standard Units. This limitation is based on 3-01 B.9. of the Vermont Water Quality Standards. Monitoring remains at daily.

Settleable Solids - The limitation of 1.0 ml/l instantaneous maximum and daily monitoring remain unchanged from the previous permit. This numeric limit was established in support of the narrative standard in Section 3-01 B.5. of the Vermont Water Quality Standards.

E. coli Bacteria - The *E. coli* limitation is 77/100 ml as specified in Section 3-04 B.3., Vermont Water Quality Standards. Since the facility utilizes ultraviolet light disinfection, twice per month monitoring is required.

Total Phosphorus – Since 2004 this discharge has been annually monitored for Total Phosphorus. The results of this monitoring indicated that the Total Phosphorus in the discharge ranges between 1 and 5 mg/l, typically the discharge averages about 3.5 mg/l

TP. Based on this data, the permitted flow of the WWTF, and the IWC at summer low median monthly flows, this discharge could contribute excessive instream phosphorus concentrations based on "desk-top" calculations. However biological sampling downstream of the WWTF indicates that the receiving water below the discharge consistently meets Class B Water Quality Standards.

To ensure that Standards will continue to be met and to help reduce the discharge of phosphorus from the WWTF, Condition I.D, has been included in the permit. This Condition requires that the WWTF be operated to optimize the biological removal of phosphorus. Since the WWTF is a sequential batch reactor system, operational procedures can be implemented to optimize the biological removal of phosphorus without adding an additional treatment system to the WWTF.

Phosphorus monitoring is being increased required once per month which is consistent with other permits from similarly sized WWTFs.

Waste Management Zone - As defined under 10 V.S.A. §1251(16), a waste management zone is "a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist due to the authorized discharge".

The permit retains the existing waste management zone (WMZ) in the Williams River beginning at the outfall and extending downstream for 1.0 miles.

Total Nitrogen – A November 10, 2011 letter from Region I of the Environmental Protection Agency to the Agency of Natural Resources mandated that Vermont establish total nitrogen limitations in permits to ensure that the total nitrogen load discharged from Vermont wastewater treatment facilities in the Connecticut River watershed be consistent with the requirements of the Long Island Sound Total Nitrogen Total Maximum Daily Load (LIS TMDL). EPA mandated that all but aerated lagoon and RBC facilities implement operational procedures to optimize nitrogen removal to reduce or minimize the discharge to the extent feasible based on the design of the facility.

Therefore Condition I.C has been included in this permit. This Condition requires the permittee have a qualified consultant develop and submit a Nitrogen Removal Optimization Plan by December 31, 2015. The plan shall be provided to the Agency before implementation. Beginning in January 2017, an annual report will be due to the Agency documenting the pounds of Total Nitrogen discharged as well as removal optimization and efficiencies. In addition this Condition contains as clause that allows the Agency to reopen the permit to include a wasteload allocation for this facility based on the LIS TMDL.

Total Nitrogen is a calculated value based on Total Kjeldahl Nitrogen and Nitrate/Nitrite Nitrogen. Monthly monitoring will be required for Total Kjeldahl Nitrogen and

Whole Effluent Toxicity (WET) Testing - 40 CFR Part 122.44(d)(1) requires the Department to assess whether the discharge causes, has the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criteria. Based on the 1994 Vermont Toxic Discharge Control Strategy, due to the low instream waste concentration and the lack of industrial sources within the collection system, it was determined that this discharge had a very low potential to cause toxicity and WET testing has not been required on this discharge. Since WET testing has never been done on this discharge and to provide data to confirm that this initial finding is still valid the proposed permit includes a requirement to conduct a two-species acute WET test in August or September 2018. If the results of this test indicate a reasonable potential to cause an instream toxic impact, the Department may require additional WET testing, establish a WET limit, or require a Toxicity Reduction Evaluation.

Operation, Management, and Emergency Response Plans

Condition I.J.1 requires the Operation, Management, and Emergency Response Plan for the wastewater treatment facility, pump stations, and stream crossings approved by the Agency on August 7, 2008, be implemented.

Condition I.J.2 requires the Operation, Management, and Emergency Response Plan for the sewage collection system approved by the Agency on July 2, 2010 be implemented.

Electric Power Failure - Within 30 days of the effective date of the permit, the permittee must submit to the Department, updated documentation addressing how the discharge will be handled in the event of an electric power outage. The effluent must receive a minimum of primary treatment plus disinfection.

VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is May 4, 2015 through June 4, 2015 during which time interested persons may submit their written views on the draft permit.

All written comments received by 4:30 PM on June 4, 2015, will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department. Written comments should be sent to:

Vermont Agency of Natural Resources Department of Environmental Conservation Watershed Management Division – Main 2 1 National Life Drive Montpelier, VT 05620-3522 Comments may also be faxed to: 802-828-1544 or submitted by e-mail using the e-mail provisions included at <u>http://www.anr.state.vt.us/dec/waterq/ww/htm/notices.htm</u>

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the proposed discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Watershed Management Division, Montpelier, VT. Copies will be made at a cost based on the current Secretary of State Official Fee Schedule for Copying Public Records from 8:00 AM to 4:30 PM, Monday through Friday. The draft permit and fact sheet may also be viewed on the Division's website at www.anr.state.vt.us/dec/ww/wwmd.cfm.

Note: At the request of the Town of Chester, the public comment period was extended on this draft permit through 4:30 pm, July 17, 2015.