STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENT AL CONSERVATION
1 NATIONAL LIFE DRIVE, MAIN 2
MONTPELIER, VT 05620-3522

1272 ORDER - Discharge Permit Nos. 3-1331, 3-1245, 3-1247

IN THE MATTER OF:
City of Burlington, Permit Nos. 3-1331,
3-1245, 3-1247
City of Burlington
PO Box 878
Burlington, Vermont 05402

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 (CSO Rule) shall apply to this Order.

FINDINGS OF FACT

(1) The City of Burlington (Burlington or City) owns and operates the Burlington Main Wastewater Treatment Facility (Burlington Main WWTF) under Direct Discharge Permit No. 3-1331, the Burlington North Wastewater Treatment Facility (Burlington North WWTF) under Direct Discharge Permit No. 3-1245, and the Burlington East Wastewater Treatment Facility (Burlington East WWTF) under Direct Discharge Permit No. 3-1247. Each WWTF collects and treats both sewage and stormwater.

Burlington Main WWTF (Permit No. 3-1331)

(2) The Burlington Main WWTF is authorized to discharge treated and disinfected wastewater into Lake Champlain under the terms and conditions of Discharge Permit No. 3-1331 through discharge point S/N 001.

(3) Discharge Permit No. 3-1331 lists the following combined sewer overflow (CSO) outfalls within the collection system: CSO #1, S/N 003 (Manhattan Drive/Park Street) and CSO #2, S/N 004 (Manhattan Drive/North Champlain Street). During certain storm events, these CSO outfalls discharge untreated sewage to wetlands contiguous to the Winooski River. Such discharges may adversely affect the quality of waters of the State and create public health concerns.

(4) In 2013, during routine maintenance, a CSO was discovered on Pine Street in Burlington. It was sealed at the time of discovery but caused flooding on Pine

Street in July 2015. The seal was removed in 2015 to reduce flooding at that location. It is now listed as CSO #3, S/N 005. The overflow is connected to a stormwater system that discharges to the Pine Street Barge Canal which subsequently discharges to Lake Champlain.

(5) The discharges from these three CSO outfalls (S/N 003, S/N 004, and S/N 005) violate 10 V.S.A. Chapter 47, the Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1331.

(6) In 1986, Burlington contracted with the Engineering firm Metcalf & Eddy to evaluate portions of the Main WWTF collection system, including Manhattan Drive.

(7) On June 1, 1989, Burlington and the Agency entered into Consent Order #722- 89CNC, which established timetables for Burlington to complete sewer separation projects to alleviate overflows at the two Manhattan Drive CSOs (S/N 003 and S/N 004).

(8) The first deadline was March 1, 1991. Nearly half of the combined sewer area was separated ahead of schedule as a result of the completed work.

(9) In January 2006, Burlington verified that the work completed in early 1990 was effective in reducing overflows at S/N 003 and S/N 004.

(10) Since 2006, Burlington has installed thirteen infiltration systems to remove stormwater input to the combined system upstream of S/N 003 and S/N 004 using both American Recovery and Reinvestment Act (ARRA) funds and Burlington funding. Burlington completed projects on Cedar Street, Manhattan Drive, Walnut Street, Luck Street, St. Mary's Street, Riverside Avenue, and North Willard Street. Burlington also completed two projects on each of the following streets: Bright Street, North Winooski Avenue and Archibald Street.

(11) Discharge Permit No. 3-1331 lists the following combined sewer overflow treatment process within the Burlington Main WWTF: S/N 002, hereafter referred to as the Wet Weather Treatment System.

(12) In the early 1990s, Burlington and Hoyle, Tanner & Associates, Inc. (HTA) proposed, and the Agency approved, the building of a wet weather primary treatment and disinfection system based on the 1987 EPA CSO policy. In 1994, Burlington constructed the Wet Weather Treatment System to treat wastewater and stormwater when combined flows exceed 13 million gallons per day (MGD) into the wastewater treatment plant due to rain events or snow melt, or both.

(13) The Wet Weather Treatment System consists of mechanical screening, vortex separation for solids removal, and disinfection using a chlorine activated bromine disinfection process. The system is designed to treat 75 MGD of combined sewage (stormwater and wastewater).

(14) The Wet Weather Treatment System eliminated numerous CSOs located in Burlington's collection system that resulted from the filling of a ravine in the mid-l800s. Flow from this ravine was directed to an 8-foot by 10-foot box culvert which is now treated by the Wet Weather Treatment System. It is estimated that 170 million gallons per year are now being treated.

(15) More recently, Burlington has completed two projects on Grant Street and one project on King Street, resulting in a reduction of stormwater flow directly to the Wet Weather Treatment System.

(16) In 2016, Burlington began an Integrated Planning effort designed to identify Burlington's Clean Water Act obligations and prioritize actions to meet those obligations, including reducing phosphorus contributions to Lake Champlain to meet the Lake Champlain Total Maximum Daily Load (Lake Champlain TMDL). The Integrated Plan considered, among other things, phosphorous optimization at the three Burlington WWTFs (Main, North, and East), stormwater best management practices, continued removal of impervious surfaces from the combined sewer systems (CSS), and sewer and roof drain separation projects throughout Burlington. The Integrated Plan modeled several scenarios to prioritize a multitude of projects to reach the phosphorous reductions required by the Lake Champlain TMDL. The Integrated Plan was completed in 2021.

(17) In 2018, Burlington began investigating source reduction through a City-operated pretreatment program for all high strength and industrial users. Burlington contracted with HTA to perform the study.

(18) Discharge Permit No. 3-1331 requires that Burlington's Wet Weather Treatment System meet Vermont Water Quality Standards (VWQS) or permit limits with the allowable 80:1 dilution for Total Suspended Solids, Total Residual Oxidant, and E.coli. It has not been confirmed whether this system meets VWQS for Biological Oxygen Demand, pH, or Settleable Solids.

(19) An annual Total Phosphorous allocation of 0.77 metric tons (1697 pounds) has been calculated for Burlington's Wet Weather Treatment System in the June 17, 2016, Phosphorous TMDLs for Vermont Segments of Lake Champlain, prepared by Region 1, U.S. Environmental Protection Agency.

Burlington North WWTF (Permit No. 3-1245)

(20) The Burlington North WWTF is authorized to discharge treated and disinfected wastewater into the Winooski River under the terms and conditions of Discharge Permit No. 3-1245 through discharge point S/N 001.

(21) Discharge Permit No. 3-1245 lists the following combined sewer overflow (CSO) outfall within the collection system: CSO #1, S/N 002 Gazo Avenue. During certain storm events, this CSO outfall discharges untreated sewage to the Winooski River. Such discharges may adversely affect the quality of waters of the State and create public health concerns.

(22) The discharges from this CSO outfall (S/N 002) violate 10 V.S.A. Chapter 47, the Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1245.

(23) Over the past several years, Burlington has redirected roof drains from the CSS to a separate stormwater collection system. This has reduced the frequency of combined sewer overflow events at CSO outfall S/N 002.

Burlington East WWTF (Permit No. 3-1247)

(24) The Burlington East WWTF is authorized to discharge treated and disinfected wastewater into the Winooski River under the terms and conditions of Discharge Permit No. 3-1247 through discharge point S/N 001.

(25) Discharge Permit No. 3-1247 does not list the following combined sewer overflow (CSO) outfall within the collection system: CSO #1, S/N 002 Riverside Avenue. During certain storm events, this CSO outfall discharges untreated sewage to the Winooski River, immediately below the Winooski Falls. Such discharges may adversely affect the quality of waters of the State and create public health concerns.

(26) The discharges from this CSO outfall (S/N 002) violate 10 V.S.A. Chapter 47, the Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1247.

(27) The collection system for the Burlington East WWTF is primarily separated sanitary sewer.

All Burlington WWTFs (Permit Nos. 3-1245, 3-1247 & 3-1331)

(28) February 19, 2019: The Agency issued a 1272 order requiring the City to:

(a) Comply with the Nine Minimum Controls:

(i) Proper operation and regular maintenance programs for collection systems and CSO outfalls;
(ii) Maximum use of the collection system for storage without endangering public health or property, or causing solids deposition problems;
(iii) Review and modification of pretreatment requirements to assure that CSO impacts are minimized;
(iv) Maximization of flow to the treatment plant for treatment consistent with an evaluation of alternative treatment options;
(v) Prohibition of CSOs during dry weather;
(vi) Control of solid and floatable materials in CSOs;
(vii) Establishment of pollution prevention programs to minimize contaminants in CSOs;
(viii) 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); and
(ix) Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

(b) Prepare a monitoring plan for the Barge Street Canal
(i) Within six (6) months of the date of this Order, Burlington shall submit to the Secretary a proposed two-year monitoring plan to assess the impact of the Pine Street CSO outfall (S/N 005) on the Pine Street Barge Canal. The two-year time frame may be modified by agreement with the Secretary. The plan shall include wet weather sampling at the outfall that discharges to the Pine Street Barge Canal and at a point of the Canal near its discharge to Lake Champlain. After approval, Burlington shall conduct the monitoring and submit a final report within three (3) months. Based on the outcome of this report, the Agency will consider issuing a 1272 Order for future work on the Pine Street CSO outfall (S/N 005).

(c) Prepare a Long-Term Control Plan (LTCP) for Combined Sewer Overflows and submit it to the Secretary within 24 months of the Order date. The LTCP shall, at a minimum, include:
(i) An alternatives analysis that shall evaluate the costs and performance of multiple CSO control alternatives.
(ii) 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.
(iii) 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.
(iv) Measures to address and prevent any documented, recurrent instances of sewage backups or discharges of raw sewage onto the ground surface.
(v) A financing plan to design and implement the CSO control projects identified.
(vi) A proposed schedule to bring the municipality's CSOs into compliance with the Vermont Water Quality Standards.

(29) August 19, 2019. The City did not submit a monitoring plan for the Barge Canal as required by the 1272 order.

(30) January 2020: The City did not submit the required Annual CSO report for 2019.

(31) January 2021: The City submitted an Annual CSO report that covered 2019 and 2020.

(32) February 19, 2021: The City submitted a draft CSO LTCP. This satisfied the requirement that a CSO LTCP be submitted within 24 months of the issuance of the previous 1272 order.

(33) April 16, 2021: DEC provided comments on the draft CSO LTCP. Additional comments were sent on May 10, 2021.

(34) January 2022: The City submitted the 2021 Annual CSO Report.

(35) July 26, 2022: The City held a public meeting to discuss the CSO LTCP.

(36) July 17, 2022: The City submitted the Final CSO LTCP. That document contains a schedule of projects the City will undertake in order to address the occurrence of CSO events. The projects and schedules are summarized on page 8-4 of the CSO LTCP and are included in the order below.

(37) Without the implementation of the requirements set forth in this Order, it can reasonably be expected that the overflows from the Burlington Main CSO outfalls (S/N 003, S/N 004, and S/N 005) 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 Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1331.

(38) Without the implementation of the requirements set forth in this Order, it can reasonably be expected that the overflows from the Burlington North CSO outfall (S/N 002) 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 Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1245.

(39) Without the implementation of the requirements set forth in this Order, it can reasonably be expected that the overflows from the Burlington East CSO outfall (S/N 002) 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 Vermont Water Quality Standards (VWQS), and Discharge Permit No. 3-1247.

(40) This 1272 Order will replace the 1272 Order issued by the Agency to the City of Burlington on February 19, 2019.

ORDER

Based on the foregoing findings of fact, the Secretary issues the following Order, under 10V.S.A. § 1272 and the Combined Sewer Overflow Rule, to ensure all existing CSOs in the Burlington Main, North, and East collection systems are brought into compliance with the applicable requirements of state and federal law, including the VWQS:

(I) Activities to be performed annually:

(1) The City 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 City shall report progress on:
   a. Compliance with the Minimum Controls;
   b. The condition and operation of the CSOs;
   c. 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;
   d. The frequency, duration, and magnitude of all CSOs from the system in the past year and a comparison to prior years; and
   e. 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.

The NPDES Permits 3-1245 effective October 1, 2004 (administratively continued April 7, 2009), 3-1247 effective October 1, 2004 (administratively continued April 7, 2009) and 3-1331 effective July 1, 2005 (administratively continued January 12, 2010) do not contain requirements for annual CSO reporting, and therefore this requirement has been included in this order. It is anticipated that the annual CSO reporting requirements will be included in the upcoming renewal of the permits or in an integrated permit. Until the permit is renewed, or all CSO outfalls have been removed, the City shall continue to report annually on the items described above.

(II) Activities to be performed by January 31, 2024:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

   By January 31, 2024, the City must implement BMP structural controls as described in the LTCP to treat a minimum of 7.89 impervious acres and store a minimum of 0.60 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Provide an update on the status of the design for the Pine Street CSO Storage Tank, including the additional flow monitoring. The Pine Street CSO Storage Tank project is described in Table 6-3 on page 6-4, pages 6-8 to 6-10, page 6-17, page 7-2, Figure 7-1 on page 7-4 and pages 8-1 to 8-4 of the Final CSO LTCP. The tank should be a minimum storage volume of 0.30 million gallons and the design shall allow for cost effective expansion or retrofitting if additional controls on CSO discharges are required after project construction.

(3) Provide a description of the tracking system developed to track basement and manhole surcharge events described in Sections 6.3 and 7.2 of the CSO LTCP. This description should include a list of locations (manholes, basements, catch basins, etc.) where the known or modelled hydraulic grade line during the 5 year, 24 hours evaluation storm specified in the appendix of the CSO Rule is within 6 feet of the ground surface, a list of locations where surcharging occurred or where sewage backed up into basements, a plan to conduct field investigations including additional electronic monitoring and a method to track funding and ownership of any backwater prevention devices installed to prevent combined sewage overflows.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(III) Activities to be performed by January 31, 2025:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2025 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 15.78 impervious acres and store a minimum of 1.20 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner (s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall

be included.

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(2) Provide an update on the status of the design for the Pine Street CSO Storage Tank.

(3) Provide a report describing the evaluation of the options developed for preventing basement surcharge events.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(IV) Activities to be performed by January 31, 2026:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2026 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 23.67 impervious acres and store a minimum of 1.80 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Prepare a complete set of construction ready documents (plans, specifications, bid package, etc) for the Pine Street CSO Storage Tank.

(3) Advertise and award Pine Street CSO Storage Tank project.

(4) Provide an update on the status of the Pine Street CSO Storage Tank project. This update should include a copy of the approved construction documents and the winning bid tabulation.

(5) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(6) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(V) Activities to be performed by January 31, 2027:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2027 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 31.56 impervious acres and store a minimum of 2.40 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Provide an update on the status of the Pine Street CSO Storage Tank project.

(3) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(5) Update the City's hydraulic model(s) of the combined sewer systems using the information gathered under the surcharge tracking program. Identify areas where pipe upsizing and/or distributed storage projects are necessary.

(6) Prepare a schedule to construct the identified pipe upsizing and distributed storage projects by 2048. This schedule shall be submitted to the Secretary for review and approval, and should include a list of projects to be constructed each year between 2028 and 2048.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(VI) Activities to be performed by January 31, 2028:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4

ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2028 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 39.44 impervious acres and store a minimum of 3.00 acre-feet.

(2) The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(3) Complete construction, start-up and commissioning of the Pine Street CSO Storage Tank. Prepare a report describing the operation and maintenance of the Pine Street CSO Storage Tank. That report shall include the dates and approximate times CSO flows were diverted to the tank, the approximate volume of combined sewage diverted to the tank for each event, the peak and average inflow rates, how the stored combined sewage is treated prior to discharge and a log of maintenance activities. Provide a set of record drawings to DEC.

(4) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(5) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(6) Provide an update on the design, permitting and funding of the pipe upsizing and distributed storage projects.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(VII) Activities to be performed by January 1, 2029:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2029 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 47.33 impervious acres and store a minimum of 3.60 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the

treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Prepare a report describing the operation and maintenance of the Pine Street CSO Storage Tank. That report shall include the dates and approximate times CSO flows were diverted to the tank, the approximate volume of combined sewage diverted to the tank for each event, the peak and average inflow rates, how the stored combined sewage is treated prior to discharge and a log of maintenance activities. The report should contain an evaluation of whether or not the storage provided is adequate. If the storage volume is not adequate to prevent CSO overflows at the Pine Street CSO then a design and schedule to provide additional storage should be included in the report.

(3) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(5) Provide an update on the design, permitting and funding of the pipe upsizing and distributed storage projects.

(6) Complete construction of the pipe upsizing and distributed storage projects identified in the schedule developed in Order Condition V(6) above for 2028. Provide a summary of the work done, including the increase in available storage volume.

A written summary of these activities and findings shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(VIII) Activities to be performed by January 31, 2030:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2030 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 55.22 impervious acres and store a minimum of 4.20 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation

agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Prepare a report describing the operation and maintenance of the Pine Street CSO Storage Tank. That report shall include the dates and approximate times CSO flows were diverted to the tank, the approximate volume of combined sewage diverted to the tank for each event, the peak and average inflow rates, how the stored combined sewage is treated prior to discharge and a log of maintenance activities. The report should contain an evaluation of whether or not the storage provided is adequate. If the storage volume is not adequate to prevent CSO overflows at the Pine Street CSO then a design and schedule to provide additional storage should be included in the report.

(3) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(5) Provide an update on the design, permitting and funding of the pipe upsizing and distributed storage projects.

(6) Complete construction of the pipe upsizing and distributed storage projects identified in the schedule developed in Order Condition V(6) above for 2029. Provide a summary of the work done, including the increase in available storage volume.

A written summary of these activities shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(IX) Activities to be performed by January 31, 2031:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By January 31, 2031 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 63.11 impervious acres and store a minimum of 4.80 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner, City inspection records and whether or not the City was required to bill the owner for maintenance shall be

included.

(2) Prepare a report describing the operation and maintenance of the Pine Street CSO Storage Tank. That report shall include the dates and approximate times CSO flows were diverted to the tank, the approximate volume of combined sewage diverted to the tank for each event, the peak and average inflow rates, how the stored combined sewage is treated prior to discharge and a log of maintenance activities. The report should contain an evaluation of whether or not the storage provided is adequate. If the storage volume is not adequate to prevent CSO overflows at the Pine Street CSO then a design and schedule to provide additional storage should be included in the report.

(3) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(5) Provide an update on the design, permitting and funding of the pipe upsizing and distributed storage projects.

(6) Complete construction of the pipe upsizing and distributed storage projects identified in the schedule developed in Order Condition V(6) above for 2030. Provide a summary of the work done, including the increase in available storage volume.

A written summary of these activities shall be provided to the Agency as part of the annual report on CSO activities (See Order I above).

(X) Activities to be performed by January 31, 2032:

(1) Provide an update on the BMP structural controls. Potential BMP structural control locations are shown in Figure 5-2 on page 5-5 of the Final CSO LTCP and these controls are further described in section 7.1. The cumulative impervious area treated by BMPs before March 2031 must be at least 71 acres and the storage provided must be at least 5.4 ac-ft. Other structural BMP projects may be substituted as long as the required total treated area and storage are provided within the combined sewersheds. The City may include projects implemented after January 1, 2019 to achieve this.

By March 31, 2031 the City must implement BMP structural controls as described in the LTCP to treat a minimum of 71 impervious acres and store a minimum of 5.40 acre-feet.

The City shall submit a description of all BMPs implemented that includes locations, descriptions of the BMPs, descriptions of the maintenance activities conducted on each BMP, sketches or plans of each BMP and treated impervious area, and calculations for the treated area and storage provided by each BMP. For BMPs that require an implementation agreement, a copy of that agreement, the name of the property owner(s), City inspection records and whether or not the City was required to bill the owner(s) for maintenance shall be included.

(2) Prepare a report describing the operation and maintenance of the Pine Street CSO Storage

Tank. That report shall include the dates and approximate times CSO flows were diverted to the tank, the approximate volume of combined sewage diverted to the tank for each event, the peak and average inflow rates, how the stored combined sewage is treated prior to discharge and a log of maintenance activities. The report should contain an evaluation of whether or not the storage provided is adequate. If the storage volume is not adequate to prevent CSO overflows at the Pine Street CSO then a design and schedule to provide additional storage should be included in the report.

(3) Provide a report describing the number, location and cost of any backflow prevention devices installed during the past year.

(4) Provide a report summarizing the information collected under the surcharge event tracking system developed previously.

(5) Provide an update on the design, permitting and funding of the pipe upsizing and distributed storage projects.

(6) Complete construction of the pipe upsizing and distributed storage projects identified in the schedule developed in Order Condition V(6) above for 2030. Provide a summary of the work done, including the increase in available storage volume.

(7) Submit a revised Combined Sewer Overflow Long Term Control Plan. This LTCP shall conform to the requirements of the CSO Rule and this order and shall contain an evaluation of the effectiveness of activities conducted under this order in eliminating impacts to water quality in the Winooski River, the Barge Canal and Lake Champlain from combined sewer overflows.

A written summary of these activities shall be provided to the Agency as part of the annual report on CSO activities (See Order I above)

(XI) General Conditions

(1) The plans and information required by this Order shall be submitted in electronic format to ANR.WSMDWastewater@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.

Dated this 19th day of 2023

Julia S. Moore, Secretary
Vermont Department of Environmental Conservation

By: 
Digitally signed by Peter LaFlamme
DN: cn=Peter LaFlamme, email=p.n.laflamme@gmail.com, c=US
Date: 2023.05.19 08:58:10 -04'00'

Peter LaFlamme, Director
Watershed Management Division