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.: 3-1338
PIN: BR95-0159
NPDES No.: VT0001066

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*.),

City of Montpelier
58 Barre St
Montpelier, VT 05602

(hereinafter referred to as the "Permittee") is authorized by the Secretary of Natural Resources (Secretary) to discharge from a facility located at:

Montpelier Pool
Poolside Drive
Montpelier, VT

to the North Branch of the Winooski River, Class B at the point of discharge in accordance with the following conditions.

This permit shall become effective on the January 1, 2020.

This permit and the authorization to discharge shall expire on December 31, 2024.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: _____ Date: 11/5/2019
Chris Gianfagna, Wastewater Program Manager
Watershed Management Division

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. During the term of this permit, the Permittee is authorized to discharge from outfall serial number S/N 001(Latitude: 44.276729 N, Longitude 72.571444 W) of the Montpelier Pool to the North Branch of the Winooski River, an effluent for which the characteristics shall not exceed the values listed below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS	
	Maximum Day	Instantaneous Maximum
Flow[1,2]	875,000 gallons	
Total Residual Chlorine[3]		0.1 mg/L
pH[3]		Between 6.5-8.5 Standard Units

[1] Flow is based upon discharging the entire contents of the pool over a single working day. This discharge will occur annually in the spring, and at one other time during the year for maintenance purposes.

[2] The Permittee shall check the discharge reading at the Wrightsville Reservoir (USGS 04285500). Discharge from the pool is allowed when that gauge reads at least 10 cubic feet per second. Discharge is prohibited if the flow rate is less than 10 cubic feet per second. The readings from the gauge should be checked and recorded on the monitoring report every 4 hours while discharging. Discharge shall be discontinued if the gauge reading drops below 10 cubic feet per second.

[3] The pool contents shall not be discharged until the discharge is in compliance with the pH and Total Residual Chlorine effluent limitations.

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. The effluent shall not cause visible discoloration of the receiving waters.

4. The discharge shall not occur when USGS Gauge 0428550 indicates a discharge of less than 10 cubic feet per second from the Wrightsville Reservoir. Gauge readings shall be recorded at the beginning of the discharge and every 4 hours while the discharge continues. Discharge shall be discontinued if the gauge reading drops below 10 cubic feet per second. Gauge readings shall be noted on the Discharge Monitoring Report.

5. The discharge point shall be inspected before, during and after discharges to ensure that no riverbank erosion occurs and that any sediment disturbed by the discharge does not cause a violation of the Vermont Water Quality Standards. These inspections shall be noted on the Discharge Monitoring Report.

6. Any action on the part of the Secretary in reviewing, commenting upon or approving plans and specifications for the construction of WWTFs 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 Secretary, 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.

B. 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: June 30, 2024

C. OPERATING FEES

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

D. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to the test procedures published in Title 40 of the Code of Federal Regulations (C.F.R.) Part 136.

The Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 for the analysis of the pollutants or pollutant parameters required under this Section.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. The Permittee shall identify the effluent sampling location used for each discharge. A description of the effluent sample location is included in Condition I.D.2.

2. Effluent Monitoring

During the term of this permit, the Permittee shall monitor and record the quality and quantity of discharge(s) at outfall serial number S/N 001 of the Montpelier Pool, according to the following schedule and other provisions:

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow (Effluent)[1]	Per Discharge (2x/year max)	Estimate
Flow (USGS Gauge 04285500)[2]	Per Discharge, 1x per 4 hours	Gauge Reading
Total Residual Chlorine[3]	1 per discharge	grab
pH[3]	1 per discharge	grab

Samples collected in compliance with the monitoring requirements specified above shall be collected from the pool.

[1] The times that the drain is opened and closed shall be recorded.
[2] The discharge from the flow gauge at the Wrightsville Reservoir shall be recorded when the drain is opened and every 4 hours while the pool is draining. The flow shall also be recorded at the time the drain is closed. Discharge from the pool must be discontinued if the flow out of the reservoir drops below 10 cubic feet per second.
[3] pH and Total Residual Chlorine samples should be taken from the pool water. Test results for these samples must comply with the permit limits before the pool water can be discharged.

3. Reporting

The Permittee is required to submit annual reports of monitoring results on Discharge Monitoring Report (DMR) form WR-43. Reports are due on the 15th day of January.

The Permittee shall electronically submit its DMRs via Vermont's on-line electronic reporting system. The Permittee shall electronically submit additional compliance monitoring data and reports specified by the Secretary. When the Permittee submits DMRs using an electronic system designated by the Secretary, which requires attachment of scanned DMRs in pdf format, it is not required to submit hard copies of DMRs. The link below shall be used for electronic submittals:

https://anronline.vermont.gov/

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

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; or

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.

4. 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 measurement;

b) The individual(s) who performed 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 this permit; and

i) For analyses performed by contract laboratories:

a. The detection level reported by the laboratory for each sample; and

b. The laboratory analytical report including documentation of the QA/QC and analytical procedures.

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

When "non-detects" are recorded, the method detection limit shall be reported and used in calculating any time-period averaging for reporting on DMRs.

5. 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 DMR form WR-43. Such increased frequency shall also be indicated.

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, pursuant to Condition II.B.4 of this permit, to specify and limit any pollutants not previously limited.

In addition, the Permittee, within 30 days of the of the date on which the Permittee is notified of such discharge, 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 pool.

2. Noncompliance Notification

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

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

i. Breakdown or maintenance of waste treatment equipment (biological and physical-chemical 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);

ii. Accidents caused by human error or negligence;

iii. Any unanticipated bypass or upset which exceeds any effluent limitation in the permit;

iv. Violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or

v. Other causes such as acts of nature,

the Permittee shall provide notice as specified in subdivisions (c) and (d) of this subsection.

c) For any non-compliance not covered under Condition II.A.2.c. of this permit, an operator of a WWTF or the operator's delegate shall notify the Secretary within 24 hours of becoming aware of such condition 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.

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.

For purposes of demonstrating compliance with the requirements of Condition II.A.3.a) of this permit regarding adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct and pass an annual laboratory proficiency test, via an accredited laboratory, for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by this permit. This can be carried out as part of an EPA DMR-QA study. Results shall be submitted to the Secretary by **December 31, annually**. The first proficiency test results are due by December 31, 2020**.** This requirement can be satisfied by demonstrating that the person or persons conducting the tests have completed a proficiency test at a different facility such as the Montpelier Water Treatment Plant or the Montpelier Wastewater Treatment Facility.

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, the environment, or human health 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, and 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 issuance 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's discharge is covered under 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, unless notice is required sooner under Section II.A.2.

10 V.S.A. § Section 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 Secretary shall proceed in accordance with chapter 170 of this title. 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 at the following address: Agency 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; and

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 or information obtained under this permit program that constitutes trade secrets under 1 V.S.A. § 317(c)(9) shall be kept confidential, except that such records or information may 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.

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;

c) Reallocation of WLA under the LC TMDL;

d) Development of an integrated WWTF and stormwater runoff NPDES permit; or

e) 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, pursuant to Condition II.B.4 of this permit, 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 (i) and (ii) above may be discharged in certain limited amounts with the written approval of, and under special conditions established by, the Secretary or his/her 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 water.

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

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Except as provided in "Bypass" (Condition II.A.5) and “Emergency Pollution Permits” (Condition 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 – means the Vermont Agency of Natural Resources.

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

Bypass – means **t**he intentional diversion of waste streams from any portion of the treatment facility.

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

Composite Sample - means 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 - means 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.

Discharge – means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.

Grab Sample – means an individual sample collected in a period of less than 15 minutes.

Incompatible Substance – means 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 - means a value not to be exceeded in any grab sample.

Major Contributing Industry – means 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 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 - is the arithmetic mean.

Monthly Average (average monthly discharge limitation) – means 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 – means the Secretary of the Agency of Natural Resources or the Secretary's duly authorized representative.

Septage – means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Untreated Discharge – means (1) combined sewer overflows from a WWTF; (2) overflows from sanitary sewers and combined sewer systems that are part of a WWTF during dry weather flows, which result in a discharge to waters of the State; (3) upsets or bypasses around or within a WWTF during dry or wet weather conditions that are due to factors unrelated to a wet weather storm event and that result in a discharge of sewage that has not been fully treated to waters of the State; and (4) discharges from a WWTF to separate storm sewer systems.

Waste – means 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 in a waste management zone due to the authorized discharge.

Waters includes all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.

Weekly average - (average weekly discharge limitation) – means 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.

Whole Effluent Toxicity (WET) – Means the aggregate toxic effect of an effluent measured directly by a toxicity test.

WWTF or wastewater treatment facility shall have the same meaning as “pollution abatement facilities,” as defined under 10 V.S.A. § 1251, which means municipal sewage treatment plants, pumping stations, interceptor and outfall sewers, and attendant facilities as prescribed by the Department to abate pollution of the waters of the State.

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WATERSHED MANAGEMENT DIVISION
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MONTPELIER, VT 05620-3522

FACT SHEET FOR DRAFT PERMIT
(September 2019)

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

PERMIT NO: **3-1338**
PIN: **BR95-0159**
NPDES NO: **VT0001066**

NAME AND ADDRESS OF APPLICANT:

City of Montpelier
58 Barre St
Montpelier, VT 05602

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Montpelier Pool
Poolside Drive
Montpelier, VT

RECEIVING WATER: North Branch of Winooski River

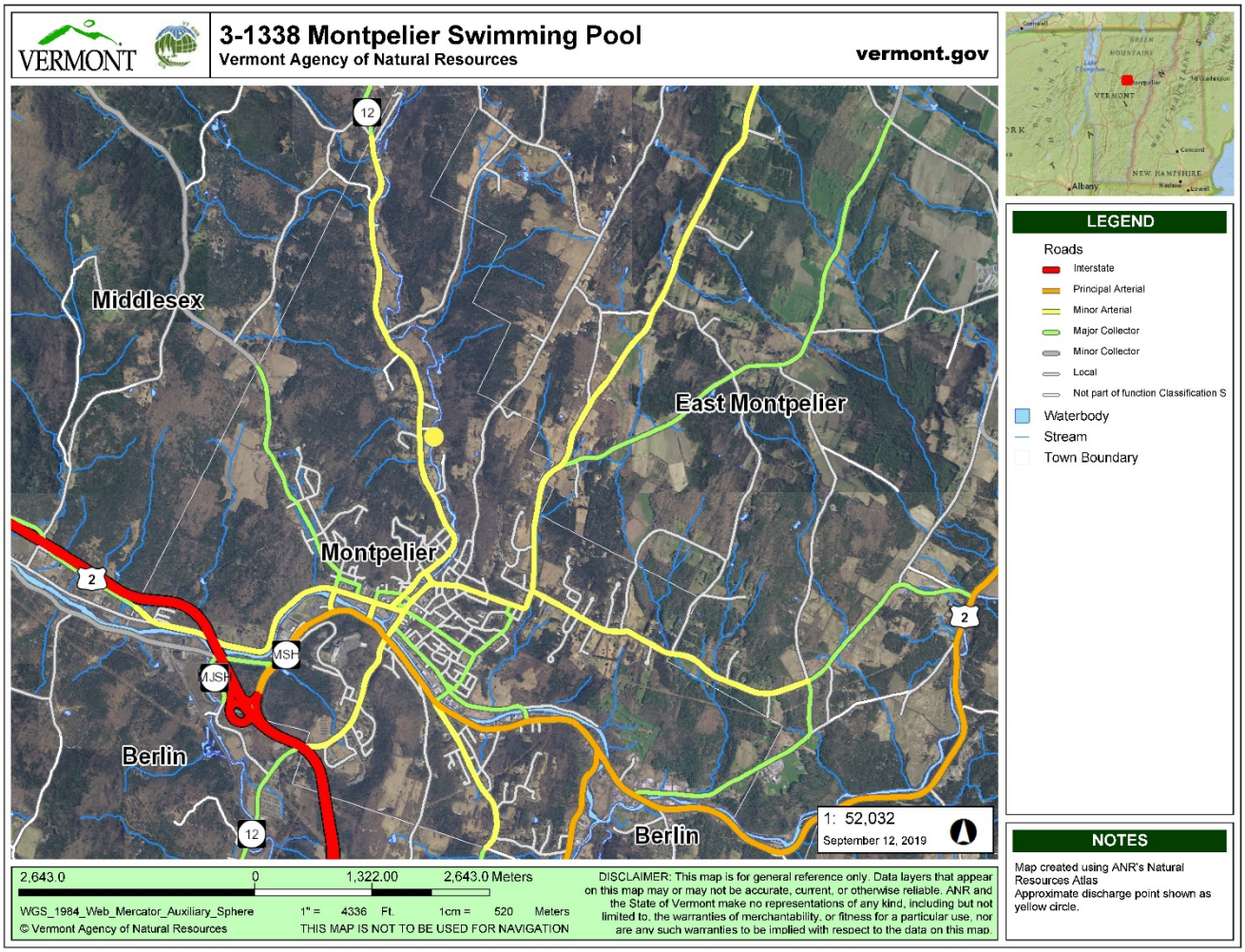
CLASSIFICATION: All uses Class B(2). Class B waters are suitable for swimming and other primary contact recreation; irrigation and agricultural uses; aquatic biota and aquatic habitat; good aesthetic value; boating, fishing, and other recreational uses; and suitable for public water source with filtration and disinfection or other required treatment.

I. Proposed Action, Type of Facility, and Discharge Location

The Secretary of the Vermont Agency of Natural Resources (Secretary) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on **October 12, 2016**. The facility's previous permit was issued on **January 24, 2012** and was effective **April 1, 2012**. The previous permit (hereafter referred to as the "current permit") has been administratively continued, pursuant to 3 V.S.A. § 814, as the applicant filed a complete application for permit reissuance within the prescribed time period as per the Vermont Water Pollution Control Permit Regulations (VWPCPR) § 13.5(b). At this time, the Secretary has made a tentative decision to reissue the discharge permit.

The facility is a municipal swimming pool. It discharges water in the spring prior to opening for the swimming season. Filter backwash water is sent to the municipal sewer system and is not part of this permit. The pool would also discharge water if it needed to be drained for repairs.

Water is discharged through the drain located at the bottom of the pool to an outlet located approximately 200' south of the pedestrian bridge located by the pool. This point is located at approximately 44.276729 N, 72.571444 W and is shown as a yellow circle on the map below.



II. Description of Discharge

The facility is a municipal swimming pool that was built by the Civilian Conservation Corps in 1938. It has a filtration system that discharges to the municipal sewer, and also discharges the previous year's pool water into the North Branch of the Winooski River. The pool discharges its entire volume (~875,000 gallons) over a period of approximately 15 hours. The Wastewater Programs's records indicate that this has occurred annually since at least 2011, but the facility has

had an NPDES Discharge Permit since 1991 and there is no reason to suspect that the pool was drained in an alternative manner historically. The flow rate varies due to the changing head in the pool, but the average rate is approximately 2.2 cubic feet per second (CFS). The permit also covers a single discharge for repair purposes.

The WWTF discharges to the **North Branch of the Winooski River** annually sometime in the spring before opening for the season.

III. Limitations and Conditions

The draft permit contains limitations for effluent flow, total residual chlorine, and pH. The effluent limitations of the draft permit and the monitoring requirements may be found on the following pages of the draft permit:

Effluent Limitations:	Pages 2-3 of 16
Monitoring Requirements:	Pages 3-4 of 16

IV. Statutory and Regulatory Authority

A. Clean Water Act and NPDES Background

Congress enacted the Clean Water Act (CWA or Act), "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specified permitting sections of the Act, one of which is Section 402. CWA §§ 301(a), 402(a). Section 402 establishes one of the CWA's principal permitting programs, the National Pollutant Discharge Elimination System (NPDES). Under this section of the Act, the U.S. Environmental Protection Agency (EPA) may "issue a permit for the discharge of any pollutant, or combination of pollutants" in accordance with certain conditions. CWA § 402(a). The State of Vermont has been approved by the EPA to administer the NPDES Program in Vermont. NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. CWA § 402(a)(1) - (2).

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: "technology-based" limitations and "water quality-based" limitations. CWA §§ 301, 303, 304(b); 40 CFR Parts 122, 125, 131. Technology-based limitations, generally developed on an industry-by-industry basis, reflect a specified level of pollutant-reducing technology available and economically achievable for the type of facility being permitted. CWA § 301(b). As a class, WWTFs must meet performance-based requirements based on available wastewater treatment technology. CWA § 301(b)(1)(B). The performance level for WWTFs is referred to as "secondary treatment." Secondary treatment is comprised of technology-based requirements expressed in terms of BOD5, TSS and pH; 40 C.F.R. Part 133.

Water quality-based effluent limits, on the other hand, are designed to ensure that state water quality standards are achieved, irrespective of the technological or economic considerations that inform technology-based limits. Under the CWA, states must develop water quality standards for all water bodies within the state. CWA § 303. These standards have three parts: (1) one or more "designated uses" for each water body or water body segment in the state; (2) water quality

"criteria," consisting of numerical concentration levels and/or narrative statements specifying the amounts of various pollutants that may be present in each water body without impairing the designated uses of that water body; and (3) an antidegradation provision, focused on protecting high quality waters and protecting and maintaining water quality necessary to protect existing uses. CWA § 303(c)(2)(A); 40 C.F.R. § 131.12. The applicable water quality standards for this permit are the 2017 Vermont Water Quality Standards (Environmental Protection Rule, Chapter 29a).

A permit must include limits for any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water quality standard, including narrative water quality criteria. See 40 CFR §122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. A NPDES permit must contain effluent limitations and conditions in order to ensure that the discharge does not cause or contribute to water quality standard violations.

Receiving stream requirements are established according to numerical and narrative standards adopted under state law for each stream classification. When using chemical-specific numeric criteria from the State's water quality standards to develop permit limits, both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable in stream pollutant concentrations. Acute aquatic life criteria are generally implemented through maximum daily limits and chronic aquatic life criteria are generally implemented through average monthly limits.

Where a state has not established a numeric water quality criterion for a specific chemical pollutant that is present in the effluent in a concentration that causes or has a reasonable potential to cause a violation of narrative water quality standards, the permitting authority must establish effluent limits in one of three ways: based on a "calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use"; on a "case-by-case basis" using CWA Section 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an "indicator parameter." 40 CFR § 122.44(d)(1)(vi)(A-C).

The state rules governing Vermont's NPDES permit program are found in the Vermont Water Pollution Control Permit Regulations (Environmental Protection Rule, Chapter 13).

1. Reasonable Potential Determination

In determining whether this permit has the reasonable potential to cause or contribute to an impairment, Vermont has considered:

1) Pollutant concentration and variability in the effluent as determined from the permit application materials, monthly discharge monitoring reports (DMRs), or other facility reports;

2) Available dilution of the effluent in the receiving water, expressed as the instream waste

concentration. In accordance with the applicable Vermont Water Quality Standards, available dilution for rivers and streams is based on a known or estimated value of the lowest average flow which occurs for seven (7) consecutive days with a recurrence interval of once in ten (10) years (7Q10) for aquatic life and human health criteria for non-carcinogens, or at all flows for human health (carcinogens only) in the receiving water. For nutrients, available dilution for stream and river discharges is assessed using the low median monthly flow computed as the median flow of the month containing the lowest annual flow. Available dilution for lakes is based on mixing zones of no more than 200 feet in diameter, in any direction, from the effluent discharge point, including as applicable the length of a diffuser apparatus.

3) All effluent limitations, monitoring requirements, and other conditions of the proposed draft permit.

The Reasonable Potential Determination Waiver for this facility is attached to this Fact Sheet as Attachment A.

B. Anti-Backsliding

Section 402(o) of the CWA provides that certain effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the current permit. EPA has also promulgated anti-backsliding regulations which are found at 40 C.F.R. § 122.44(l). Unless applicable anti-backsliding exemptions are met, the limits and conditions in the reissued permit must be at least as stringent as those in the current permit.

V. Description of Receiving Water

The receiving water for this discharge is the **North Branch of the Winooski River**, a designated **Cold** Water Fish Habitat. At the point of discharge, the river has a contributing drainage area of **76.4** square miles. The flow is controlled a dam at Wrightsville Reservoir and the minimum flow is 1.5 cubic feet per second. The instream waste concentration at this flow rate is **58.4%**. This is the flow rate that the VT Water Quality Standards require be used to calculate acute impacts to aquatic biota.

The gauge at Wrightsville Reservoir (USGS 04285500) provides additional information about flow in this stretch of the North Branch of the Winooski River. In addition to a current flow reading, values are provided for the 25th percentile (11 cubic feet per second), median (23 cubic feet per second), 75th percentile (38 cubic feet per second), mean (45 cubic feet per second) and maximum (505 cubic feet per second) flows. The values are based upon almost 30 years of data.

Due to the high instream waste concentration at the minimum flow rate and the detection limits of the approved chlorine testing methods it is not permissible to discharge the contents of the pool when the North Branch of the Winooski River is at minimum flow. However, the proximity of the gauge and easy access to near real-time data reporting from it makes estimating the receiving water's flow a simple task.

In order to protect the water quality of the receiving water it will be necessary to prohibit discharges from the pool when the receiving water flows are less than 10 cubic feet per second.

This value is less than the 25th percentile flow in this river, and discharges typically occur in the spring when river flows are high. Therefore, this restriction is not expected to pose any hardship or impose operational changes to the permittee.

VI. Facility History and Background

The City of Montpelier owns and operates the Montpelier Pool. The pool has had an NPDES discharge permit since 1991 and has annually discharged its contents into the North Branch of the Winooski River in the springtime prior to opening for the season. Under ordinary operations filter backwash water is send to the municipal sewer system. The pool was built in 1938 by the Civilian Conservation Corps.

VII. Permit Basis and Explanation of Effluent Limitation Derivation

This permit was evaluated under the 2017 Vermont Water Quality Standards

A. Flow – The draft permit maintains the daily maximum flow limitation of 875,000 gallons per discharge, with two discharges allowed annually. Flow monitoring for the pool discharge is not required because this is a batch discharge. However, discharge from the pool will be prohibited unless the flow rate shown on USGS Gauge 04285500 is a minimum of 10 cfs and rising or holding steady.

B. Conventional Pollutants

1. **pH** – The pH limitation remains at 6.5 - 8.5 Standard Units as specified in Section 29A-303(6) in the Vermont Water Quality Standards. Monitoring remains at once per discharge. Discharge is prohibited unless tests indicate that both pH and TRC comply with permit limits.

C. Non-Conventional and Toxics

1. **Total Residual Chlorine –** The Total Residual Chlorine limits of 0.1 mg/l, instantaneous maximum, is set in accordance with the Policy for the protection of aquatic biota, these limits ensure compliance with the Vermont Water Quality Standards. Monitoring remains at once per discharge. Discharge is prohibited unless tests indicate that both pH and TRC comply with permit limits, and the flow rate shown on USGS Gauge 04285500 is a minimum of 10 cfs and rising or holding steady.

D. Special Conditions

1. **Laboratory Proficiency Testing -** To ensure there are adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct an annual laboratory proficiency test for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by their NPDES permit. Proficiency Test samples must be obtained from an accredited laboratory. This requirement may be fulfilled through the successful completion of an EPA DMR-QA study. Results shall be submitted to the Secretary by December 31, annually and the first set of results is due by December 31, 2020. This requirement can be satisfied by demonstrating that the person or persons conducting the test

have successfully completed laboratory proficiency testing at another facility. This is a new requirement for this permit.

2. **Electronic Reporting -** The EPA recently promulgated a final rule to modernize the Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires the inclusion of electronic reporting requirements in NPDES permits that become effective after December 21, 2015. The rule requires that NPDES regulated entities that are required to submit discharge monitoring reports (DMRs), including majors and nonmajors, individually permitted or covered by a general permit, must do so electronically after December 2016. The Secretary has created an electronic reporting system for DMRs and has training materials available to train facilities in its use. As of December 2020, these NPDES facilities will also be expected to submit additional information electronically as specified in Appendix A in 40 CFR part 127. This is a new requirement for this permit.

3. **Noncompliance Notification -** As required by the passage of 10 V.S.A. §1295, promulgated in the 2016 legislative session, Condition II.A.2 has been included in the proposed permit. Section 1295 requires the Permittee to provide public notification of untreated discharges from wastewater facilities. The Permittee is required to post a public alert within one hour of discovery and submit to the Secretary specified information regarding the discharge within 12 hours of discovery.

4. **Reopener -** This draft permit includes a reopener whereby the Secretary reserves the right to reopen and amend the permit to implement an integrated plan to address multiple Clean Water Act obligations.

A. Reasonable Potential Analysis

The Secretary has conducted a reasonable potential analysis waiver, which is attached to this Fact Sheet as Attachment A. Based on this analysis, the Secretary has determined the available data indicate that this discharge does not cause, have a reasonable potential to cause, or contribute to an instream toxic impact or instream excursion above the water quality criteria.

VIII. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit was from October 2 through November 1, 2019. No comments were received.

Agency of Natural Resources
Department of Environmental Conservation
Watershed Management Division
1 National Life Drive 2 Main
802-828-1535

MEMORANDUM

To: Chris Gianfagna, Manager, Wastewater Program (WWP)

From: John Merrifield, Wastewater Program

Cc: Rick Levey, Monitoring, Assessment and Planning Program
Amy Polaczyk, Wastewater Program

Date: September 16, 2019

Subject: Montpelier Swimming Pool Reasonable Potential Determination Decision

Facility:
Montpelier Swimming Pool
Permit No. 3-1338
NPDES No. VT0001066

Hydrology for Montpelier Swimming Pool used in this evaluation:
Design flow = 875,000 gallons drained over 15 hours, 2.2 CFS
Receiving Water: North Branch of the Winooski River
Minimum flow = 1.5 CFS
25th Percentile flow = 11 CFS
Required Flow = 10 CFS

The Reasonable Potential Determination for the Montpelier Swimming Pool discharge has been examined and it has been determined that a full assessment is not necessary due to the small discharge, limited frequency of discharge, long standing nature of the discharge and the results of monitoring analysis.

The Montpelier Swimming Pool discharges its contents into the North Branch of the Winooski River annually in the spring before the operating season. While the pool is operational its filter backwash is discharged to the municipal sewer system. After the end of the swimming season the chlorine in the pool is allowed to dissipate through a combination of UV rays, evaporation and the breakdown of organic matter over a period of several months. Water to be discharged is sent through the drain at the bottom of the pool through a pipe to a point in the river approximately 200' downstream of the pedestrian bridge. The entire pool is typically emptied during a 15 hour period according to recent records. This corresponds to an average discharge rate of approximately 2.2 CFS. The permittee has a monitoring only requirement for flow.

Monitoring data for 8 years is available and has been reviewed for pH, Total Residual Chlorine (TRC) and flow. The data indicates that the volume of the pool, 875,000 gallons or less, has been discharged over a 15 hour period. It also indicates that pH and TRC measurements fall within the limitations of the permit. The pH values are all within the VT WQS limits of 6.5 and 8.5 and dilution is not required to meet the VT WQS in the receiving waters for pH.

This facility discharges into a receiving water body that is controlled by an upstream dam. The VT WQS use the minimum flow out of a human made structure for calculating numeric water quality

criteria. For the Wrightsville Dam, the minimum flow is 1.5 CFS. The instream TRC concentration at the minimum flow, assuming that the TRC concentration in the upstream waters is 0 and that of the discharge is 0.1 mg/L, can be calculated as:

{2.2 CFS * 0.1 mg/L TRC + 1.5 CFS * 0 mg/L TRC}/{2.2 CFS + 1.5 CFS} = 0.059 mg/L TRC

This value exceeds the VT WQS for the Protection of Aquatic Biota of 0.019 mg/L.

If the same calculation is performed using the method detection limit of 0.05 mg/L, the lowest amount of TRC that can be measured with certainty, the resulting instream TRC concentration still exceed the VT WQS for the Protection of Aquatic Biota of 0.019 mg/L.

{2.2 CFS * 0.05 mg/L TRC + 1.5 CFS * 0 mg/L TRC}/{2.2 CFS + 1.5 CFS} = 0.029 mg/L TRC

It should be noted that the pool has its planned discharge in the springtime when river flows are typically at their highest. The minimum value for the receiving water flow is extreme, and not representative of the flow conditions under most conditions. A more typical value, but still one that is very conservative, is a flow rate of 10 CFS. This value is less than the 25th percentile flow out of the Wrightsville Reservoir. When the receiving water TRC concentration is calculated using values of 2.2 CFS and 0.1 mg/L TRC for the pool, and 10 CFS and 0 mg/L TRC for the North Branch of the Winooski River, the resulting TRC concentration is 0.018 mg/L which is less than the acute VT WQS for the Protection of Aquatic Biota of 0.019 mg/L.

{2.2 CFS * 0.1 mg/L TRC + 10 CFS * 0 mg/L TRC}/{2.2 CFS + 10 CFS} = 0.018 mg/L TRC

If the pool is only discharged when the receiving water has at least 10 CFS of flow this discharge does not have the potential to cause or contribute to an instream toxic impact or instream excursion above the water quality criteria. The vicinity of the USGS Gauge 01485500 at the Wrightsville Reservoir will make the determination of flows in the North Branch of the Winooski River a simple task, and imposing a requirement to check and records flows before and during the pool's discharge, and a prohibition on discharge when the gauge reading is less than 10 CFS will both be protective of water quality and also allow for the normal operation of the pool. The TRC limit of 0.1 mg/L will be protective of the acute criteria (0.019 mg/L) when the receiving water flows are 10 CFS or greater as required by the permit conditions. Due to the low frequency and short duration of the pool discharge the chronic VT WQS for the Protection of Aquatic Biota is not applicable.

The requirement to have at least 10 CFS in the receiving water before discharge may pose a hardship for the permittee if the pool needs to be repaired during times of low flow. However, this is unlikely to be occur, an alternate method of disposal is available, and procedures exist to handle this situation if it is considered to be an emergency rather than an inconvenience.

Considering these factors, the Wastewater Program concludes this facility and its discharge as currently operated and permitted, does not have the potential to cause, or contribute to an instream toxic impact or instream excursion above the water quality criteria.