

Claim Case Study

Municipal Drinking Water

Facts

A car wash released 5 gallons of a detergent containing the chemical 2-Butoxyethanol into the Municipal drinking water distribution system. 2-Butoxyethanol is not a carcinogen, but causes gastrointestinal upset and irritation. The car wash was originally built as a 6 stall self-serve car wash. The plumbing system connected the City water to the car wash system. It used rainwater and Municipal water to top up the water levels. The car wash had a cross connection system that was installed without a plumbing permit.

A patron washing his car noticed that there was soap in the rinse water. After notifying the employee on duty, the employee flushed the system. The valve connected to the City system was open. Someone had inadvertently opened the cross connection. The pressure in the car wash system exceeded the City pressure and the contaminant back flowed into the City system.

A nearby resident noticed that her tap water was pink and notified the Municipality right away.

The City had to issue a 'drinking water advisory' and then a 'water boil' advisory. Approximately 50,000 notices had to be delivered to water users. As a result of the contamination, 19 people had to seek medical treatment and local schools were closed for a day. Hospitals had to redirect patients to other facilities and cancel surgeries.

Issue

What actions should a Municipality take to mitigate the damage in a situation such as this?

Legislation

The police charged the car wash with an offence under section 20(1) of the *Safe Drinking Water Act*, 2002 SO 2002 c.32, which reads as follows:

"Prohibition

20. (1) No person shall cause or permit any thing to enter a drinking water system if it could result in,

(a) a drinking water health hazard;

(b) a contravention of a prescribed standard; or

(c) interference with the normal operation of the system."

Findings

The City responded in a defensive, precautionary manner. The City immediately responded to the incident and initiated a crisis procedure. Notifications were broadcast on radio and television and written notices were delivered across the area. Drinking water depots were set up to supply safe water to citizens. The response was effective in mitigating the City's exposure to claims for liability due to injury from drinking the contaminated water.

Outcome of the Claim

The City in this case responded appropriately and lessened the risk of more catastrophic outcome.

Lessons Learned

In Ontario, the *Safe Drinking Water Act* outlines the responsibilities of those responsible for water.

Section 11(1) of the act reads as follows:

"Duties of owners and operating authorities

Every owner of a municipal drinking-water system or a regulated non-municipal drinking-water system and, if an operating authority is responsible for the operation of the system, the operating authority for the system shall ensure the following:

1. That all water provided by the system to the point where the system is connected to a user's plumbing system meets the requirements of the prescribed drinking-water quality standards.
2. That, at all times in which it is in service, the drinking-water system,
 - i. is operated in accordance with the requirements under this Act,
 - ii. is maintained in a fit state of repair, and
 - iii. satisfies the requirements of the standards prescribed for the system or the class of systems to which the system belongs.

3. That the drinking-water system is operated by persons having the training or expertise for their operating functions that is required by the regulations and the licence or approval issued or granted for the system under this Act.
 4. That all sampling, testing and monitoring requirements under this Act that relate to the drinking-water system are complied with.
 5. That personnel at the drinking-water system are under the supervision of persons having the prescribed qualifications.
 6. That the persons who carry out functions in relation to the drinking-water system comply with such reporting requirements as may be prescribed or that are required by the conditions in the licence or approval issued or granted for the system under this Act”.
2. The person operating the laboratory at which the adverse result was obtained”.

It is not only important to maintain your drinking water facilities, but also to report any regulated matter to the public. Devise a policy and procedure for emergency events in your Municipality. Quick and effective response to a crisis is essential. Consider things such as the following:

1. How many volunteers will you need?
2. Is there a media spokesperson for the Municipality trained in dealing with these sorts of events?
3. Are detailed records kept and easy to access during an emergency?
4. Are contact numbers in place for reaching employees/ volunteers during an emergency?

Proper reporting is also important under the act.

Section 11(2) states:

“Duty of owner to report to public

If an owner of a municipal drinking-water system or regulated non-municipal drinking-water system is required by the regulations to report on any matter to the public, the owner shall report in accordance with the regulations”.

And section 18(1) reads:

“Duty to report adverse test result

Each of the following persons shall report every prescribed adverse result of a drinking-water test conducted on any waters from a municipal drinking-water system or a regulated non-municipal drinking-water system to the Ministry and the medical officer of health immediately after the adverse result is obtained:

1. The operating authority responsible for the system or, if there is no operating authority responsible for the system, the owner of the system.

Be sure to review your policies and procedures yearly and update them as needed. New staff should be trained in the emergency response and current staff should be kept up to date with any changes