



Vermont Department of Environmental Conservation
Watershed Management Division
103 South Main Street, Building 10 North
Waterbury, VT 05671-0408

Agency of Natural Resources

[phone] 802-241-3777
[fax] 802-338-4890

September 25, 2012

Kurt Motyka
City of Montpelier
Department of Public Works
39 Main Street
Montpelier, VT 05602

Re: 1272 Order No. 3- 1207-A4: Effectiveness Assessment

Dear Mr. Motyka,

Enclosed is your copy of the above referenced 1272 Order which has been signed on behalf of the Commissioner of the Department of Environmental Conservation.

The Order establishes a schedule which requires the City to complete and submit a Combined Sewer Overflow Effectiveness Study by December 31, 2013. This Study must assess the combined sewer overflow (CSO) work completed to date and include a plan to achieve compliance with the Vermont Combined Sewer Overflow Control Policy at the remaining overflow points.

If you have any questions, please feel free to Randy Bean at 802 338-4809.

Sincerely,

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

Ernest F. Kelley, Manager
Wastewater Management Program

Enclosure

cc:

Todd Law, City of Montpelier
Liz Dickson, VT DEC WWMD
Mari Cato, VT DEC WWMD

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1272 ORDER No. 3-1207-A4

In The Matter of:

City of Montpelier
City Hall
39 Main Street
Montpelier, Vermont 05602

In accordance with the provisions of 10 V.S.A. Section 1272, the Secretary ("Secretary") of the Agency of Natural Resources ("Agency") makes the following:

FINDINGS OF FACT

- A. The City of Montpelier ("Montpelier") owns and operates a combined sewage collection system which collects both sanitary sewage and stormwater runoff.
- B. During storm events, overflows containing untreated sanitary sewage can discharge to the Winooski River and North Branch River at several locations within the sewer system (see Attachment A.). These discharges constitute public health and environmental hazards. Based on current records, these overflows occur during certain storm events but do not occur during dry weather conditions.
- C. The discharge from the combined sewer overflows containing untreated sanitary sewage is in violation of the 10 VSA Chapter 47, the Vermont Water Quality Standards, Section 3-04(B)(3), and Discharge Permit No. 3-1207.
- D. A preliminary engineering assessment, conducted for Montpelier by Dufresne-Henry, Inc. and submitted to the Agency on December 31, 1992, determined that the optimum alternative for elimination of the combined sewer overflow discharges is separation of the stormwater and sanitary collection systems.
- E. An amendment to the preliminary engineering assessment was submitted to the Agency on December 15, 1993, and identified a two phased separation of the stormwater and sanitary collection systems as the most feasible method of eliminating the combined sewer overflow discharges.

- F. Montpelier completed Phase I of the combined sewer overflow elimination project in 1998.
- G. Montpelier completed Phase II of the combined sewer overflow elimination project in August 2004.
- H. During the summer and fall of 2004 and the spring of 2005, Montpelier conducted an "Effectiveness Study" to verify if the combined sewer overflow elimination project had resulted in compliance with the Vermont Combined Sewer Overflow Policy, June 1990 (CSO Policy).
- I. The Effectiveness Study indicated that CSO 002, CSO 017, and CSO 024 were no longer active and could be eliminated.
- J. The Effectiveness Study also indicated that the combined sewer overflow elimination project had not resulted in compliance with the CSO Policy.
- K. The Effectiveness Study indicated that CSO 001, CSO 003, CSO 007, CSO 008, and CSO 023 are still actively discharging during smaller storm events than is specified in the CSO Policy.
- L. Further investigations into the possible causes of these overflow events revealed that the 36" trunk sewer line from the siphon structure located in CSO 023 near the Bailey Avenue bridge to the wastewater treatment facility was partially filled with accumulated sand and sediment deposits. Also the section of the trunk line from the Bailey Avenue bridge to the "North Branch" river crossing had substantial amounts of accumulated sand and sediment deposits. This accumulated material restricted the flow in the sewer line and created or contributed to overflow events occurring at CSO 001, CSO 003, CSO 007, CSO 008, and CSO 023.
- M. Montpelier conducted a phased cleaning of the trunk sewer line. Montpelier cleaned the section from the Bailey Avenue bridge to the Montpelier wastewater treatment facility in the summer of 2005 and the section from the Bailey Avenue bridge to the "North Branch" river crossing during the summer of 2006. In addition, Montpelier physically eliminated CSOs 002, 0017, and 024.
- N. During the summer of 2006 Montpelier also discovered an old stone box culvert which was conveying a significant volume of groundwater and runoff from a pond into the sewer collection system in the subcatchment for CSO 009. Montpelier eliminated the old stone box culvert on November 9, 2006.
- O. Based upon limited monitoring after the completion of the trunk line cleaning and elimination of the old stone box culvert from the collection system, it was presumed that CSO 009 and CSO 013 could be physically eliminated from the collection system. Additionally the storm drain outfall of CSO 001 from the overflow

structure to the river was full of sediment and needed cleaning to prevent the backup of stormwater into the sanitary sewer collection system.

- P. The Effectiveness Study also noted that in order to protect the sewer siphons and pumps stations in the collection system and private property in Montpelier, the overflow structures for CSOs 001, 003, 007, 008, and 023 will need to be maintained.
- Q. On January 8, 2008, the Agency issued 1272 Order No. 3-1207A-2 to Montpelier which required elimination of CSO 009 and CSO 013 and the cleaning of the storm drain outfall of CSO 001 by December 31, 2008.
- R. On February 1, 2008, Discharge Permit No. 3-1207 and 1272 Order 3-1207A-2 were appealed to the Environmental Court.
- S. On June 26, 2008, Montpelier informed the Agency that CSO 013 had been physically plugged and the discharge eliminated. However, due to the potential to cause a sewage backup in adjacent buildings, CSO 009 could not be blocked without additional abatement work. In addition, due to a collapse of the storm drain outfall at CSO 001, extensive excavation work was necessary to repair the outfall.
- T. On July 22, 2008, the Environmental Court dismissed the appeal of 1272 Order 3-1207A-2, however the appeal of Discharge Permit No. 3-1207 remained in effect.
- U. On June 30, 2009, the Environmental Court issued a decision on a Cross Motion for Summary Judgment with respect to the appeal of Discharge Permit No. 3-1207.
- V. On August 10, 2009, an interlocutory review of the June 30, 2009 decision of the Environmental Court was granted.
- W. On October 26, 2011, the Vermont Supreme Court remanded the interlocutory review of the June 30, 2009 decision of the Environmental Court back to the Environmental Court.
- X. On November 8, 2011, the Environmental Court remanded the pending NPDES permit application back to the Agency.
- Y. On May 16, 2012, at the request of the Agency, Montpelier provided an update of the status of the CSO abatement project to the Agency. While Discharge Permit No. 3-1207 was in litigation, Montpelier had:
 - 1. Repaired the collapsed outfall line at CSO 001;
 - 2. Raised the height of the overflow weirs at CSO 001 and CSO 008 approximately 3”;

3. Completed combined sewer separation work on Richardson Street, Graham Terrace, Main Street, Lower State Street, Arsenal Drive, and McKinley Street;
 4. Routinely cleaned siphon lines and problematic areas of the collection system; and
 5. Monitored CSO 001, 003, 007, 008, 009, and 023 for overflow frequency during April through October.
- Z. To assess the impact of this recent work in eliminating or reducing overflows, it is necessary to conduct a study to determine effectiveness of this work and to develop a strategy to ensure the remaining CSOs are eliminated or achieve compliance with the CSO Policy in a timely and efficient manner.
- AA. It is estimated that it will take approximately 18 months to collect and correlate additional overflow and precipitation data to properly assess the effectiveness of this recent work.
- BB. Without the implementation of the methods and procedures set forth in this Order, it can reasonably be expected that the overflows from CSO 001, 003, 007, 008, 009, and 023 to the North Branch and the Winooski River will continue to create or cause a discharge of untreated sewage to waters of the State in violation of 10 V.S.A. Chapter 47.

In accordance with the provisions of 10 V.S.A. Section 1272, the Secretary, based on the findings of fact above, hereby issues the following Order to establish methods and procedures to eliminate or control these discharges:

ORDER

1. **By no later than December 31, 2013**, Montpelier shall conduct a study and submit a report to the Agency which shall:
 - a. Assess the effectiveness of all the combined sewer overflow abatement projects completed to date. This study shall include an assessment of the frequency of the overflow events at all remaining CSO outfalls and specifically determine whether the remaining CSO outfalls comply with design storm conditions contained in the CSO Policy.
 - b. Recommend the most cost effective and efficient approach for achieving compliance with the CSO Policy for all remaining CSO outfalls (CSO 001, 003, 007, 008, 009, and 023) that do not comply with CSO Policy.

- c. Provide a ranking of the remaining CSO outfalls that do not comply with CSO Policy based on the remaining abatement work necessary to comply with the CSO Policy and develop schedule to complete the remaining work.
2. The report referenced in Condition 1 above shall be submitted to:

Agency of Natural Resources
Watershed Management Division
Building 10 N, 103 South Main Street
Waterbury, VT 05671-0408

3. Subsequent to the Agency's review of the reports required in Condition 1 above, this Order shall be amended to include a schedule for financing, submission of final engineering plans, and annual construction activities for completion of the additional combined sewer overflow abatement necessary to achieve compliance with the CSO Policy.
4. Montpelier shall continue to implement the following controls to reduce the combined sewer overflow discharge and their effects on the quality of the receiving water:
 - a. implementation of proper operation and regular maintenance programs for the sewer system and the combined sewer overflow such as routine catch-basin, sewer, and interceptor cleaning;
 - b. maximizing the use of the collection system for storage;
 - c. maximizing wet-weather flow to the wastewater treatment facility;
 - d. elimination of any discharge from the combined sewer overflow during dry weather.
 - e. control of solid and floatable material in the combined sewer overflow;
 - f. pollution prevention programs such as litter control and street sweeping to reduce the contaminants in the combined sewer overflow discharge;
 - g. implementation of a public notification process to ensure that the public receives adequate notification of when and where a combined sewer overflow discharge occurs; and
 - h. monitoring to characterize the impacts of the combined sewer overflow discharge and to determine the effectiveness of these controls
5. The State of Vermont and the Agency reserve continuing jurisdiction to ensure future compliance with all statutes, rules, and regulations applicable to the facts and violations set forth above.
6. Nothing in this Order shall be construed as having relieved, modified, or in any manner affected Montpelier's on-going obligation to comply with all other federal, state, or local statutes applicable to Montpelier nor does it relieve Montpelier of the obligation to obtain all necessary federal, state, and local permits.

7. The Agency, in issuing this Order, accepts no legal responsibility for any damage, direct or indirect of whatever nature and by whoever suffered arising out the activities described.
8. This Order is not a resolution of any enforcement action that may be pending, contemplated, or initiated in this matter.
9. This Order does not grant any exclusive rights or privileges which would impair any rights possessed by any riparian owners of the State of Vermont.
10. This Order does not grant any right, title, or easement to or over any land not owned in fee by Montpelier nor does it authorize any damage to private property or invasion or private rights or violation of Federal, State, or local laws and regulations.
11. Montpelier shall allow access to Agency representatives, upon presentation of proper credentials, to inspect this facility and subject site and sample any discharge(s) or receiving waters as necessary to assess compliance with this Order and applicable law related to water quality.
12. Pursuant to 10 V.S.A. Chapter 220, any appeal of this Order must be filed with the clerk of the Environmental Court with 30 days of the date of this Order. The filing of an appeal does not stay this Order. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The address for the Environmental Court is: 2418 Airport Road - Suite 1, Barre, Vermont 05641, tel (802) 828-1660.
13. This Order shall be effective upon the date of signing and shall remain in effect until such time as the activities governed under this Order are completed or until such time the Agency rescinds this Order or issues a subsequent Order, whichever occurs first.

State of Vermont
Agency of Natural Resources

David K. Mears, Commissioner
Department of Environmental Conservation

BY:



Digitally signed by Peter LaFlamme
DN: cn=Peter LaFlamme, o=VTDEC,
ou=Watershed Management Division,
email=pete.laflamme@state.vt.us, c=US
Date: 2012.09.25 12:11:07 -04'00'

Peter LaFlamme, Director
Watershed Management Division

Attachment A

Serial Number S/N 002: Combined Sewer Overflow # 001
Location: Taylor Street bridge abutment
Receiving Water: Winooski River

Serial Number S/N 004: Combined Sewer Overflow # 003
Location: Bailey Avenue
Receiving Water: Winooski River

Serial Number S/N 007: Combined Sewer Overflow # 007
Location: near Railroad Bridge
Receiving Water: North Branch River

Serial Number S/N 008: Combined Sewer Overflow # 008
Location: 100 feet south of CSO #007
Receiving Water: North Branch River

Serial Number S/N 009: Combined Sewer Overflow # 009
Location: Main Street near Baird Street
Receiving Water: North Branch River

Serial Number S/N 014: Combined Sewer Overflow # 023
Location: Bailey Avenue Bridge
Receiving Water: Winooski River