



**Vermont Department of Environmental Conservation**

**EC7** Facilities Engineering Division

1 National Life Drive  
Main Building, 2nd Floor  
Montpelier, VT 05620-3510

*Agency of Natural Resources*

Megan Moir, Assistant Department of Public Works Director  
Authorized Representative  
City of Burlington  
234 Penny Lane  
Burlington, VT 05401

**Re: City of Burlington, SCADA/PLC Upgrade Project  
Vermont/ USEPA Clean Water Revolving Loan Number RF1-249**

**Categorical Exclusion from Detailed Environmental Review**

Dear Megan Moir:

The Department of Environmental Conservation has determined that the City's proposed upgrades to existing Supervisory Control and Data Acquisition (SCADA) systems and Programmable Logic Controller (PLC) units may be excluded from detailed environmental review. The Department's (Clean Water) environmental review procedures require a 30-day public comment period following the issuance of a Notice of Determination of Eligibility for Categorical Exclusion. If neither the City nor the Department receives adverse comments, then the Categorical Exclusion becomes effective.

Copies of documents supporting a Categorical Exclusion are enclosed. Please keep copies of the enclosed documents available for public inspection during a public comment period of 30 days. A full listing of the documents that must be available for public inspection is attached. Please call 802-522-2192 if you have any questions or concerns.

If you have any questions, please do not hesitate to send an email to [Robert.Pelosi@vermont.gov](mailto:Robert.Pelosi@vermont.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric Blatt", is written over a horizontal line.

Eric Blatt, P.E.  
Director

Notice of Determination of Eligibility for Categorical Exclusion from Detailed Environmental Review

Facilities Engineering Division

Documents Enclosed for Categorical Exclusion Public Comment Period (30 days)

1. *"Notice of Determination of Eligibility for Categorical Exclusion"*  
(Signed by Eric Blatt, PE, Director, Facilities Engineering Division.)
2. *"Evaluation of Eligibility for Categorical Exclusion"*  
(Approved by Eric Blatt, PE, Director, Facilities Engineering Division.)

Additional Documents Needed for Categorical Exclusion Public Comment Period (30 days)

1. ***"Environmental Review Procedures for Projects Funded Through the Vermont/EPA Revolving Loan Program"***, <https://anrweb.vt.gov/DEC/IronPIG/DownloadFile.aspx?DID=129684&DVID=0>
2. **Preliminary Engineering Report (PER)** titled, *"Preliminary Engineering Report, Burlington Vermont Wastewater Treatment Plants, Capital Improvement Plan 2018, SCADA/PLC & Disinfection Upgrade Projects,"* dated June 28, 2019, and prepared by Mike Schramm, PE of the City of Burlington, Vermont.
3. **Engineering Report** titled, *"Burlington Wastewater, 20 Year Engineering Evaluation, 10 Year Capital Plan and Consulting Engineering Report,"* dated March 10, 2017, and prepared by Dubois & King, Inc. of Randolph, Vermont.
4. **Design Report** titled, *"Burlington Waste Water Treatment Facility, Control System Upgrade, Preliminary Design Report,"* dated August 2018, and prepared by Hallam-ICS of South Burlington, Vermont.
5. **Environmental Information Document (EID)** titled, *"Environmental Report, Burlington Wastewater Treatment Plants (WWTPs), RF1-249-3.0, RF1-246-2.0,"* dated June 25, 2019, and prepared by Mike Schramm, PE, of the City of Burlington, Vermont.
6. **Project Review Sheet** dated June 3, 2019.

**COPY LIST**

**Mike Schramm, PE,** City of Burlington

**Chip Gianfagna & David DiDomenico,** Wastewater Management Program, Watershed Management Division

**Tom Brown,** CWSRF Program Lead, Financial Management Section, VT-DEC-FED

**Scott Dillon,** Survey Archaeologist, Vermont Division for Historic Preservation, VT-ACCD

Notice of Determination of Eligibility for Categorical Exclusion

City of Burlington

City of Burlington, SCADA/PLC Upgrade Project

Vermont/ USEPA Clean Water Revolving Fund Loan Number RF1-249

In accordance with section VII of the Department's *"Environmental Review Procedures for Projects Funded Through the Vermont/EPA Revolving Loan Program,"* the City of Burlington has requested that its proposed SCADA/PLC Upgrade Project receive Categorical Exclusion from detailed environmental review.

Consideration of the request for Categorical Exclusion has included review of the following documents:

- **Preliminary Engineering Report (PER)** titled, *"Preliminary Engineering Report, Burlington Vermont Wastewater Treatment Plants, Capital Improvement Plan 2018, SCADA/PLC & Disinfection Upgrade Projects,"* dated June 28, 2019, and prepared by Mike Schramm, PE of the City of Burlington, Vermont.
- **Engineering Report** titled, *"Burlington Wastewater, 20 Year Engineering Evaluation, 10 Year Capital Plan and Consulting Engineering Report,"* dated March 10, 2017, and prepared by Dubois & King, Inc. of Randolph, Vermont.
- **Design Report** titled, *"Burlington Waste Water Treatment Facility, Control System Upgrade, Preliminary Design Report,"* dated August 2018, and prepared by Hallam-ICS of South Burlington, Vermont.
- **Environmental Information Document (EID)** titled, *"Environmental Report, Burlington Wastewater Treatment Plants (WWTPs), RF1-249-3.0, RF1-246-2.0,"* dated June 25, 2019, and prepared by Mike Schramm, PE, of the City of Burlington, Vermont.
- **Project Review Sheet** dated June 3, 2019.

Upon completion of its independent evaluation, the Department has determined that the proposed project meets the criteria for issuance of a Categorical Exclusion.

Specifically, the project includes minor rehabilitation of existing facilities and functional replacement of equipment (which does not affect the degree of treatment or capacity of the existing facility by more than 20%)

Notice of Determination of Eligibility for Categorical Exclusion from Detailed Environmental Review

at the City of Burlington's Main, North, and East Wastewater Treatment Facilities. Further, the project does not create a new permanent discharge of stormwater or treated wastewater to surface waters or groundwater. Finally, the project does not involve (create) serious local or environmental issues or meet any of the criteria that would result in denial of an Exclusion. Further, information on the project and this Determination is available for inspection at the following locations:

Megan Moir, Assistant Department of Public Works Director  
City of Burlington  
234 Penny Lane  
Burlington, VT 05401

tel. 802-863-4501

Robert Pelosi, E.I.  
Vermont Department of Environmental Conservation  
Facilities Engineering Division  
1 National Life Drive, Main 2  
Montpelier, VT 05620-3510

tel. 802-522-2192

*(Note: National Life requires photo identification to obtain an access badge for entry.)*

No significant administrative action will be taken on this project for thirty (30) days from issuance of this Notice of Determination, to allow for public response.



Eric Blatt, P.E., Director  
Facilities Engineering Division

July 22, 2019

Date

Department of Environmental Conservation  
Vermont Agency of Natural Resources



**Vermont Department of Environmental Conservation**

**EC7** Facilities Engineering Division

1 National Life Drive  
Main Building, 2<sup>ND</sup> Floor  
Montpelier, VT 05620-3510

*Agency of Natural Resources*

TO: Eric Blatt, P.E., Director, Facilities Engineering Division

A handwritten signature in blue ink, appearing to read "E. Blatt".

FROM: Robert Pelosi, E.I.  
Design Engineer, Facilities Engineering Division

A handwritten signature in blue ink, appearing to read "R. Pelosi".

SUBJECT: City of Burlington  
SCADA/PLC Upgrade Project

Evaluation of Eligibility for Categorical Exclusion  
from Detailed Environmental Review

DATE: July 10, 2019

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A. Project Identification

Project Name: SCADA/PLC Upgrade Project -- City of Burlington's Main, North, and East Wastewater Treatment Facilities

Address: Megan Moir, Assistant Department of Public Works Director  
Authorized Representative  
City of Burlington  
234 Penny Lane  
Burlington, VT 05401

Project Location: The City is proposing to replace or install Supervisory Control and Data Acquisition (SCADA) systems, Programmable Logic Controller (PLC) units, Gas Detection equipment, Fire Alarm boxes, and Water Information Management Solution (WIMS) software at three wastewater treatment facilities.

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**Evaluation of Eligibility for Categorical Exclusion from Detailed Environmental Review**

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The facilities are located as follows:

Burlington Main Wastewater Treatment Facility (SCADA/PLC, Gas Detection, and WIMS)  
 53 LaValley Lane  
 Burlington, Vermont  
 Burlington North Wastewater Treatment Facility (Gas Detection, Fire Alarm, and WIMS)  
 North Avenue  
 Burlington, Vermont

Burlington Riverside (East) Wastewater Treatment Facility (Gas Detection, Fire Alarm, and WIMS)  
 Riverside Avenue  
 Burlington, Vermont

Vermont/ USEPA Clean Water Revolving Loan Number RF1-249

**B. Summary of Environmental Review**

In accordance with section VII of the Department's *"Environmental Review Procedures for Projects Funded Through the Vermont/EPA Revolving Loan Program,"* the City of Burlington has requested that the proposed SCADA/PLC Upgrade Project receive Categorical Exclusion from detailed environmental review.

The following planning document have been reviewed:

- **Preliminary Engineering Report (PER)** titled, *"Preliminary Engineering Report, Burlington Vermont Wastewater Treatment Plants, Capital Improvement Plan 2018, SCADA/PLC & Disinfection Upgrade Projects,"* dated June 28, 2019, and prepared by Mike Schramm, PE of the City of Burlington, Vermont.
- **Engineering Report** titled, *"Burlington Wastewater, 20 Year Engineering Evaluation, 10 Year Capital Plan and Consulting Engineering Report,"* dated March 10, 2017, and prepared by Dubois & King, Inc. of Randolph, Vermont.
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**Evaluation of Eligibility for Categorical Exclusion from Detailed Environmental Review**

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Our findings are summarized below:

1. Project Description

The City of Burlington is located in Chittenden County, Vermont.

The City is proposing to upgrade systems and controls at the Main, North and East Wastewater Treatment Facilities. The specific upgrades, by facility, are described as follows:

- **Burlington Main WWTF**
  - Supervisory Control and Data Acquisition (SCADA) and Programmable Logic Controllers (PLC)
  - Gas Detection equipment
  - Water Information Management Solution (WIMS) software
- **Burlington North WWTF**
  - Gas Detection equipment
  - Fire Alarm boxes
  - Water Information Management Solution (WIMS) software
- **Burlington East WWTF**
  - Gas Detection equipment
  - Fire Alarm boxes
  - Water Information Management Solution (WIMS) software

The City is proposing these upgrades to realize specific benefits. The benefits include:

**SCADA/PLC**

The SCADA/PLC system is intended increase reliability and sustainability of the wastewater treatment processes by providing Operators real-time control of air flow, process flow rates, chemical dosing, and other process parameters. Further, the SCADA system provides improved redundancy with multiple power supplies, servers and human machine interfaces. Finally, the replacement of copper with fiber optic cables between buildings increases communication speed, reliability, and lightning protection. Thus, Operators are better able to make time-critical decisions under dynamic process and environmental conditions.

**Gas Detection Equipment and Fire Alarms Boxes**

All proposed upgrades to the equipment above address age-related deficiencies and are to be installed as like-kind replacement.

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Evaluation of Eligibility for Categorical Exclusion from Detailed Environmental Review

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### **Water Information Management Solution (WIMS) Software**

The WIMS software is intended to improve management of the three Wastewater Treatment Facilities (Main, North, and East) and twenty-five (25) pump stations throughout the sewer collection system. By replacing manual recordkeeping, the WIMS software provides electronic means to track, review and manage facility data in a comprehensive and efficient manner.

The proposed upgrades are predominantly confined to the interior of existing buildings. Where required, excavation is to occur in previously disturbed areas within the facility boundaries.

Eligibility for clean water revolving loan (CWSRF) construction funding will be limited to the eligible clean water work as detailed in the Preliminary Engineering Report and to physical areas cleared through this environmental review process.

#### **2. Justification for Categorical Exclusion**

The Facilities Engineering Division has determined that the proposed project meets the criteria for issuance of a Categorical Exclusion.

Specifically, the project includes minor rehabilitation of existing facilities and functional replacement of equipment (which does not affect the degree of treatment or capacity of the existing facility by more than 20%) at the City of Burlington's Main, North, and East Wastewater Treatment Facilities. Further, the project does not create a new permanent discharge of stormwater or treated wastewater to surface waters or groundwater.

Concerning other cultural or natural resources, the project is not expected to adversely affect wetlands, wetlands buffer zones, floodplains, historic sites, archeological sites, habitats of threatened or endangered species, or other environmentally or culturally sensitive areas.

Finally, the project does not involve serious local or environmental issues or meet any of the criteria that would result in denial of a Categorical Exclusion.