

CITY OF MONTPELIER, VERMONT



COMMUNITY WATER SYSTEM VULNERABILITY ASSESSMENT

as required by

**THE PUBLIC HEALTH AND SECURITY AND BIOTERRORISM ACT OF
2002**

Completed on

June 30, 2004

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I. EPA Certification Form
VULNERABILITY ASSESSMENT CERTIFICATION

Public Water System ID number: 5272

System Name: City of Montpelier

City where system is located: Berlin

State: Vt.

Person Authorized to Sign this Certification on behalf of the System:
Geoff Wilson

Title: Chief Operator

Address : 1480 Paine Turnpike North

City: Berlin

State: Vt.

Zip: 05602

Phone: 802 - 229-1401 Fax: 802 - 229-2987
Email: BWTF@montpelier.org

I certify to the Administrator of the U.S. Environmental Protection Agency that this community water system has conducted a vulnerability assessment that complies with Section 1433(a)(1) of the Safe Drinking Water Act, as amended by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188, Title IV— Drinking Water Security and Safety).

I further certify that this document and all attachments were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information (Safe Drinking Water Act (42 U.S.C. 300f et seq.)).

The vulnerability assessment this community water system conducted addresses the following components of my system.:

YES N/A

- | | | |
|---|--------------------------|--|
| X | <input type="checkbox"/> | pipes and constructed conveyances |
| X | <input type="checkbox"/> | physical barriers |
| X | <input type="checkbox"/> | water collection |
| X | <input type="checkbox"/> | pretreatment |
| X | <input type="checkbox"/> | treatment |
| X | <input type="checkbox"/> | storage |
| X | <input type="checkbox"/> | distribution facilities |
| X | <input type="checkbox"/> | electronic, computer or other automated systems, which are utilized by the public water system |
| X | <input type="checkbox"/> | the use, storage, or handling of various chemicals |
| X | <input type="checkbox"/> | the operation and maintenance of such system |

Signed:

Geoff Wilson

Date:

June 30, 2004

Primary contact person that EPA can call if there are questions about this Certification and VA submission:

Name: **Geoff Wilson**
Address: **1430 Paine Turnpike North**
Phone: **802 - 229-1401**
Email Address: **BWTF@montpelier.org**

Alternate Contact Person:

Name: **Steve Gray**
Address: **City Hall**
 39 Main Street
 Montpelier, VT 05602
Phone: **802 - 223-9508**
Email Address: **S.Gray@Montpelier-VT.org**

D. Consequence Analysis

We have developed the following list of potential consequences that may result from losing specific components/portions of our water system:

Component	Consequence	Mitigation
Berlin Pond	Total loss of supply.	Source protection plan in place and used. Cannot restrict vehicle access roads around the pond. Airport flight pattern is over the pond. Protection proposed includes installing a hydrocarbon (TOC) detector at the Berlin Pond vacuum station. Post no trespassing signs
Intake	Single 24" line serves raw water to the plant. SS intake screen. Loss of use of the line not probable because of location of intake in middle of the pond, at 20' below surface. Possible clogging of screen from non-native plants or zebra mussels. Add a 10' high fence around the Natgun Clearwell (tank) with gate at the hatch area. Lock with shielded padlock and stainless steel chain. Motion detector will signal fenced area intrusion triggering police response and strobe light on roadside of the building. Replace fiberglass mushroom vent with SS tamper-proof vent or construct a shield over the existing vent. Install no trespassing signs on all fencing and federal warning signs on all locked hatches and main door of filter building. Area surveillance - install video system to view and record quality, evidentiary video in the vicinity of the Clearwell hatch/vent.	Inspect the screen more regularly. Improve security at vacuum buildings (see these items for detail). Where pipe becomes exposed during low flow months, may be possible to dam up to keep water level above the pipe or cover the pipe with fill.
City of Montpelier Water Filtration Facility	This facility provides the filtration and disinfection necessary to produce potable water. Loss of these functions would affect the quality and safety of the water supplied to both critical customers and the general population. Additionally, this facility pumps directly into the transmission system thereby providing pressure water for fire flow and to service higher elevation areas including CVMC.	For restricting unauthorized vehicle access to the water filtration plant site - install Jersey barriers or large concrete blocks in the upper and lower gated access areas and block or large rocks to prevent drive around the existing gates. From lower gate uphill to approx mid distance to the main gate, install guardrail to restrict vehicle access. Post no trespassing signs along the roadway. Main gate - install a motorized operated gate (roll horizontally to the side). Gate intercom or bell with video surveillance from the building west side. Harden the gate with a section of guardrail. Gateposts should be heavy duty. Make all gate hardware tamper-proof. Gate operated from within the filter plant and in vehicles with remote operators to be carried by the operating personnel and other authorized persons. The plant has intrusion detection (alarmed) on all doors and one side of the lower pair of awning style windows. Wiring needs to be shielded to prevent cutting if power is not continuous (ie: clip wire sets off alarm). Each room has a

11. Are all monitoring wells identified and locked, or abandoned properly if they are no longer needed?

An unsecured monitoring well is a direct pipeline into your aquifer. All observation/test wells should be properly locked or secured to prevent the introduction of contaminants into the aquifer or water supply. Abandoned wells should be either removed or filled with concrete, cement, grout, or clay slurry.

Montpelier's source is Berlin pond only. There are no well points anywhere in the water supply.

N/A: Berlin Pond

12. Is your water supply used for multiple uses, i.e. recreational activities?

If your water supply is used for multiple purposes (recreation of any type), control and monitoring of that supply becomes increasingly important and a more encompassing process with respect to ensuring the quality of the source water and the safety of the supply. Establish a source-monitoring program (water quality and security) commensurate with the activity in your watershed (i.e. increasing activity, increasing monitoring).

Montpelier has a policy in place for Berlin pond that does not allow any fishing, swimming, motor boating, canoeing, etc., and if caught doing any recreational activity in the pond the person or persons can be subject to a substantial fine along with community service time.

NO: Berlin Pond

13. Is your water supply open to the public?

If your water supply is open to public access then there is a definite need to monitor the activities within the watershed. In addition, increased monitoring of the raw water quality entering the treatment scheme of the water supply should occur.

The City Of Montpelier has a policy of no recreational activity on or around the pond at all. No exceptions.

NO: Berlin Pond

14. Are your intakes inspected daily?

Frequent and random patrolling of the water system by system staff may discourage potential tampering. It may also help identify problems that may have arisen since the previous patrol. Use signage to let the public know when and who to call. Example of Signage: {WARNING: Tampering with this facility is a federal offense. Unauthorized access is strictly prohibited. Report any suspicious activity to Water System Maintenance at 1-800-...-...}. If public use of your watersheds is allowed, then that may provide more sets of eyes watching for you. Consider setting up a neighborhood watch program if recreational use of your watershed is allowed. We have only one intake And it is approximately 20 feet below the pond surface. The city does periodically hire divers to inspect the intake bonnet area.

NO: Berlin Pond