

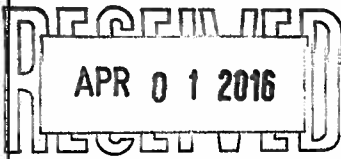


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**Temagami North & South Drinking Water Systems
 Management Review Minutes**

- File Incoming Other
- Mayor
- Council
- CAO
- Building
- Finance
- Ec Dev
- Parks & Rec
- Planning
- Public Wks
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Date :	December 08, 2015
Time:	
Location:	Kirkland Lake Compliance Office
Participants:	Eric Nielson, Senior Operations Manager; Denis Dolbec, Operations Manager; Brian Jibb, Operations Manager; Mike Del Monte, Operations Manager; Anthony Danis, Operations Manager; April Swanson, Process and Compliance Technician Rebecca Marshall, Process and Compliance Technician Ilona Bruneau, Process and Compliance Technician Julie Culverhouse, Business Development Manager
Regrets:	
Previous Review:	December 02, 2014
Review Timeframe:	December 2014 to November 2015



Acceptance of Agenda

Standing Agenda Items

1. Incidents of Regulatory Non-compliance *(Discussion Lead - Rebecca Marshall)*

- **Temagami North MOE Inspection** - The most recent MOE inspection was conducted on September 30, 2015, by Lori Duquette. The inspection was announced and focused. According to the draft report the system will receive an inspection rating of 100%.

One issue was noted – Low chlorine residuals in the distribution system at and after the tower and it is recommended that the issue be resolved before there is a non-compliance.

(The chlorine at the plant has been increased and the residuals at the tower and Ontera are better. The installation of a chemical booster at the tower will also be investigated)

- **Temagami South DWS Moe Inspection** - The most recent MOE inspection was conducted on September 30, 2015, by Lori Duquette. The inspection was announced and focused. According to the draft report the system will receive an inspection rating of 100%. One recommendation/best practice item was identified;

During the inspection period, due to problems with the filter effluent valve, filtered water continued to be directed to the wastewater pit after a back wash rather than the clearwell. As a result of this the wastewater pit overflowed, causing the release of filtered water into the environment and into Lake Temagami.

***note: it was on the 2015 Capital Letter to have the valves serviced but the item was not approved**



Recommendation:

At the time of the incident it was noted that the wastewater pit is not equipped with a high level alarm it is highly recommended that the municipality and Operating Authority consider the addition of a wastewater pit high level alarm to ensure operators are notified in the future and can take immediate action. (This is being done)

2. Incidents of Adverse Drinking Water Tests

(Discussion Lead - Rebecca Marshall)

- There have been no adverse drinking water incidents for the Temagami North DWS.
- **Temagami South DWS**
 - February 18, 2015 - Complete loss of pressure - Pumps unable to meet demand due to a water main break in the distribution system. The water was shut off at approx 06:30am as municipal staff working to locate the break. A Boil Water Advisory was put into place. Once the water main break was found and isolated, the water was turned back on. Disinfection was restored and 2 sets of Bacti samples were taken from 5 locations, 24 hours apart. The results were negative for E.coli and Total Coliforms. The incident was resolved on February 23, 2015 and the Boil Water Advisory was also lifted on this day. AWQI # 122559

3. Deviations from Critical Control Limits and Response Actions

(Discussion Lead - Rebecca Marshall)

PDC and WISKI were reviewed from December 2014 to November 2015

Critical Control Limits (CCLs) for the Temagami North Drinking Water System include:

1. **Filtration Process:** Turbidity off the filters – 1.0 NTU (high)
Turbidity off the filters deviated from the CCL on several occasions in 7 of the 13 months. None of these incidents resulted in an AWQI. They typically occur momentarily after a backwash.
2. **Primary Disinfection:** Treated free chlorine residual - 0.85 mg/L (low) and 3.5 mg/L (high)
Feb 7: Chlorine = 0.87 – CT Met
Oct. 26: Chlorine = 0.52 (20 second dip)
3. **Secondary Disinfection:** Distribution free chlorine residual – 0.05 mg/L (low) and 4.0 mg/L (high)
No CCL deviations were recorded

Critical Control Limits (CCLs) for the Temagami South Drinking Water System include:

1. **Filtration Process:** Turbidity off the filters – 1.0 NTU (high)
Turbidity off the filters deviated from the CCL on several occasions. None of these incidents resulted in an AWQI. They typically occur momentarily after a backwash.
2. **Primary Disinfection:** Treated free chlorine residual - 0.9 mg/L (low) and 3.5 mg/L (high)
Aug 23: CL17 reading 0.89 and hand held reading 1.01, CL17 changed to reflect hand held reading



3. **Secondary Disinfection:** Distribution free chlorine residual – 0.05 mg/L (low) and 4.0 mg/L (high)
No CCL deviations were recorded.

4. Effectiveness of the Risk Assessment Process *(Discussion Lead - Rebecca Marshall)*

- The Risk Assessment Procedure and Outcomes were reviewed on November 19, 2015 during the internal audit and the information remains valid.
- The only Critical Control Points identified are the mandatory filtration process and the primary and secondary disinfection free chlorine residuals.

5. Internal Audit Results *(Discussion Lead - Rebecca Marshall)*

The most recent internal audit of the Temagami Drinking Water Systems was conducted on November 19, 2015. Three OFI's were identified and will be addressed in the next revision of the Operational Plan.

6. Third Party Audit Results *(Discussion Lead - Rebecca Marshall)*

- A full scope Systems Audit of the Temagami North and South Drinking Water Systems was conducted on March 5, 2015(desk top) and April 1, 2015(on-site) by SAI Global. There were five non-conformances identified which were addressed immediately and cleared. Temagami received accreditation on May 5, 2015.

7. Results of Emergency Response Testing *(Discussion Lead - Rebecca Marshall)*

- The contingency plan for "Security Breach" is being tested on December 15, 2015.

8. Operational Performance *(Discussion Lead – Mike Del Monte)*

- The plants could be running better than they are. They are making safe drinking water and staying in compliance but the plants require a lot of attention and maintenance in order to do so. Required work will be identified in the 2016 capital letter.

9. Raw Water Supply and Drinking Water Quality Trends *(Discussion Lead - Rebecca Marshall)*

- The raw water quality fluctuates seasonally, which is typical of surface water. The annual average values for operational tests (pH, alkalinity, colour, turbidity, temperature, etc) have not changed significantly over the past years.

10. Follow up on Action Items from Previous Management Reviews *(Discussion Lead - Eric Nielson)*

- There were no action items from the previous Management Review



11. Status of Management Action Items Identified Between Reviews *(Discussion Lead - Eric Nielson)*

- There were no items identified between reviews

12. Changes that Could Affect the QEMS *(Discussion Lead - Eric Nielson)*

- There will be some changes to the organizational structure in the New Year which result in the Operational Plan requiring some minor updates.

13. Consumer Feedback *(Discussion Lead - Rebecca Marshall)*

- There have been no complaints for the Temagami North DWS or the Temagami South DWS.

14. Resources Needed to Maintain QMS *(Discussion Lead - Eric Nielson)*

- More resources may be required in the New Year due to the increased work loads.

15. Results of the Infrastructure Review *(Discussion Lead – Mike Del Monte)*

Temagami North	
inspect clearwell	2016 Capital letter
submersible pump for instruments	Not approved
replace chemical metering pump	Completed
chem tank ultrasonic	Not approved
load test genset	Completed
service plant heating	Town completed
service flow and control valves	2016 Capital letter
inspect plant intake	2016 Capital letter
install pH meter for distribution	2016 Capital letter
replace chart recorder	In progress
Temagami South	
remove and replace old WTP	under funding proposal
service WTP control (clay) valves	2016 Capital letter
service heating by HVAC contractor	Town completed
inspect intake	Not approved
replace genset	under funding proposal
chemical tank ultrasonic	2016 Capital letter
pH for distribution	2016 Capital letter
replace chart recorders	In progress



16. Operational Plan Currency

(Discussion Lead - Rebecca Marshall)

- The plan was last updated on February 5, 2015 (Revision 6).
- Some minor updates are required which are described in section 5 of this agenda
- Any issues or recommendations identified during this Management Review meeting will also be considered in the next update.

17. Staff Suggestions

(Discussion Lead - Eric Nielson and/or Mike Del Monte)

Acceptance of Minutes of Management Review Meeting and Adjournment