

Drinking Water Quality Management System Annual Meeting
Tuesday, January 25, 2022 at 9:00 a.m.
Virtual Meeting via Microsoft Teams
Minutes

Attendees:

Chris Morrison, Manager, Housing Department
Andrew Shaw, Maintenance Supervisor, Housing Department
Caroline Rigutto, Policy and Program Review Analyst, Housing Department
Curtis Whitteker, Overall Responsible Operator, Whitteker Environmental

Meeting commenced at 9:00 a.m.

1. **Risk Assessment:** (Housing Manager, Maintenance Supervisor, Overall Responsible Operator)
 - a. Identify Hazards/Hazardous events for each process area of the water distribution system.
 - i. Must consider Hazards listed in **Potential Hazardous Events for Municipal Residential Drinking Water Systems** document provided by the MOECP.
 - b. For each hazard/hazardous event, identify control measures that are in place to prevent the hazard/hazardous event from occurring. Control measures are defined as measures to eliminate or reduce the hazard to an acceptable level.
 - c. Each hazard identified will be ranked by the team according to likelihood, severity and detectability.
 - d. All hazards or hazardous events that have a risk rating of 9 or higher will be identified on the table. A critical control point will be added to the process step associated with the highest risk.

For each critical control point:

 - Reference to monitoring procedures to describe what is monitored to indicate that the process step has gone out of specified critical control limits
 - Describe the response to deviation from critical control limits, including reporting and recording information

Reviewed and updated the Risk Assessment Tables for Miller Manor Apartments DWS and The Maples DWS.

The Maples (33 Bennett St. Spencerville) Discussion:

- Reviewed the Risk Assessment Table (Appendix C1) of The Maples Operational Plan to determine whether there are Critical Control Points (CCP) with a risk level that reaches 9. Risk level is the sum of three categories Likelihood, Severity, and Detectability. Each category is weighted 1-5, one being least significant or most detectable, and 5 being most catastrophic or least detectable.

Each Hazard or Hazardous Event was reviewed. No Hazards or Hazardous Events reached the threshold for becoming a Critical Control Point. No changes to the risk level ratings were suggested for any hazards or hazardous events on the table.

- Chemical Spill Impacting Source Water (e.g. Highway Accident) – Current Total Risk Rating 4 – Not a CCP.

Discussion: Control measures include “Bottled water is available on site for residents until water is determined as safe” Recommend changing to “Bottled water will be made available for residents.” To bring documentation in line with current practice.

Question: The question was raised. “If we were experiencing long term impacts of climate change on The Maples Drinking Water System. What indicators would alert us to those impacts?”

Response from Overall Responsible Operator: The most likely long-term impact of climate change on The Maples Drinking Water System would be reduced capacity from a reduced water table. There are two likely methods that we may be alerted. The users of the water system living in the building may submit complaints/concerns that there is not enough water, or, the Ministry of Environment Conservation and Parks MOECP may alert us that other members of the local community are experiencing reduced water availability.

Question: The question was raised: “If required, could the building’s water source be a water truck or water delivery in an emergency.”

Response from Overall Responsible Operator: Yes, with consideration for whether the delivery was potable water, how long the alternate water source would be required, etc. In most circumstances, it would likely be faster to focus on repairing the issues with the original water source rather than making alterations to run from a temporary water source.

Miller Manor (3 Miller Dr. Mallorytown) Discussion:

- Reviewed the Risk Assessment Table (Appendix C1) of the Miller Manor Operational Plan to determine whether there are Critical Control Points (CCP) with a risk level that reaches 9. Risk level is the sum of three categories, Likelihood, Severity, and Detectability. Each category is weighted 1-5, one being least significant or most detectable and 5 being most catastrophic or least detectable.

Each Hazard or Hazardous Event was reviewed. No Hazards or Hazardous Events reached the threshold for becoming a Critical Control Point. No changes to the risk level ratings were suggested for any hazards or hazardous events on the table.

2. Infrastructure Review: (Manager, Maintenance Supervisor, Overall Responsible Operator)

- a. Review the 10 year replacement forecast
 - Indexed 2% by inflation.
 - We have a plan; 10 year forecast submitted to Council.
 - The entire system was replaced fall of 2020.
- b. Make repair/replace recommendations based on:
 - i. Work and infrastructure data
 - ii. MOE Compliance Inspection Reports
 - iii. Housing Staff recommendations
 - iv. Water quality trends
 - v. Consumer complaints
- c. The Manager shall adjust the 10-year replacement forecast and annual budget recommendation as required, as an output of the review meeting.

10 Year Financial Plan Discussion:

- Reviewed the 10-year financial plan spreadsheet. The water treatment systems at both locations were fully replaced in the fall of 2020.

No changes were recommended, no questions were raised.

3. Management Review

a. Incidents of Regulatory Non-Compliance

- Miller Manor: There were three incidents of regulatory Non-Compliance identified during the 2020 MOECP inspection. This inspection was conducted in October of 2021. The three incidents were discussed.

First Regulatory Non-Compliance

Appropriate records of flows and any capacity exceedances were not made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA

Discussion: Treated water flows were captured in the 2020 Annual Summary but raw water flows were not. Raw water consumption occurs in three locations, water softener regeneration, sprinkler system flow alarm tests and one outside faucet that supplies non-potable water. Treated water flows were reported in the Annual Summary monthly and the Drinking Water Licence requires they be reported twice monthly.

To close this non-compliance four actions were taken:

- The outside faucet's source water was changed to treated water
- The 2020 Annual Summary was revised by including raw water flows calculated by adding the raw water used by each regeneration cycle of the water softener to the volume of water used during the monthly sprinkler system flow alarm test and reporting the total.
- Total capacity from the drinking water licence was added to the flow summary page of the 2020 Annual Summary to indicate that capacity was not exceeded.
- The table in the annual summary that reports water flows was revised to include rows for twice monthly reporting of flows.

Second Regulatory Non-Compliance

The Annual Report did not contain the required information and/or was not prepared by February 28th of the following year

Discussion: An annual report was prepared by February 28th but it did not contain the expenses related to the upgrade of the water system that was performed in the fall of 2020.

To close this non-compliance the 2020 Annual Report was revised to include the expenses related to the upgrade of the water system.

Third Regulatory Non-Compliance

Summary Reports for municipal council were not completed on time, did not include the required content, and/or were not distributed in accordance with the regulatory requirements.

Discussion: A summary report was prepared by March 31, 2021 as required by O. Reg. 170/03, Schedule 22, (1)(a) but the report was not presented to council until June 8, 2021.

To close this non-compliance the 2022 Management Review Meeting was moved from February to January to ensure adequate time to present the resulting reports to Council by March 31, 2022.

- The Maples: There were no incidents of regulatory Non-Compliance found during the 2020 MOECP inspection which was conducted in October of 2021

Discussion: Although there were no regulatory non-compliances found during this inspection the scope of this inspection was less than the inspection performed at Miller Manor. It was decided that best practice should be to apply the lessons learned from the non-compliances found during the Miller Manor inspection to The Maples as well.

b. Incidents of Adverse Drinking Water Tests

- All tests for both locations returned no adverse results in 2021.

c. Critical Control Point Limits and Response Actions

- The Risk Assessment was reviewed. No critical control points were identified.
- The discussion continued into Appendix C3: Response, and Reporting and Recording Deviations Procedure Table. Through discussion some minor updates were suggested:

1. Add "*Customer Complaints*" to the Monitoring Process/Procedure column for the following hazards at both water systems.

- Long Term Impacts of Climate Change
- Water Supply Shortage

2. Change the Response Procedure: from "*Contact a plumber*" to "*Contact ORO. County staff to provide bottled water*" to the following hazards at both water systems

- Sustained extreme temperatures (e.g. deep freeze, heat wave) Deep freeze
- Sustained extreme temperatures (e.g. deep freeze, heat wave) Heat wave.

d. Risk Assessment Process

- The Risk Assessment process was followed. No changes were suggested.

e. Audit Results

- The 2021 external audit was shared. No opportunities for improvement were identified.
- The 2021 internal audit summary was shared, there was one opportunity for improvement and one corrective action (pages 5 & 6 of the audit):

- Element 1 – No Findings.
- Element 2 – No Findings.
- Element 3 – No Findings.
- Element 4 – No Findings.
- Element 5 – No Findings
- Element 6 – No Findings.
- Element 7 – No Findings.
- Element 8 – No Findings.
- Element 9 – No Findings.
- Element 10 – No Findings.

- Element 11: Opportunity for improvement: Create a tracking mechanism to identify which operators worked on the drinking water system and on what dates. The current system is that the operator is captured in the operator's logs by initialing the log sheets.

- Element 12: Corrective action required: The updated Risk Assessment from February 2021 had not been communicated to Council as of the date of the audit.

Discussion: The risk assessment is reviewed each year during the Management Review Meeting. Moving forward the risk assessment will be included in the report to Council that includes the Annual Summary and Management Review Meeting Minutes.

- Element 13 – No Findings.
- Element 14 – No Findings.

- Element 16 – No Findings.
- Element 17 – No Findings.
- Element 18 – No Findings.
- Element 19 – No Findings.
- Element 20 – No Findings.
- Element 21 – No Findings.

f. Emergency Response Testing Results

- The emergency On Site Emergency Test Summaries for both Miller Manor and the Maples were reviewed.

Miller Manor Discussion:

The results of the mock power failure performed on September 13, 2021. During the test, one UV filter was found to be plugged into an outlet that was not fed from the generator panel. The generator panel fed outlet had been recently installed and it was likely that the UV filter had not been transferred to the new outlet at that time. All other components powered by the emergency generator functioned as expected.

The Maples Discussion:

During the mock power failure, the generator on site was not able to power the required building components as expected.

The generator used at The Maples is smaller than the generator that was purchased for Miller Manor. The Maples generator was handed down from the Ontario Housing Authority when the United Counties of Leeds and Grenville took over the building. It was decided that a similar generator to the one at Miller Manor would be purchased.

The new generator was purchased in the fall of 2021. The upgraded generator required minor upgrades to the generator electrical panel. These upgrades were completed late in 2021.

g. Raw Water Supply and Water Quality Trends

- There is one tracking spreadsheet.
- The Maples - no adverse results and no trends causing concern.
- Miller Manor - no adverse results and no trends causing concern.

- Overall Responsible Operator – no concerns.

h. Follow-Up Actions from Previous Management Reviews

The Maples – 33 Bennett St. Spencerville

Suggested Action: In the risk assessment under Sustained Extreme Temperatures (hot) correct total risk rating to read 5 rather than 6

Outcome: Arithmetic is now correct.

Suggested Action: Follow-up on how traffic would be re-routed in the event of a spill.

Outcome: Local officials will determine the best course of action on a case-by-case basis should there be a requirement to detour traffic in the Township of Edwardsburg Cardinal.

Suggested Action: Ensure sprinkler system raw water is supplied prior to water treatment to eliminate any risk of backflow

Outcome: Complete

Suggested Action: Ensure UV and Water Softener systems are powered from the generator panel.

Outcome: Complete

Miller Manor – 3 Miller Dr. Mallorytown

Suggested Action: In the risk assessment under Sustained Extreme Temperatures (hot) correct total risk rating to read 5 rather than 6

Outcome: Arithmetic is now correct

Suggested Action: Follow-up on how traffic would be re-routed in the event of a spill.

Outcome: Local officials will determine the best course of action on a case-by-case basis should there be a requirement to detour traffic in the Village of Mallorytown.

Suggested Action: Ensure sprinkler system raw water is supplied prior to water treatment to eliminate any risk of backflow

Outcome: Complete

Suggested Action: Ensure UV and Water Softener systems are powered from the generator panel.

Outcome: Complete

Suggested Action: Identify a way to verify if the generator is powering the septic pump at 3 Miller Dr.

Outcome: Andrew Shaw has proposed that a three-position toggle switch be installed in the controller box above the sump pit. The intention of this switch would be to enable an observer to cycle the sewage pumps as required. The switch would be configured cycle 1/auto/cycle 2.

Suggested Action: Confirm that the Emergency Response Testing Result report template has a signature line and that the reports are signed.

Outcome: Complete

Suggested Action: Create a list of elements to go to Council with projected deadlines and share with Manager

Outcome: Complete

i. Status of Management Action Items Identified

- No outstanding action items from last year.

j. Changes in Resource Requirements, Infrastructure, Process, Personnel, DWQMS, or Regulations

- None.

k. Consumer Feedback

- No complaints this year at either building.

I. Resources Needed for QMS

- No new needs or gaps.

m. Results of Infrastructure Review

- All parties report systems and system operations are greatly improved after the upgrade in late 2020.

n. Operational Plan – Currency, Content, Updates

- Operational plan is current and complete. No changes suggested.

o. Staff Suggestions

- Andrew – none.
- Curtis – none.
- Caroline – none.
- Chris – None

4. Emergency Management: (Required attendees: Housing Manager, Maintenance Supervisor/QMS Representative, Overall Responsible Operator)

A traffic accident occurs on the highway near 3 Miller Drive. Mallorytown. The well head is damaged and there are concerns of contamination of the well from overland water.

Prepare a response that:

- a) Meets the needs of the tenants, and
- b) Protects the Counties assets (building, water works).

ORO

- Shut down the water system until the well head is repaired and water quality is verified.
- Arrange to repair well head.
- Recommend performing thorough testing of the water similar to when drilling a new well to determine what affects if any the accident had on the water source.
- Contact MOECP to report adverse test results if any. Determine through consultation with the MOECP what follow up documentation and inspections the repairs will require.
- Make recommendations to correct adverse test results.
- "Shock" the well as a precaution to prevent bacteriological contamination
- Perform two bacterial tests 24 hours apart to confirm no bacteriological contamination

UCLG

- Work with local authorities regarding follow up for the traffic accident
- Arrange cleanup and repair of site around the well head as required.
- Implement plan for no water, provide bottled water as required
- Expected timeline for repair in this scenario is days. If the water system is required to be out of service for an extended period consider a temporary alternate water source. Examples include a tanker truck or food grade liquid storage totes.