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.: 3-1566
PIN: RU17-0192
NPDES No.: VT0120059

AMENDED
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*.),

Vermont Agency of Transportation
1 National Life Drive
Montpelier, Vermont 05633

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

Main Street and Merchants Row
Middlebury, Vermont

to Otter Creek, Class B(2) at the point of discharge in accordance with the following conditions.

This permit shall become effective on **October 1, 2019**.

This permit and the authorization to discharge shall expire on December 31, 2022.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: _____ Date: 9/10/19

Chris Gianfagna, Wastewater Program Manager

I.

A. EFFLUENT LIMITS and MONITORING REQUIREMENTS

1. Following completion of construction of outfall S/N 003, discharge from outfalls S/N 001 (44.01346N, 73.16843W) and S/N 002 (44.01448N, 73.16914W) are prohibited.

2. During the term of this permit and following completion of construction of S/N 003 (44.01433N, 73.16897W), the Permittee is authorized to discharge from outfall S/N 003: treated contaminated groundwater and comingled stormwater to Otter Creek. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Annual Average	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow			**0.300 MGD**	Daily	Total
Turbidity [1,2]	25 NTU			Daily	Grab
Total Suspended Solids[2]		30 mg/L		2 x month	Grab
Total Phosphorus[2]		0.2 mg/L		2 x month	Grab
Arsenic[2]		0.03 mg/L		2 x month	Grab
Chromium (III)[2]		0.05 mg/L		2 x month	Grab
Lead[2]		0.15 mg/L		2 x month	Grab
Volatile Organic Compounds[2,3]		Monitor only ug/L		1 x month	Grab
pH[2]			6.5 to 8.5 Standard Units	2 x month	Grab

Samples collected in compliance with the monitoring requirements specified above shall be collected from the sample port after the final sediment filter in the treatment train(s) prior to discharge to the outfall.

1. Turbidity is an annual average under dry weather base-flow conditions.

2. **If there are multiple treatment trains with separate discharges to outfall S/N 003, a proportional volume of sample from each treatment train shall be collected and combined into one composite sample for analysis, observing appropriate hold times. pH should be measured and reported separately for each treatment train.**

3. Volatile Organic Compounds shall be analyzed by EPA Method 8021B.

3. ***During the term of this permit,*** **the Permittee is authorized to discharge from outfall S/N 004 (44.01146N, 73.16716W): treated contaminated groundwater and comingled stormwater to Otter Creek. Such discharges shall be limited and monitored by the Permittee as specified below:**

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Annual Average	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow			**0.100 MGD**	**Daily**	**Total**
Turbidity [1,2]	**25 NTU**			**Daily**	**Grab**
Total Suspended Solids[2]		**30 mg/L**		**2 x month**	**Grab**
Total Phosphorus[2]		**0.2 mg/L**		**2 x month**	**Grab**
Arsenic[2]		**0.03 mg/L**		**2 x month**	**Grab**
Chromium (III)[2]		**0.05 mg/L**		**2 x month**	**Grab**
Lead[2]		**0.15 mg/L**		**2 x month**	**Grab**
Volatile Organic Compounds[2,3]		**Monitor only ug/L**		**1 x month**	**Grab**
pH[2]			**6.5 to 8.5 Standard Units**	**2 x month**	**Grab**

Samples collected in compliance with the monitoring requirements specified above shall be collected from the sample port after the final sediment filter in the treatment train(s) prior to discharge to the outfall.

1. **Turbidity is an annual average under dry weather base-flow conditions.**

2. **If there are multiple treatment trains with separate discharges to outfall S/N 004, a proportional volume of sample from each treatment train shall be collected and combined into one composite sample for analysis, observing appropriate hold times. pH should be measured and reported separately for each treatment train.**

3. **Volatile Organic Compounds shall be analyzed by EPA Method 8021B.**

4. ***During the term of this permit,*** **the Permittee is authorized to discharge from outfall S/N 005 (44.01725N, -73.17499W): treated contaminated groundwater and comingled stormwater to Otter Creek. Such discharges shall be limited and monitored by the Permittee as specified below:**

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Annual Average	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow			0.100 MGD	Daily	Total
Turbidity [1,2]	25 NTU			Daily	Grab
Total Suspended Solids[2]		30 mg/L		2 x month	Grab
Total Phosphorus[2]		0.2 mg/L		2 x month	Grab
Arsenic[2]		0.03 mg/L		2 x month	Grab
Chromium (III)[2]		0.05 mg/L		2 x month	Grab
Lead[2]		0.15 mg/L		2 x month	Grab
Volatile Organic Compounds[2,3]		Monitor only ug/L		1 x month	Grab
pH[2]			6.5 to 8.5 Standard Units	2 x month	Grab

Samples collected in compliance with the monitoring requirements specified above shall be collected from the sample port after the final sediment filter in the treatment train(s) prior to discharge to the outfall.

1. **Turbidity is an annual average under dry weather base-flow conditions.**

2. **If there are multiple treatment trains with separate discharges to outfall S/N 005, a proportional volume of sample from each treatment train shall be collected and combined into one composite sample for analysis, observing appropriate hold times. pH should be sampled and reported separately for each treatment train.**

3. **Volatile Organic Compounds shall be analyzed by EPA Method 8021B.**

5. **Special Conditions**

   a. **The Permittee has notified the Secretary (Wastewater Management Program) in writing on July 30,2019 that they intend to discontinue discharges from S/N 001 and S/N 002 and to begin discharging from S/N 003. Discharges shall not occur from S/N 003 prior to August 30, 2019 and no discharges from S/N 001 and S/N 002 after August 30, 2019.**

b. The dates that the sediment filters are changed or cleaned shall be reported on the monthly DMR report.

c. Any material removed from the sediment filters by the Permittee shall be disposed of in accordance with the Corrective Action Plan for the project prepared by VHB dated July 25, 2017, and applicable state and federal regulations.

d. The Permittee shall maintain sufficient rip-rap at the outfalls to prevent erosion during discharge.

e. The Permittee shall inspect the area downgradient of the discharge points regularly (at least quarterly) for signs of erosion. The Permittee shall take prompt action to correct any instances of erosion resulting from the discharge.

f. These discharges shall not cause erosion or contain sediment which causes or contributes to a violation of the Vermont Water Quality Standards in the receiving water.

g. These discharges shall not contain a visible sheen, foam, or floating solids at any time in the receiving water.

h. These discharges shall not cause a visible discoloration of the receiving water.

i. These discharges shall not cause a violation of the Vermont Water Quality Standards in the receiving water.

j. Based on the results of the analyses conducted on this discharge, this permit may be amended to require additional analyses or to establish specific or alternate effluent limitations.

k. No flocculation polymers shall be used. Any flocculation polymers or other chemicals intended to remove suspended solids must be reviewed and approved by the Secretary must to ensure that the receiving water is not adversely impacted.

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, 2022**

C. OPERATING FEES

This discharge is subject to operating fees as required by 3 V.SA. § 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 40 C.F.R. Part 136.

The permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under the Code of Federal Regulations, Title 40, Part 136 for the analysis of the pollutants or pollutant parameters specified in Condition I.A. above.

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. Reporting

The Permittee is required to submit monthly reports of monitoring results on DMR form WR-43. Reports are due on the 15th day of each month, beginning with the month following the issuance date of this permit.

The Permittee shall electronically submit its DMRs via Vermont's online 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, it is not required to submit hard copies of DMRs.

The link to submit DMRs via Vermont's online electronic reporting system is: 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.

3. 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 performed the sampling or measurements;

c. The dates and times the analyses were performed;

d. The individual(s) who performed the analysis;

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; and

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.

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

4. 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 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 to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

a. The Permittee shall give advance notice to the Agency 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. Pursuant to 10 V.S.A. §1295, notice for "untreated discharges," as defined.

i. Public notice. For "untreated discharges" an operator of a wastewater treatment facility or the operator's delegate shall as soon as possible, but no longer than one hour from discovery of an untreated discharge from the wastewater treatment facility, post on a publicly accessible electronic network, mobile application, or other electronic media designated by the Secretary an alert informing the public of

the untreated discharge and its location, except that if the operator or his or her delegate does not have telephone or Internet service at the location where he or she is working to control or stop the untreated discharge, the operator or his or her delegate may delay posting the alert until the time that the untreated discharge is controlled or stopped, provided that the alert shall be posted no later than four hours from discovery of the untreated discharge.

ii. Agency notification. For "untreated discharges" an operator of a wastewater treatment facility shall within 12 hours from discovery of an untreated discharge from the wastewater treatment facility notify the Secretary and the local health officer of the municipality where the facility is located of the untreated discharge. The operator shall notify the Secretary through use of the Department of Environmental Conservation's online event reporting system. If, for any reason, the online event reporting system is not operable, the operator shall notify the Secretary via telephone or e-mail. The notification shall include:

(1) The specific location of each untreated discharge, including the body of water affected. For combined sewer overflows, the specific location of each untreated discharge means each outfall that has discharges during the wet weather storm event.

(2) Except for discharges from a wastewater treatment facility to a separate storm sewer system, the date and approximate time the untreated discharge began.

(3) The date and approximate time the untreated discharge ended. If the untreated discharge is still ongoing at the time of reporting, the entity reporting the untreated discharge shall amend the report with the date and approximate time the untreated discharge ended within three business days of the untreated discharge ending.

(4) Except for discharges from a wastewater treatment facility to a separate storm sewer system, the approximate total volume of sewage and, if applicable, stormwater that was released. If the approximate total volume is unknown at the time of reporting, the entity reporting the untreated discharge shall amend the report with the approximate total volume within three business days.

(5) The cause of the untreated discharge and a brief description of the noncompliance, including the type of event and the type of sewer structure involved.

(6) The person reporting the untreated discharge.

d. For any non-compliance not covered under Section II.A.2.b. of this permit, an operator of a wastewater treatment facility 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 insure 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.

The Permittee shall demonstrate the accuracy of the effluent flow measurement device(s) **monthly** and report the results on the monthly report forms. The acceptable limit of error is ± 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 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, 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 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 at the following address: Agency of Natural Resources, Department of Environmental Conservation, One National Life Drive, Main Building, 2nd Floor, Montpelier VT 05620-3522.

10. Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,

b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

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 federal 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, 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.

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. Civil and Criminal Liability

Except as provided in, "Bypass" (Section II.A.5), "Emergency Pollution Permits" (Section II.A.9), and "Power Failure" (Section II.A.10), 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

III.

A. OTHER REQUIREMENTS

This permit shall be modified, suspended or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or

2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

B. DEFINITIONS

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

Agency – The Vermont Agency of Natural Resources

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 the 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.

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 these 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
ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2ND FLOOR
MONTPELIER, VT 05620-3522

AMENDED FACT SHEET
(***August 2019***)

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

PERMIT NO: 3-1566
PIN: RU17-0192
NPDES NO: VT0120059

NAME AND ADDRESS OF APPLICANT:

Vermont Agency of Transportation
1 National Life Drive
Montpelier, Vermont 05633

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Main Street and Merchants Row
Middlebury, Vermont

RECEIVING WATER: Otter Creek

CLASSIFICATION: Class B(2). Class B waters are suitable for swimming and other forms of water-based recreation and irrigation of crops and other agricultural uses without treatment; good aesthetic value; aquatic biota and wildlife sustained by high quality aquatic habitat; suitable for boating, fishing, and other recreational uses; acceptable for public water supply with filtration and disinfection.

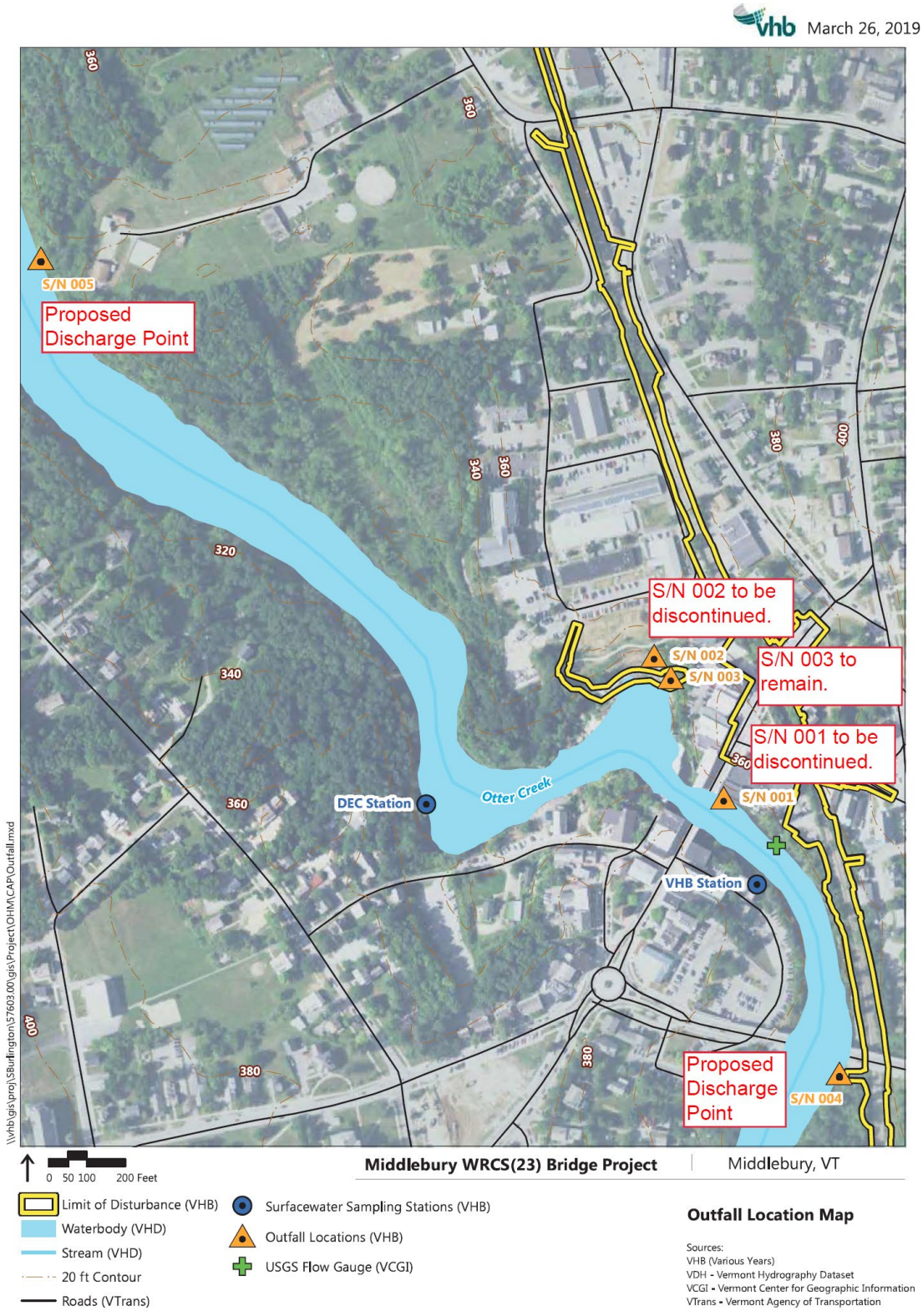
I. Proposed Action, Type of Facility, and Discharge Location

The Secretary of the Vermont Agency of Natural Resources (Secretary) received an application to amend the discharge permit from the above-named applicant on April 8, 2019. The facility is engaged in the treatment of comingled groundwater and stormwater from a construction excavation project. The discharge is from three stormwater outfalls to Otter Creek.

The applicant has requested a decrease in the maximum daily flow limitation for outfall S/N 003 from 0.500 MGD to 0.300 MGD and the addition of two stormwater outfalls, S/N 004 and S/N 005, each with a maximum daily flow limitation of 0.100 MGD. The combined total daily flow limitation for the three outfalls remains at 0.500 MGD. Discharges from S/N 001 and S/N 002 will be discontinued prior to the initiation of flows at S/N 003. No other changes to the current

permit are requested. At this time, the Secretary has made a tentative decision to amend the discharge permit as requested.

Figure 1: Location Map for Stormwater Outfalls to Otter Creek in Middlebury, Vermont



II. Description of Discharge

The facility is engaged in the treatment of comingled groundwater and stormwater from a construction excavation project. The discharge is from treatment systems to remove sediment and contaminants. The discharge will flow through the stormwater collection system in Middlebury to three stormwater outfalls to Otter Creek.

III. Limitations and Conditions

The draft permit contains limitations for flow, Turbidity, Total Suspended Solids, Total Phosphorus, Arsenic, Chromium (III), Lead, and pH. It also contains a monitoring requirement for Volatile Organic Compounds. 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 2-4 of 18
Monitoring Requirements	Pages 2-4 of 18

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 delegated by 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 C.F.R. 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 C.F.R. § 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 C.F.R. § 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).

B. Reasonable Potential Determination

Due to the proposed limits for the pollutants of concern in the discharge, the flow rate of the discharge, and the 7Q10 receiving water flows, there is not a reasonable potential for exceedance of the Vermont Water Quality Standards at these conditions,

The Reasonable Potential Determination is attached to the Fact Sheet as Attachment A. *There only changes resulting from this amendment are minor changes in the location of the discharges with total flow volumes and allowable pollutant loads remaining the same. For these reasons it is not necessary to update the Reasonable Potential Determination memo at this time.*

A review of state listed endangered and threatened species indicates that fluted shell mussels, a Vermont listed endangered species, may be present in the vicinity of the discharge points, and a mussel survey conducted as part of this project's Environmental Assessment confirmed the presence of this species near S/N 003. As a result of this a permit condition has been added to prohibit the use of flocculation polymers. Any proposed use of flocculation polymers or other chemicals used to remove suspended solids will require the review and approval of the Secretary to ensure that the receiving water will not be adversely impacted.

V. Receiving Water

The receiving water for this discharge is Otter Creek, a designated Warm Water Fish Habitat.

VI. Facility History and Background

The Vermont Agency of Transportation has a multi-year construction project in downtown Middlebury to replace two roadway bridges on Main Street and Merchants Row that span the Vermont Railway, Inc. railroad track. The project will replace the two bridges with a single pre-cast concrete box tunnel, and the existing grade of the railroad track will be lowered by approximately 12 feet to accommodate the new tunnel. The grade along the railroad track to the north and south will also be lowered.

Groundwater dewatering from the deeper excavation areas is anticipated to be necessary during construction to maintain a safe working environment. The soil in the project area has been impacted with contaminants associated with the former railroad operations and from a historic gasoline release. The excavation will also proceed through the Middlebury Train Derailment hazardous waste site #2009-3912, related to a 2007 accidental train derailment that occurred between the Otter Creek truss bridge and the Merchants Row bridge. The gasoline spill from the derailment impacted soil, groundwater, and the Otter Creek near the derailment area. This site underwent active remediation in 2009 and 2010, and is currently undergoing natural attenuation. The accumulated groundwater and comingled stormwater in the excavation areas will be pumped and treated in fractionation tanks and sediment filters to remove sediment and contaminants prior to discharge to the stormwater collection system to three stormwater outfalls to Otter Creek.

Outfall S/N 001 is an existing stormwater outfall located at 44.01346N, 73.16843W and is proposed to be used for dewatering operations during Fall 2017 and the 2018 construction season (see Figure 1). Outfall S/N 001 will not be used after Outfall S/N 003 is constructed and becomes operational.

Outfall S/N 002 is an existing stormwater outfall located at 44.01448N, 73.16914W and is proposed to be used for dewatering operations during Fall 2017 and the 2018 construction season (see Figure 1). Outfall S/N 002 will not be used after Outfall S/N 003 is constructed and becomes operational.

Outfall S/N 003 is a new outfall to be located at 44.01433N, 73.16897W and is proposed to be used for dewatering operations during the 2019 and 2020 construction seasons (see Figure 1). Outfall S/N 003 will be installed during the 2018 construction season and will replace Outfalls S/N 001 and S/N 002. There may be multiple treatment trains, each with a fractionation tank and sediment filters, with separate discharges to outfall S/N 003. *The Vermont Agency of Transportation (VTrans) has requested a decrease in the maximum daily flow limitation from 0.500 MGD to 0.300 MGD to accommodate the addition of two stormwater outfalls, each with a flow limitation of 0.100 MGD. The combined total daily flow limitation remains at 0.500 MGD. Based on experience from the 2018 construction season, VTrans is requesting to discharge from existing outfall S/N 003 and two new discharge locations, S/N 004 and S/N 005, simultaneously due to construction logistics.*

Outfall S/N 004 is an existing stormwater outfall located at 44.01146N and 73.16716W and is proposed to be used for dewatering operations beginning in the 2019 construction season.

Outfall S/N 005 is an existing stormwater outfall to be located at 44.01725N and 73.17499W and is proposed to be used for dewatering operations beginning in the 2019 construction season.

Permit Basis and Explanation of Effluent Limitation Derivation

This permit was evaluated under the 2017 Vermont Water Quality Standards

Flow – The draft permit proposes a total daily flow limitation of 0.500 MGD. Monitoring is required daily.

Turbidity – The draft permit proposes an annual average limit of 25 NTU under dry weather base-flow conditions. Monitoring is required daily when a discharge occurs.

Total Suspended Solids (TSS) – The draft permit proposes a monthly average limit of 30 mg/L. Monitoring is required twice per month when a discharge occurs.

Total Phosphorus – The draft permit proposes a monthly average limit of 0.2 mg/L. Monitoring is required twice per month when a discharge occurs.

Arsenic – The draft permit proposes a monthly average limit of 0.03 mg/L. Monitoring is required twice per month when a discharge occurs.

Chromium (III) – The draft permit proposes a monthly average limit of 0.05 mg/L. Monitoring is required twice per month when a discharge occurs.

Lead – The draft permit proposes a monthly average limit of 0.15 mg/L. Monitoring is required twice per month when a discharge occurs.

Volatile Organic Compounds (VOCs) - The draft permit proposes monitoring for VOCs once per month when a discharge occurs.

pH – The pH limitation is proposed at 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards. Monitoring is required twice per month when a discharge occurs.

VII. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit was from August 22, 2019 to September 5, 2019. The Agency received no comments from the public concerning this draft permit.

ATTACHMENT A

Agency of Natural Resources
Department of Environmental Conservation

Watershed Management Division
1 National Life Drive 2 Main
802-828-1535

MEMORANDUM

To: Liz Dickson, Wastewater Program (WWP)

From: Rick Levey, Monitoring, Assessment and Planning Program (MAPP) Rick Levey 09/22/17

Cc: Pete LaFlamme, Director, WSMD
Jessica Bulova, Manager, WWP

Date: September 22, 2017

Subject: VTrans Middlebury Bridge and Rail Project Reasonable Potential Determination Decision

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Project:
VTrans Middlebury Bridge and Rail Project

Hydrology for Middlebury Bridge Project:
Design Flow: 345 GPM= 0.50 MGD = 0.76 CFS
Receiving Water: Otter Creek; 7Q10 = 146 CFS, LMM = 325 CFS

MAPP has evaluated the request to waive the Reasonable Potential Determination for the Middlebury Bridge Project and has determined that it is not necessary due to the size of the discharge and the significant available dilution of the receiving water which is the Otter Creek. The proposed discharge is for construction-phase dewatering of groundwater and stormwater accumulating in excavation areas. Pre-Construction groundwater monitoring identified arsenic and lead as contaminants of concern.

The Middlebury Bridge Project proposed industrial discharge is permitted to discharge 0.50 MGD (0.76 CFS). The available dilution of the Otter Creek at critical 7Q10 flow of 146 CFS provides sufficient dilution to prevent exceedances of VWQS. Specifically, the Instream Waste Concentration (IWC) at full discharge is calculated to be 0.5 percent, this relates to 1:200 dilution.

Total Phosphorus:
At maximum discharge flow (0.5 MGD), and at permit limit of 0.2 mg/L-TP, the calculated TP concentration at LMM flow (325 cfs) attributable to the discharge is 0.46 µg/L-TP; less than 1 microgram TP, a very minor nutrient addition that is within the analytical error of phosphorus analysis for surface waters. The TP concentrations within this section of the Otter Creek average 38 µg/L-TP.

Sediment, Hardness and Metals:
Instream total suspended solids were calculated using the 7Q10 of 146 CFS at design flow of 0.76 CFS (0.5 MGD), assuming the maximum permit limit of 30 mg/L-TSS. The calculated suspended sediment concentration at these conditions is 0.15 mg/l, indicating a very slight increase of instream ambient suspended sediment concentrations in receiving waters.

The proposed limits for lead (Pb) and other metals of concern will not pose a risk to the receiving waters. To illustrate, using the proposed limit of 150 µg/L for lead (Pb) at maximum flow (0.50 MGD) the calculated Pb concentration attributable to the discharge is 0.75 µg/L- Pb, this is about 1/3 of the most stringent chronic criteria for Pb which is 1.92 µg/L-Pb at receiving water hardness of 78 mg/L-CaC03.

Conclusion:
The calculations shown above also illustrates the deminimus impact other pollutants within this discharge would pose to receiving waters, and the proposed permit limits provide further assurance that VWQS will not be exceeded. Considering these factors, MAPP concurs with the Wastewater Program that this project and its discharge as proposed and permitted, does not have the potential to cause measurable change in the receiving water.