STATE OF VERMONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1 NATIONAL LIFE DRIVE, MAIN 2 MONTPELIER, VT 05620-3522

1272 ORDER - Discharge Permit No. 3-1225

IN THE MATTER OF:

Town of Hartford 171 Bridge Street White River Junction, VT 05001

In accordance with the provisions of 10 V.S.A. § 1272 and the Combined Sewer Overflow Rule (Environmental Protection Rule, Chapter 34), the Secretary (Secretary) of the Vermont Agency of Natural Resources (Agency) makes the following findings of fact. The definitions in the Combined Sewer Overflow Rule shall apply to this Order.

FINDINGS OF FACT

- (1) The Town of Hartford (Hartford) owns and operates the Hartford- White River Junction Wastewater Treatment Facility (WWTF), which collects and treats both sewage and stormwater.
- (2) The WWTF is authorized to discharge treated and disinfected wastewater into the Connecticut River under the terms and conditions of Discharge Permit No. 3-1225.
- (3) Discharge Permit No. 3-1225, Attachment B, contains a list of combined sewer overflow (CSO) outfalls within the collection system. During certain storm events, these CSO outfalls discharge untreated sewage to the Connecticut River. Such discharges adversely affect the quality of waters of the State and create public health concerns.
- (4) The discharges from these CSO outfalls violate 10 V.S.A. Chapter 47, the Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1225.
- (5) In 1988 Hartford had six CSO outfalls. The outfalls included: S/N 002, S/N 003, S/N 004, S/N 005, S/N 006, and S/N 007.
- (6) May 26, 1988, the Agency issued 1272 Order No. 3-1225 to Hartford. The Order required Hartford to conduct a preliminary engineering study for eliminating the CSOs and to submit the results to the Agency by April 1, 1989.
- (7) November 28, 1988, Hartford submitted a preliminary engineering study to the Agency that identified sewer separation as the most feasible alternative for eliminating the CSOs.

Specifically, the study proposed a four-phased sewer separation project consisting of construction of the following:

Phase I: 8,530 linear feet of storm sewer in Wilder.

Phase II: 3,620 linear feet of storm sewer in White River Junction south of the White River.

Phase III: 2,890 linear feet of storm sewer in Hartford Village.

Phase IV: 8,190 linear feet of storm sewer in White River Junction north of the White River.

- (8) On May 6, 1993, the Agency issued Amended 1272 Order No. 3-1225 to Hartford. The Order specified a schedule to complete the four-phased CSO elimination project. The Order required that Phase I of the project be completed by December 31, 1993, Phase II and Phase III be completed by December 31, 1994, and Phase IV be completed by December 31, 1995.
- (9) Hartford completed Phases I through III of the CSO elimination project as required. CSO S/N 005 was eliminated in June 1998.
- (10) Phase IV of the CSO elimination project was not completed as required. A major contributor of stormwater to the CSOs proposed for elimination in Phase IV was the Agency of Transportation (AOT) drainage system associated with Route 5. The schedule for conducting this phase of the CSO elimination project was planned to match the AOT's planned highway work for this segment of road. The scheduled highway work on this road segment was repeatedly delayed.
- (11) On February 11, 2002, the Agency issued Amended 1272 Order No. 3-1225 to Hartford. The Order specified a schedule to complete Phase IV of CSO elimination project by December 31, 2003.
- Ouring the summer of 2003, the Agency received correspondence from Hartford indicating that Phase IV of the CSO project would not be completed on time due to delays in the Route 5 highway work. Therefore, Phase IV of the CSO project was not completed by December 31, 2003.
- (13) On July 12, 2004, the Agency issued a NOAV to Hartford for failure to complete Phase IV of the CSO elimination project by December 31, 2003.
- (14) During the summer of 2004, discussions were held between the Town of Hartford and the Agency regarding the remaining CSO project and the contributions of stormwater to the sewer collection system from AOT's drainage system along Route 5.

- (15) An Emergency Order was issued on December 7, 2005 requiring the Town to complete construction of the "Tafts Flat" section of the Phase IV CSO elimination project to eliminate overflows from CSOs S/N 006 and S/N 007 generated by a 24 hour, 2.5-inch rainfall event in accordance with the Vermont Combined Sewer Overflow Control Policy, June 30, 1990.
- (16) The December 7, 2005 Emergency Order required the submittal of an effectiveness study for CSOs S/N 002, S/N 003, and S/N 004 by December 31, 2008 and for CSOs S/N 006 and S/N 007 by December 31, 2010.
- (17) The December 2008 effectiveness study for CSOs S/N 002, S/N 003, and S/N 004 found the Passumpsic Avenue Pump Station (S/N 002) to be in compliance with the 1990 CSO Control Policy and recommended that monitoring be discontinued. However, due to overflows that occurred during the monitoring period, the Wilder Pump Station (S/N 003) and Nutt Lane (S/N 004) overflow locations did not meet compliance with the 1990 CSO Control Policy. The effectiveness study recommended that the Town evaluate alternatives for abatement of CSO events at S/N 003.
- (18) The December 31, 2010 effectiveness study indicated that overflows were greatly reduced due to the completion of the Tafts Flat project. The Town also discovered an 8" flow restrictor in the sewer line and evaluated options to modify this structure. In a letter, dated March 8, 2011, the State allowed the Town to remove the restriction, monitor the overflows, and provide results of the additional monitoring by September 12, 2012. The State granted the Town an extension until September 30, 2013 due to a lack of storm events to correlate rainfall and overflow events.
- (19) An updated effectiveness study for the Wilder pump station (S/N 003) and Nutt Lane (S/N 004) was received by the Agency on August 24, 2010. This study suggested the Town continue to monitor both of these overflow locations.
- (20) An updated effectiveness study for CSO S/N 006 and S/N 007 was received by the Agency on September 30, 2013. This study suggested the Town continue to monitor both overflow locations.
- (21) On January 9, 2014, the Town was informed the September 2013 effectiveness study indicated that while the "storm-size" criteria mandated in the 1990 CSO Control Policy had been met, the "storm intensity" criteria had not been. Therefore, per Condition I.A.5.b of Discharge Permit 3-1225, the Agency could not grant the increased flows requested by the Town.
- (22) The Town submitted a letter dated October 2, 2015 providing additional information to make a final determination of S/Ns 006 and 007 compliance with the 1990 CSO Control Policy.
- (23) On October 6, 2015, the Agency determined S/Ns 006 and 007 were complaint with the

1990 CSO Control Policy and the Hartford - White River Junction Wastewater Treatment Facility upgrade and expansion was considered complete and the effluent limits specified in Condition I.A.2 became effective. Specifically, the annual discharge flow was increased from 1.215 MGD to 1.450 MGD.

- In June 2016 a Combined Sewer Overflow Effectiveness Study Update S/Ns 006 and 007 was submitted to the Agency. This study concluded that no overflows were recorded at either location in the past two years and the separation work completed by the Town and the resulting flow removed for the design storm event should be sufficient to abate the overflows for up to the design storm event, bringing both of these overflows into compliance with the 1990 CSO Control Policy.
- (25) Notwithstanding any prior determinations that S/Ns 002, 006, and 007 were in compliance with the 1990 CSO Control Policy, which was superseded by the Combined Sewer Overflow Rule, all discharges from CSO outfalls must be in compliance with the Combined Sewer Overflow Rule, 10 V.S.A. Chapter 47, the Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1225.
- Without the implementation of the requirements set forth in this Order, it can reasonably be expected that the overflows from Hartford's remaining CSO outfalls S/N 002, S/N 003, S/N 004, S/N 006, and S/N 007 to the Connecticut 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, the VWQS, and Discharge Permit No. 3-1225.

ORDER

Based on the foregoing findings of fact, the Secretary issues the following Order, under 10 V.S.A. § 1272 and the Combined Sewer Overflow Rule (Environmental Protection Rule, Chapter 34), to ensure all remaining CSOs in Hartford are brought into compliance with the applicable requirements of state and federal law, including the VWQS.

- (I) **Initial Assessment.** The municipality shall conduct an assessment of the CSO outfalls listed in Discharge Permit No. 3-1225 and submit a report of this assessment to the Secretary **within 60 days of the date of this Order**, including at a minimum:
 - (1) A list of all CSO outfalls, including their latitude and longitude and current status (active or closed),
 - (2) For any closed CSOs, the date and method of closure,
 - (3) The date of the most recent overflow event for each CSO,
 - (4) The type of CSO monitoring used and protocol for checking CSOs following a storm event, and
 - (5) Current or planned projects at CSO outfalls.

- (II) **Minimum Controls**. The municipality shall implement the minimum technology-based requirements below, known as the "Minimum Controls," which are designed to maximize pollutant capture and minimize impacts to water quality:
 - (1) Proper operation and regular maintenance programs for collection systems and CSO outfalls;
 - (2) Maximum use of the collection system for storage without endangering public health or property, or causing solids deposition problems;
 - (3) Review and modification of pretreatment requirements to assure that CSO impacts are minimized:
 - (4) Maximization of flow to the treatment plant for treatment consistent with an evaluation of alternative treatment options;
 - (5) Prohibition of CSOs during dry weather;
 - (6) Control of solid and floatable materials in CSOs;
 - (7) Establishment of pollution prevention programs to minimize contaminants in CSOs;
 - (8) Public notification to ensure that the public receives adequate notification of CSOs and CSO impacts, which shall, at a minimum, comply with § 34-404 of the Combined Sewer Overflow Rule (Environmental Protection Rule, Chapter 34);
 - (9) Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls, which shall include at a minimum:
- (A) The municipality shall define through monitoring, modeling, and other means, as appropriate, the sewer system, the response of the system to a range of precipitation events that encompasses the 5-year design storm, the characteristics of the overflows, and the water quality impacts that result from CSOs. To comply with the foregoing requirement, the municipality shall, at a minimum:
- (i) Establish and maintain a precipitation monitoring system. The system must provide unique precipitation amounts specific to individual CSO subcatchments. Such a system does not necessarily demand a precipitation recording device for each CSO outfall. Precipitation measurements shall be to the nearest 0.01 inches, continuous at a five-minute interval over the duration of a storm event, and indexed to time and date. If establishing a physical precipitation monitoring system, the municipality shall work to minimize impacts of wind and surrounding trees and buildings that may hinder the accuracy of precipitation recording devices. If a municipality proposes to use a system other than a physical precipitation monitoring system, the municipality shall get prior approval from the Secretary.
- (ii) Establish a CSO flow monitoring system. At a minimum, the municipality shall install a tell-tale block in each overflow structure and check the block after every precipitation/runoff event.
- (B) The municipality shall submit to the Secretary, by no later than January 31st of each year, a report on CSO control project(s) of the previous calendar year. The Secretary will

use the information from the report to monitor the progress on implementation of CSO control project(s). The municipality shall report progress on:

- (i) Compliance with the Minimum Controls;
- (ii) The condition and operation of the CSS;
- (iii) The frequency, duration, and magnitude of the precipitation events leading to CSOs from the system in the past year and a comparison to prior years;
- (iv) The frequency, duration, and magnitude of all CSOs from the system in the past year and a comparison to prior years;
- (v) The overall status of the Long Term Control Plan (LTCP); and
- (vi) Key CSO control accomplishments, highlighting those that reduced the frequency and magnitude of CSOs; projects under design; and construction that occurred in the previous year.
- (III) **Long Term Control Plan.** The municipality shall create a Long Term Control Plan (LTCP)¹ and submit it to the Secretary **within 18 months of the date of this Order.** In developing a LTCP, the municipality shall employ a public participation process that actively involves the affected public in the decision-making to develop and select the long-term CSO controls. The affected public includes rate payers, industrial users of the sewer system, persons who reside downstream from the CSO outfalls, persons who use and enjoy the downstream waters, and any other interested persons. The LTCP shall, at a minimum, include:
 - (1) An alternatives analysis that shall evaluate the costs and performance of multiple CSO control alternatives, such as:
 - installing a flow metering system for each CSO outfall;
 - reducing stormwater flows through the separation of combined stormwater and sanitary sewer lines;
 - adding storage tanks or retention basins to hold overflow during storm events;
 - expanding the treatment plant capacity;
 - adding screening and disinfection facilities for the overflow;
 - incorporating green stormwater infrastructure to reduce stormwater flow into CSSs to the greatest extent feasible and practical; and
 - providing for disinfection of CSOs at the outfall.
- (2) A detailed list of the selected CSO control projects necessary to bring the CSOs into compliance with the VWQS and a timeline for implementing the projects. Projects shall be prioritized based on the relative importance of adverse impacts upon water quality, including impacts on designated and existing uses. The municipality shall give the highest priority to bringing overflows to "sensitive areas" into compliance with the VWQS.

¹ If the municipality wishes to apply for funding from the State to assist in the creation or implementation of its LTCP, the municipality shall draft all reports, including associated planning documents, according to the PER format.

"Sensitive areas" means designated Outstanding Resource Waters, designated National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters where primary contact recreation occurs, public drinking water intakes or their designated protection areas, and shellfish beds.

- (3) A strategy to ensure that new sources of stormwater and wastewater to the CSS do not increase the volume, frequency, or duration of CSO events through implementation of control measures, such as making reductions in existing sources of stormwater or wastewater to the CSS, creating or increasing storage capacity within the collection system, or other measures approved by the Secretary.
- (4) Measures to address and prevent any documented, recurrent instances of sewage backups or discharges of raw sewage onto the ground surface.
- (5) A financing plan to design and implement the CSO control projects identified pursuant to subsection (III)(2) of this Order.
- (6) Green stormwater infrastructure for stormwater runoff and sewer overflow management to the greatest extent possible.
- (7) A proposed schedule to bring the municipality's CSOs into compliance with the Vermont Water Quality Standards. The Agency recognizes CSO abatement and control is a costly process and anticipates plans will take an iterative approach to lessen the number and quantity of CSO events and improve their quality. As such, the schedule may include interim CSO controls as a step in the process of bringing CSOs into compliance with the VWQS. Interim CSO controls should be evaluated and designed based on storms with a theoretical 5-year recurrence interval (also known as the 5- year design storm). The 24-hour and 1-hour extreme precipitation depths at the 5- year recurrence interval for each CSO municipality are listed in Appendix A of the Combined Sewer Overflow Rule (Environmental Protection Rule, Chapter 34).

(IV) General Conditions.

- (1) The plans and information required by this Order shall be submitted in electronic format to **Amy Polaczyk**, **Environmental Analyst**, at amy.polaczyk@vermont.gov.
- (2) The Secretary reserves the right to amend this Order at any time as necessary to protect water quality and to comply with state and federal law.
- (3) The State of Vermont and the Secretary reserve continuing jurisdiction to ensure future compliance with all statutes, rules, and regulations applicable to the facts and violations set forth above.
- (4) Nothing in this Order shall be construed as having relieved, modified, or in any manner affected the municipality's on-going obligation to comply with all other federal, state, or local statutes nor does it relieve the municipality of the obligation to obtain all necessary federal,

state, and local permits.

- (5) This Order does not grant any exclusive rights or privileges, which would impair any rights possessed by riparian or littoral owners of the State of Vermont. It does not grant any right, title, or easement to or over any land, nor does it authorize any damage to private property or invasion of private rights or the violation of federal, state, or local laws or regulations.
- (6) The Secretary, in issuing this Order, accepts no legal responsibility for any damage, direct or indirect of whatever nature and by whoever suffered, arising out of the activities described.
- (7) This Order is not a resolution of any enforcement action that may be pending, contemplated, or initiated in this matter.
- (8) The municipality shall allow access to Agency representatives, upon the presentation of proper credentials, to inspect the subject site and sample any discharge or receiving waters as necessary to assess compliance with this Order and applicable state laws related to water quality.
- (9) Pursuant to 10 V.S.A. Chapter 220, any appeal of this Order must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of this Order. For further information, see the Vermont Rules for Environmental Court Proceedings, available online at www.vermontjudiciary.org. The address of the Environmental Court is Vermont Superior Court, Environmental Division, 32 Cherry Street, 2nd Floor, Suite 303, Burlington, VT 05401 (Tel # (802) 951-1740). The filing of an appeal does not stay this Order. The Notice of Appeal must specify the parties taking the appeal and the statutory provisions under which each party claims party status; must state the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project, or facility which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings.
- (10) 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 as the Agency rescinds this Order or issues a subsequent Order, whichever occurs first.

Emily Boedecker, Commissioner Department of Environmental Conservation	
By:	Date:
Peter LaFlamme, Director Watershed Management Division	