



4th Quarter 2021 Drinking Water Quality Management Standard Report to Members of Council

The purpose of this report is to summarize the activities of the Roads and Public Works Department (water distribution system) for the period of October 1st, 2021 through December 31st, 2021.

Ministry of Environment, Conservation and Parks Inspection

An MOECP inspection of the Drinking Water System occurred on September 17, 2021. On December 9, 2021 the Municipality received the Inspection Summary Rating Record based on the inspection. The final Inspection Rating was 100%.

Operational Plan Revisions

The following revisions were completed to the plan this quarter

Element 3 –update with current Council

Element 9 – update responsibilities and authorities for Operations Manager and Environmental Compliance Coordinator. Also identify who Top Management is

Element 10 – update required competencies and desired competencies for the Operations Manager

Appendix B – add 5.1.a to identify who is responsible for agenda and minutes for risk assessment

Update Table 2A to identify which SOP's are being referred to

Appendix C – identify who Top Management is

Appendix F – review and update Essential Supplies and Services List

Appendix J - add 5.3.a to identify who is responsible for agenda and minutes for emergency plans review and testing.

Review and update Emergency Contact List

Appendix M – include Revision 10 – March 2021 Water Distribution System Map

SOP - Mississippi Mills Drinking Water System, "Overall Responsible Operator Designation"
Revision 7 – March 15, 2021

The Staff member completing the duties as back up Overall Responsible Operator has been changed.

SOP - Almonte Waste Water Collection System, “Overall Responsible Operator Designation”
Revision 9 – March 15, 2021

The Staff member completing the duties of Overall Responsible Operator has been changed.

Internal Audits

The internal audit was completed by staff and was finalized on December 1, 2021. The following non-conformances were determined from the audit;

1. **Element 5, Documents and Records Control** – Section 5.2 – Handwritten Records must be legible and permanently rendered in ink. There were numerous entries in the master logbook that have been written over, scribbled out or left difficult to decipher.
2. **Element 5, Documents and Records Control** – the following were not located where indicated in Appendix A – Table 1
 - a. Master logbook is not located in Administrative Assistant Office
 - b. SOP's were not located in the Operational Plan Binder
 - c. Service Requests (complaints) were not located in a file
 - d. Internal Audit Report not located in Administrative Assistant Office
 - e. Shift vacation/schedule not located in a Binder
3. **Element 6, Drinking-Water Distribution System** – Section 6.2 and 6.3 are out of date.
4. **Element 10, Competencies** – QMS Awareness Training of new staff member(s) by the ECC was not documented appropriately.
5. **Element 14, Review and Provision of Infrastructure** – Section 5.0 The Director will include the results of the recommendation and implementation schedule at the Management Review. The minutes of the management review did not reflect adequately the director's review of recommendations and implantation of the authorized items.
6. **Element 18, Emergency Management** – Appendix J Section 5.2 does not reflect what is in the Emergency Plan. The titles of the Emergency Sub Plans do not match those listed in Section 5.0 of the QMS. However, the content is consistent with what is stated.
7. **Element 4, Quality Management System Representative** – Both the Director of Roads and Public Works and the Environmental Coordinator are responsible for ensuring personnel are aware of the applicable legislative and regulatory requirements that pertain to their operational duties and promoting awareness of the QMS to all facility personnel. Additional training was required for location of file and record storage.

The Correction Actions:

1. Element 5 – Logbook procedures to be reviewed with staff. Staff to receive external training for Log Book/Record Keeping in 2022 once it's available.
2. Element 5 – review and update all of Table 1 to reflect current procedures no later than March 31, 2022.

3. Element 6 – to be updated to reflect most recent description as per the approved description in 2021 Drinking Water License no later than March 31, 2022.
4. Element 10 – Training of new staff to be confirmed and in house training record to be completed by A/ECC no later than Dec 31, 2021. All staff will receive training of Safe Drinking Water Act & Related Regulation and Drinking Water Quality Management Standard through Walkerton Clean water Agency in 2022 as well as new staff receiving training for QMS awareness.
5. Element 14 – The QMS rep shall review this requirement with the Director and the person responsible for taking minutes prior to the 2021 Management Review.
6. Element 18 – Operational Plan to be updated to reflect what is listed in the Emergency Plan by March 31, 2022. Notification provided to emergency control group & requested that if Emergency Sub Plans are updated that notification be provided to the Director to ensure the DQWMS Has the same information.
7. Element 4 – Staff were verbally informed of the requirements at the time of the audit. Additional updates on each DWQMS Element are scheduled to take place on a monthly basis starting in January 2022.

There was one Opportunity for Improvement – MMQMS-1 Table 1 should be reviewed and updated to remove ambiguity were identified during review. This will be completed by March 31, 2022 with all other plan updates required.

External Audits

There were no External Audits during this quarter.

Status of License

The certificate of full-scope accreditation for our QMS – Operational Plan (OAP-178) currently posted with our sub-system licenses was issued on May 28, 2021.

The Municipality Municipal Drinking Water License (MDWL) was renewed on November 26, 2021 and will expire on November 25, 2026. The Municipality's Drinking Water Works Permit (DWWP) expires on August 31, 2027.

Drinking Water Quality

Customer Service Inquiries

During the 4th quarter of 2021, 7 (seven) inquiries were received relating to water supply and/or quality and is summarized as follows:

- Water aesthetic - 2 - one was determined to be from flush and the other due to the new water storage tank being commissioned
- Water Pressure – 2 – one was determined that the valve from flushing caused low pressure – valve operated and pressure reinstated and the other one was determined to be a broken line on homeowners side
- Internal Plumbing – 2
- Water meter – 1 – concerned about possible defective water meter. It was determined the water meter is operating correctly.

Adverse Water Quality Incidents

There were no reportable adverse quality incidents in the third quarter (per Ontario Regulation 170/03).

Management Review

The Management Review took place on December 20, 2021. All required staff members were present.

An Emergency Tabletop exercise was conducted on October 4, 2021. It was based on flooding with multiply water breaks within the system over a period of 4 days. From this exercise it was determined that communication between staff would be an issue, staffing numbers and contractor information updates required.

Operational Activities

The following activities have been initiated or completed during the fourth quarter:

- Fall flushing
- Hydrant repairs
- Mill Run watermain commissioning
- 333 Country Street watermain commissioning
- Johanna St apartments watermain commissioning
- Water storage tank added to the system
- Service repairs
- Service inspections
- Meter replacements
- Meter readings

Water Production Statistics

- Refer to attached Table / Graph.

Upcoming Events / Activities

Construction - Mill Run, Water Storage, White Tail Ridge, Riverfront Estates/Apartments, Country Haven

Flushing
Service Repairs
Water Meter Reads

Cc: All Licensed Waterworks Staff

TABLE



Mississippi
Mills

WATER TREATMENT PRODUCTION (2021 YEAR TO DATE Q4)

| Month/Year | Well 3 Monthly Total (m3) | Well 5 Monthly Total (m3) | Well 6 Monthly Total (m3) | Well 7 Monthly Total (m3) | Well 8 Monthly Total (m3) | Monthly Total (m3) | Operating Limit (m3) |
|------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------|-------------------------|
| Jan-21 | 5.04 | 6344.86 | 7765.45 | 26868.61 | 26637.2 | 67621.11 | 165826.8 |
| Feb-21 | 2553.89 | 5693.44 | 7777.53 | 24164.17 | 23689.6 | 63878.66 | 165826.8 |
| Mar-21 | 6045.46 | 5449.25 | 8774.23 | 27954.05 | 27424.7 | 75647.66 | 165826.8 |
| Apr-21 | 6759.19 | 3426.53 | 7196.07 | 25871.27 | 25379 | 68632.08 | 165826.8 |
| May-21 | 9262.8 | 3838.13 | 7726.77 | 32741.75 | 31423.6 | 84993.05 | 165826.8 |
| Jun-21 | 9867.21 | 7879.48 | 0 | 32381.06 | 29811.1 | 79938.88 | 165826.8 |
| Jul-21 | 1840.9 | 7713.9 | 331.6 | 33466.3 | 29347.4 | 72700.1 | 165826.8 |
| Aug-21 | 0 | 5965.2 | 8911.4 | 34026.9 | 33492.6 | 82396.1 | 165826.8 |
| Sep-21 | 24.2 | 3770.8 | 8634.3 | 28357.7 | 27800.3 | 68587.3 | 165826.8 |
| Oct-21 | 2780.6 | 3353.75 | 8164.33 | 27096.04 | 26467.75 | 67862.47 | 165826.8 |
| Nov-21 | 6193.78 | 5264.96 | 7250.2 | 22982.12 | 22308.5 | 63999.56 | 165826.8 |
| Dec-21 | 6019.54 | 5406.62 | 4761.71 | 28573.12 | 23076.3 | 67837.29 | 165826.8 |

GRAPH

