



Vermont Department of Environmental Conservation

Watershed Management Division

1 National Life Drive, Main-2

Montpelier VT 05620-3522

Agency of Natural Resources

[phone] 802-828-1535

[fax] 802-828-1544

February 18, 2015

City of Burlington
Department of Public Works
Attn: David Allerton
645 Pine Street
Suite A
Burlington, VT 05402

RE: Discharge Permit No. 3-1558: Moran Plant - Treated Groundwater Discharge

Dear Mr. Allerton,

Enclosed is your copy of Discharge Permit No. 3-1558 which has been signed on behalf of the Commissioner of the Department of Environmental Conservation. This permit authorizes the discharge of treated groundwater from remediation and dewatering activities at former Moran Plant, Lake Street, Burlington, VT to Lake Champlain.

Please review the permit carefully and make note of the effluent limitations, monitoring requirements, and other special conditions.

We did not receive any comments on this draft permit during the public notice period. However as discussed, the effluent limitations for tetrachloroethylene and trichloroethylene have been slightly adjusted to meet the current version of the Vermont Water Quality Standards.

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

Sincerely,

A handwritten signature in blue ink that reads "Ernest F. Kelley".

Ernest F. Kelley, Manager

Wastewater Management Program

attachments

cc.

Norman Baldwin, City of Burlington Dept. of Public Works

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.: 3-1558
PIN: EJ15-0004
NPDES No.: VT0120036

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 Burlington
Department of Public Works
645 Pine Street
Suite A
Burlington, VT 05402

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

"Moran Plant"
Lake Street
Burlington, Vermont

to Lake Champlain, Class B at the point of discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

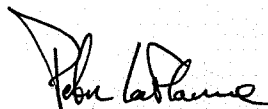
This permit shall become effective on the date of signing.

This permit and the authorization to discharge shall expire on December 31, 2019.

State of Vermont
Agency of Natural Resources

David K. Mears, Commissioner
Department of Environmental Conservation

BY:



Digitally signed by Pete
LaFlamme
DN: cn=Pete LaFlamme
Date: 2015.02.17 14:14:37
-05'00'

Peter LaFlamme, Director
Watershed Management Division

PART I.**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. From the date of signing through December 31, 2019, the Permittee is authorized to discharge from outfall serial number S/N 001: treated contaminated groundwater from remediation and dewatering activities at the former "Moran Plant" to Lake Champlain. Such discharges shall be limited and monitored by the Permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow	See ⁽¹⁾ below	864,000 gpd ⁽¹⁾	Daily	Total Flow
Tetrachloroethylene	0.69 ug/l ⁽²⁾		1 x week	Grab
Trichloroethylene	2.5 ug/l ⁽²⁾		1 x week	Grab
Total Arsenic		Monitor only ⁽³⁾	1 x week	Grab
Total Zinc		Monitor only ⁽³⁾	1 x week	Grab
pH		6.5 to 8.5 SU	1 x week	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken after treatment and prior to discharge to waters of the State and prior to mixing with other discharges.

- ⁽¹⁾ The monthly average flow is expect to be approximately 660,000 gpd but is dependent on groundwater conditions. The treatment system is designed to treat a maximum of 864,000 gpd. Flow shall be measured at the flow meter, prior to mixing with other discharges.
- ⁽²⁾ If sample results indicate that the effluent does not meet the specified limitations an additional effluent sample shall be collected immediately and analyzed for tetrachloroethylene and trichloroethylene.
- ⁽³⁾ Based upon the results of this monitoring, the Agency may reopen this permit and establish effluent limitations.

2. Influent Monitoring

The permittee shall monitor the influent to the treatment system for the parameters listed in Condition I.A., excluding flow, above at a minimum frequency of twice per month.

3. Special Conditions:

- a. The permittee shall replace the first carbon adsorption canister prior to breakthrough of dissolved hydrocarbons. The time of breakthrough shall be calculated based on flow data developed from pump tests and analysis of untreated contaminated groundwater (influent). The calculated breakthrough time shall be utilized as a schedule for replacing and rotating the carbon adsorption units unless ongoing analyses demonstrate that a different breakthrough time interval is appropriate in order to meet the effluent limitations specified in Part I.A.1 above. The dates of carbon canister replacement shall be reported on form WR-43.
- b. Should this discharge exceed the effluent limitations specified in Part I.A.1 above at any time, then permittee shall:
 1. Notify the Wastewater Management Program within 24 hours;
 2. Submit a written report within 5 days detailing the reason(s) for the violation and the procedures to be employed so that the discharge will once again be in compliance with the effluent limitations; and
 3. The Wastewater Management Program will evaluate the situation on a case-by-case basis and may require the Permittee to cease discharging until such time as treatment has been restored to a level that will consistently meet the effluent limitations.
- c. The discharge shall not cause erosion or contain sediment which causes or contributes to a violation of water quality standards of the receiving water.
- d. The discharge shall not contain a visible sheen, foam, or floating solids at any time.
- e. The discharge shall not cause a visible discoloration of the receiving water.
- f. The discharge shall not cause or contribute to a violation of water quality standards of the receiving water.

B. REAPPLICATION

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

Reapply for a Discharge Permit by **June 30, 2019**.

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 the 40 C.F.R. Part 136.

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

2. Reporting

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

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

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

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

All reports shall be signed:

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

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

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

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 Discharge Monitoring Report form WR-43. Such increased frequency shall also be indicated.

PART II

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

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

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

- a. breakdown or maintenance of waste treatment equipment (biological and 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),
- b. accidents caused by human error or negligence, or
- c. any unanticipated bypass or upset which exceeds any effluent limitation in the permit;
- d. violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or
- e. other causes such as acts of nature,

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

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

3. Operation and Maintenance

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

- a. The Permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment and control facilities and systems (and

related appurtenances) installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

- b. The Permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to 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 analyze any additional samples as may be required by the Secretary to ensure analytical quality control.

5. Bypass

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

6. Duty to Mitigate

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

7. Records Retention

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

period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

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

9. Emergency Pollution Permits

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

10 V.S.A. § 1268 reads as follows:

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

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

- (5) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant.”

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

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 Clean Water Act, any substances or parameters at any location.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to

the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary **at least 30 days in advance of the proposed transfer date**. The notice to the Secretary shall include a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit

This request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
 - i.. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.
 - ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.
 - iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c. The date of the sale or transfer.

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

3. Confidentiality

Pursuant to 10 V.S.A. § 1259(b):

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

Claims for confidentiality for the following information will be denied:

- a. The name and address of any permit applicant or permittee;

- b. Permit applications, permits, and effluent data; and
- c. Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

4. Permit Modification, Suspension, and Revocation

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

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

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

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

5. Toxic Effluent Standards

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

6. Oil and Hazardous Substance Liability

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

7. Civil and Criminal Liability

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

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.

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.

PART 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 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 a treatment facility.

The Clean Water Act - The federal Clean Water Act, as amended.

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 limitation expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

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

Department – The Vermont Department of Environmental Conservation.

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

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

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

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

Major Contributing Industry - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the 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.

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

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

FACT SHEET
(January 2015)

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

NPDES NO: VT0120036
PERMIT NO: 3-1558
PROJECT ID NO: EJ15-0004

NAME AND ADDRESS OF APPLICANT:

City of Burlington
Department of Public Works
645 Pine Street
Suite A
Burlington, VT 05402

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

“Moran Plant”
Lake Street
Burlington, VT

RECEIVING WATER: Lake Champlain

CLASSIFICATION: Class B. Class B waters are suitable for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection.

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

The above named applicant applied on January 7, 2015 to the Vermont Department of Environmental Conservation for a permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to issue a discharge permit. The applicant is engaged in the extraction and treatment of contaminated groundwater during site remediation and dewatering activities. The discharge is to Lake Champlain.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations and the discharge permit application.

III. Limitations and Conditions

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

Effluent Limitations: Page 2

Monitoring Requirements: Page 2

IV. Receiving Water

The receiving water for this discharge is the “Burlington Bay” segment of Lake Champlain.

V. Permit Basis and Explanation of Effluent Limitation Derivation

The City of Burlington is proposing to extract, treat, and discharge contaminated groundwater during dewatering/remediation activities at the former Moran Plant, Lake Street, Burlington, VT. The groundwater extraction and collection system consists of multiple well points and a pump. The contaminated groundwater will be conveyed to a 20,000 gallon frac tank followed by two treatment trains in series each consisting of a bag filter for particle removal, followed by two carbon canisters for contaminate removal. The treated effluent will then be discharge to Lake Champlain via an existing stormwater outfall.

Flow - The system is designed to extract, treat, and discharge a maximum of 600 gpm (864,000 gpd). It is anticipated that average flow from the facility will be approximately 660,000 gpd but will be dependent on the volume of groundwater that will need to be removed. It is anticipated that the system will discharge continuously during the dewatering operation.

Tetrachloroethylene - Due to past waste disposal practices that occurred at the site, tetrachloroethylene has been detected in the groundwater. Tetrachloroethylene contaminated groundwater will be extracted during the dewatering/remediation activities. The permit establishes a monthly average effluent limitation for tetrachloroethylene of 0.69 ug/l. This limitation is based on Appendix C “Consumption of Water and Organisms” criteria of the Vermont Water Quality Standards. Based on the design of the treatment system, this limitation is obtainable. Sampling is required once per week.

Trichloroethylene – Due to past waste disposal practices that occurred at the site trichloroethylene has been detected in groundwater. Trichloroethylene contaminated groundwater will be extracted during the dewatering/remediation activities. The permit establishes a monthly average effluent limitation for trichloroethylene of 2.5 ug/l. This limitation is based on Appendix C “Consumption of Water and Organisms” criteria of the

Vermont Water Quality Standards. Based on the design of the treatment system this effluent limitation is obtainable. Sampling is required once per week.

Arsenic and Zinc – Elevated concentrations of arsenic and zinc have been detected in the groundwater at some locations within this site. The abnormally high arsenic and zinc in the groundwater could be the result of past waste disposal practices or natural soil and geologic formations. The permit establishes a monitoring requirement for arsenic and zinc. Sampling is required once per week. If the results of this monitoring indicate these pollutants are being detected at a concentration of concern, then the Agency may reopen this permit and establish effluent limitations for these pollutants.

pH – The permit establishes a pH limitation of 6.5 - 8.5 Standard Units. This limitation is based on the Vermont Water Quality Standards. Sampling is required once per week.

Anti-Degradation

This discharge is the result of site remediation activities design to remove contaminated groundwater from a listed hazardous waste site. Per Section III.C.1 of the Agency's "Interim Anti-Degradation Implementation Procedure" dated October 12, 2010, this discharge does not trigger the Anti-Degradation requirements of the Vermont Water Quality Standards.

Discharge Criteria

Per Section 1-04.A of the Vermont Water Quality Standards, new discharges of wastes may be allowed only when all the following criteria are met:

1. The proposed discharge is in conformance with all applicable provisions of these rules including classification of the receiving waters adopted by the Board as set forth in Chapter 4 of these rules.
2. There is neither an alternative method of waste disposal, nor an alternative location for waste disposal, that would have a lesser impact on water quality including the quality of groundwater, or if there is such an alternative method or location, it would clearly unreasonable to require its use.
3. The design and operation of any waste treatment or disposal facility is adequate and sufficiently reliable to ensure the full support of uses and to ensure compliance with these rules and with all applicable state and federal treatment requirements and effluent limitations.
4. Except as provided for in 10 V.S.A. 1259(d) and (f), the discharge of wastes other than nonpolluting wastes and stormwater is prohibited in Class A waters regardless of the degree of treatment provided.
5. Except as provided for in 10 V.S.A. 1259, the discharge of wastes that, prior to treatment, contained organisms pathogenic to human beings is prohibited.
6. The receiving waters will have sufficient assimilative capacity to accommodate the proposed discharge.
7. Assimilative capacity has been allocated to the proposed discharge consistent with the classification set forth in Chapter 4 of these rules.
8. The discharge of wastes to the thermocline or hypolimnion of any lake in manner that may prevent full support of uses is prohibited.

9. The discharge of sewage into Class B waters shall not pose more than a negligible risk public health. Compliance with this criterion shall include as assessment of both the level and reliability of treatment achieved and the impact of the discharge on the water quality of the receiving waters.

The Agency finds that these criteria have been met. Specifically,

1. The discharge conforms with the classification of the receiving water.
2. Due to the volume of water, geologic formations, and site limitations, infiltration or spray irrigation is not a feasible alternative for disposal of this wastewater. In addition discharging this wastewater into the Burlington Main wastewater treatment facility would require extensive sewer line construction and could cause excessive flows into the WWTF during peak loading periods. Therefore, the only alternative is to discharge this wastewater to waters of the State.
3. Based on the current design of the facility and the permitted effluent limitations, the pollutants in this discharge meet the Vermont Water Quality Standards and will not result in any measurable change in the receiving water and will ensure full support of all uses.
4. The discharge is not to a Class A water.
5. The discharge, prior to treatment, does not contain organisms pathogenic to humans.
6. Adequate assimilative capacity exists to accommodate this discharge.
7. See 6 above.
8. While the receiving water is Lake Champlain, the discharge enters the lake via an existing shoreline outfall and is not to the thermocline or hypolimnion portion of the lake.
9. The discharge does not contain sewage

VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from January 16, 2015 through February 16, 2015, during which time interested persons may submit their written views on the draft permit.

All written comments received by 4:30 PM on February 16, 2015, will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department. Written comments should be sent to:

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

Comments may also be faxed to: 802-828-1544 or submitted by e-mail using the e-mail provisions included at <http://www.anr.state.vt.us/dec/waterq/ww/html/notices.htm>

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

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

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

No comments were received during the public comment period.