

DWQMS Management Review Meeting

Tuesday March 19, 2019

Belle River Water Treatment Plant

Chair: Nicole Bradley

Attendees: Darrin Johnston, Gary McDonald, Garry Punt, Kevin Girard, Nelson Cavacas, Stephanie Grondin

1. Call To Order – 9:10am

2. Review Management Review Meeting minutes from March 8, 2018.

3. Action Items from March 8, 2018:

a. Incidents of Non-Compliance

- Stoney Point WTP – Ontario Regulations – 4.1.ii – per Nicole, have all be taken care of.
- Findings from last year’s audits, need to review to confirm they have been taken care of.
- Element 4 – Kevin Girard is now QMS representative
- Element 5 – table has been updated and revised.
- Element 18 review completed in April of last year.
- Element 9 has been completed
- Element 13 is done. Will need to go through the list again for this year’s audit. Updated list is in the contingency binders in the lunchroom at WD shop. Nicole can add to Compliance Science. Gary McDonald requesting an update from the May 2018 list. Nicole will discuss Gary Mc to update.
- Element 18 will be discussed further into the meeting.
- Everything has been completed from the external audit, otherwise it would have been in the CARRS for this year.

b. Action Item Table from March 8, 2018:

- Suppliers list completed, but requires revision as mentioned in the external audit.
- Mock emergency did not occur last year.
- Corrective action reports are complete
- Job descriptions updated, but may need further adjustment due to outcome of external audit.
- Per NB, everything in the table has been completed.

ITEMS TO REVIEW MARCH 19, 2019

1. Incidents of Non-compliance – Table presented

- a. Lakeshore WSA – 2 under Ontario Regulations, one in June 2018 and resolved, another in October 2018 from MOE inspection due to communications being down for extended period of time. Resolution accepted, complete. Under license/permit – monthly UV reports not being completed correctly, resolution accepted by inspector, complete.
- b. STPT – no incidents yet. Report has not yet been completed by inspector, may have items after report is completed. Coming in this afternoon.
- c. Tecumseh – 2 – adverse results – due to lab error, switched labs, matter resolved.
- d. Union – 2 – one in June and one found through MOE inspection. Error corrected and communication between NB and Ken determined to prevent this type of error from reoccurring.

2. 2018 Internal Audit – NB presented Audit Report

- a. Councillor training ongoing currently. Endorsement and commitment being completed tonight at Council meeting.
- b. Locate set up addressed through new program being introduced in 2019 – ongoing.
- c. QMS Rep role – suggested by inspectors that there be at least 2 persons assigned.
- d. Operational plan needs to be on the website for DWQMS. Kevin suggesting we add ours to the web to appease request in audit.
- e. Communication with suppliers will be taken care of through revisiting the element.
- f. Additional training for CityWorks is coming for Distribution staff and administration staff.
- g. Risk assessment linked to review and provision of infrastructure – Kevin advised this is related to performance measures and we should be able to do relatively easily.
- h. Obsolete infrastructure in Antero – NB advised she can go in and delete. Kevin inquired how Antero is maintained, NB advised we develop the timeframe/template within Antero and we maintain it. Software updated 2 years ago, per KG should be revisited in 2020. System will notify when update is required. DJ said an email will be sent to Pat Girard (IT) to see when next update should take place.
- i. Suggestion in audit to address smaller scale issues and debrief. NB presented to KG if that is something that can be looked at going forward. KG in favour, suggested it can be added to the H&S meetings to improve communication and understanding of activities occurring from plant to plant.

3. 2018 External Audit – 4 minor 1 major

- a. Element 5 – minor – NB will work on completing requested corrections for next audit.
 - b. NB sent info into NSF, GP received confirmation. NB is looking to have answers by the end of this week as it is required by April 2019 for accreditation.
 - c. Still awaiting final copy of report to identify any OFIs that require action.
4. **Services/Activities** – NB presented outline of identified changes coming. Requesting any others be identified by the meeting members.
- a. NB questioning why extra tests are being done on the Lakeshore-Union WSA. If it is due to switch of coagulant (that took place at the Ruthven WTP) then we should inquire because we are looking into a coagulant switch as well...will we need to run these extra tests?
 - b. Effective Monday, John Merritt will be working out of Lakeshore and Bill Dukes will be working out of STPT until more is determined on the return of Margaret, Mike O'Connor and Brad Deboers.
 - c. New locate program will be introduced, training will be provided once in place. GP is waiting for SCADA issues resolved before adding the electronic log books, will discuss further with Pat Girard (IT). Meter workload being reviewed and revamped as it now in CityWorks.
 - d. DWQMS standard and relevant policies will be added to tender packages for water jobs going forward. GP & KG advised this will take effect with next tender.
 - e. Paperwork will be created for valve maintenance until Sue in IT can look into formalizing an electronic format.
 - f. Source Water Protection - change to regulation outlined in presentation. Info is on EBR #013-1840
 - g. Clean Water Act – amendments under “General” Info is on EBR#013-1839.
 - h. Health Canada – Updated drinking water on lead. MAC reduced from .01mg/L to 0.005 mg/L. Lakeshore, STPT and Tecumseh will remain within the standard guidelines even with this change. Current results for lead are generally less than 1.0 ug/L.
 - i. Tecumseh – NB inquiring about HAA sampling, wondering about water coming from Tecumseh as it is being delivered from Windsor. The HAAs need to be completed near the point of entry so we are not getting a true representation as the water is travelling a long way before it gets to our nearest sample station. Test is irrelevant if the results are used for anything. GP inquiring if we could use what Tecumseh is using. Test is completed quarterly. KG advised we will continue to do the test as required.

5. **Emergency Preparedness and Response**

- a. NB suggested we need to come together to go through the document provided. NB and DJ identified a couple of areas that need to be added or reviewed. KG suggested a meeting be scheduled to review in the near future when everyone in the room with the exception of NC is available.

- b. NB needs a decision on how often Lakeshore will review procedure for emergency preparedness to add to Element. GP will determine and advise NB. GP will have summer student work on supplier list then will determine from there.

6. Results of Infrastructure Review

- a. NB requesting we compile WO report from Antero for Treatment Plant activities. SG to provide w/o report from CityWorks for Water Distribution activities.
- b. Currently working on dead end flushing program and hydrant maintenance was completed in the fall for Water Distribution. Need to create a written plan for maintenance programs and create priorities.

7. Comments/Suggestions From Staff

- a. GP suggested a pamphlet and/or web content be designed regarding water conservation.
- b. NB suggested “new business” be deleted from presentation as it is an ongoing review with opportunity to add new items throughout meeting. GP agreed.

8. Next Meeting: August 13, 2019

- a. Items to review that month will require information be brought in from meeting members.



March 2019 Mngt
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Meeting Adjourned: 10:40am

DWQMS - Management Review Meeting

Sept 25, 2019

Attendees: Nicole Bradley (NB), Kevin Girard (KG), Garry Punt (GP), Darrin Johnston (DJ), Jay Gignac (JG), Nelson Cavacas (NC), Lauren Rivest (LR)

Absent: Stephanie Grondin, Gary McDonald (GM)

1. Called To Order at 9:20 am

2. Review Minutes from September 26, 2018 Management Review Meeting

- a) Section 7 c – Distribution should have manufacturer information available. NB stated that Ministry looks for us to have manufacturer information on pumps and lab equipment, this information must be on file and accessible. GM had said that he has these in a filing cabinet in his office, but it is locked. This information needs to be accessible.
- b) Section 12 a – NB asked if Stantec has finished the updated drawings and schematics. KG and GP stated that the new Stoney Point's is to be completed next September, as part of the scope of work for the clarifier replacement. The IPC Drawings need to be updated.
- c) Section 12 b – GP stated that the NSF61 inventory list of chemicals and components was completed by Abby. Needs to be available for auditor. NB to follow-up on letter sent, describing that we meet NSF requirements.
- d) Section 12 d - Source water meetings - KG goes to all of them as he is a committee member, one coming up in October that he is going to. Bill Dukes was appointed as the treatment representative.

3. Action Items From Last Meeting

- a) Mock Emergency – To be scheduled for early November. Once completed, it does not have to be an annual event. KG gathered information from other municipalities.
- b) Saddles Rotting – Complete. GP said we had eight saddles out. Compactor on site, AMICO was using that rattled the ground. The saddles we used, the metal was impartial. KG stated that as failures happen we will replace the saddles. Tracking was improved through the use of City Works.
- c) Water Production Report – Complete. KG also tracks water purchased and produced through both plants, compared year to year, for the last three years. This is saved in the W drive.
- d) Distribution to have Manufacturer Information Available - Ongoing. See above section for more information.
- e) Councillors to be made aware of responsibilities – All of them had training at some point.
- f) CAR Element 15 – Complete
- g) Plant Process – Drawings and Schematics – Complete, see above.

- h) Sign Off on NSF61 & NSF372 – Complete.
- i) Plant manuals need to be updated for both Belle River and Stoney Point – GP did reach out to an associate and will follow up.
- j) Source Water Meetings – See above.
- k) Corrective Action Forms – Completed.
- l) Emergency Preparedness Report– KG bring the draft to everyone and finalize after we hear suggestions and take comments. Have NC approve and then finalize.

4. Operational Performance

Treatment Plants & Distribution – NB broke performance down into three topics: Lab Analysis Results, Critical Control Point tracking and anything Out of the Ordinary. In general plant performances have been steady providing good quality drinking water.

- a) Lab Analysis –Data is based on weekly analysis, with total number of samples being 52. Used microcystin results from Caduceon.
 - i. Raw water – plants are doing their job, no issues with plants for both Belle River and Stoney Point.
 - ii. Treated water – plants are operationally sound, based on all lab results. Both plants track generally the same for operational performance.

- b) Critical Control Point Exceedance
 - a) No critical control point limit exceedences at LWTP for this reporting period. NB stated that there were instances where CCP alarms were generated and call-ins occurred. However, these instances are not recorded due to system returning to operation but the alarm remaining engaged until physically cleared by an operator. These instances are generally quick spikes or dips in operational values in turbidity. If we need to come in to restore the alarm, should we record this? NB asked to assess Critical Control Points in April at Risk Assessment meeting.

 - b) STPNT incident on November 24, 2018 - Clairifier turbidity, Jan 10, 2019 – Filter effluent turbidity, Jan 18, 2019 – clarifier turbidity, Jan 20-21, 2019 – clarifier turbidity, Jan 21, 2019 Filter effluent turbidity, May 8, 2019 Intermediate well turbidity, May 8, 2019 – Clarifier turbidity, July 26-27, 2019, - Plant effluent chlorine residual.

-Hope that we will see decrease in these incidents once the clarifier is fixed.

 - c) Distribution, none to our knowledge.

5. Out of the Ordinary Occurrences – none for either plant.

- DJ discussed operational Issues in Belle River:

- There was a generator failure which was reportable, due to the UV failing to close, this caused non UV treated water to get into the reservoirs. This was confirmed that it was fine to leave in the reservoirs due to the chlorine residual in the reservoirs. The water was treated again before it left the plant.
- Residual problem – battery back-up that the two main servers are on did not last long enough. If you lose power, it goes into safe mode and will not start up until we go to fix it. Talked to Pat about getting a longer battery back-up, currently we have 45 minutes. If we lose power, we will have a data gap. We will wait to see the comments from Ministry regarding this issue.
- DJ discussed one UV bulb failure, system switched over to other unit without any system shut downs. Bulbs due to be changed this fall, bulbs are in and ready to change.
- DJ discussed operational Issues in Stoney Point:
 - Carbon system, is antiquated state. Needs decision on what to do down the road. There is no room to replace it, but we would want to replace it with same unit as LWTP. Intention is to mix it in the clarifier. If we replace it, we would need to put an expansion on the low lift. Projection for 2021. GP suggested that an alternative would be to put a new loading system.

6. Distribution

Valve maintenance programs are up and running. Tracked through using an audit trail reports. Valve maintenance plan document needs to be created. A few main breaks, two on Railway and one on Ruston Drive. KG stated that there were quite a few leaking services that needed to be fixed, a high number of water-tap in services, and leaking fire hydrants. GP started hydrant flushing. Painting the hydrants totally yellow, and adding reflectors. Look into getting reflective tape for top of pole (for during winter). Need to notify fire department so that they take care of the hydrants.

7. Trends in Raw Water Supply and Drinking Water Quality

- a) Raw water - LWTP & STPT – Ph, Temperature, Turbidity, & flow comparison for 2017, 2018, & 2019
 - i. LWTP - Flow was down this year compared to previous years, Turbidity was not consistent.
 - ii. STPT- Ph was high in Stoney Point, throughout the year, temp was consistent, turbidity was not consistent.
- b) Treated water – LWTP & STPT – PH, Temperature, Turbidity, flow and Alum comparison for 2017, 2018, 2019.
 - i. LWTP – pretty consistent
 - ii. STPT – High PH, temp was consistent, Alum was low based on flow going through plant. Flow is steady.

- c) LWTP chart viewing Raw vs treated for 2017 & 2018. Consistent between putting out and taking in.
- d) STPT chart viewing raw vs. treated for 2017 & 2018. Significant differences, more water coming in then sending out. New flow meter was installed at STPT, which should even out.

8. Deviations from Critical Control Points

- a) Refer back to Operational Performance and the list of indicators used to represent the operational performance at both plants.
- b) Binders are located at each of the WTP's with detailed notes on each of the CCP limit exceedents.

9. Effectiveness of Risk Assessment Process

- a) Annual review was held in April. Went over Lakeshore, Stoney Point, and Distribution. Reviewed and updates were made to each. Meeting minutes are available for full details. NB was wondering if the effectiveness of the Risk Assessment is good. DJ commented that it is good compared to before. No issues from external audit, only a few recommendations. KG said that we could look at adding critical control points to Risk Assessment Table.

10. Resources Needed For Drinking Water QMS Maintenance

- a) Are there sufficient competent operators to fulfill staffing needs – KG comments that the water compliance position needs to be full time. Review staffing needs because of this change. GP commented that we are not meeting our QMS requirements based on current staffing.
- b) Current and Appropriate Training Courses – NB noted courses are heavy in Fall/Winter. We can't afford to lose staff to training during Spring/Summer. On track for training, everyone has met their requirements. NC confirmed with Darlene, 3 of the 8 counselors did not complete training. Darlene is looking into training for these counselors.
- c) Budget – NB stated, ensure that when budget is planned to have a discussion to keep minutes to prove that we have discussed the infrastructure for the auditor.
- d) Revised operations manuals and development manuals - NB stated that these need to be revised and updated. GP is going to track it down. We need to sit down and discuss. Most of it is still relevant, but things need to be updated. When tender/development packages are given out to contractor, make sure they are up to date. Development manuals need to be drafted.
- e) Library of Reference materials – Keep training binders for information. As well as magazines that we get. Keep everything in one place for easy access and reference. Work stations will be in this area as well.

- f) Maintenance Programs – For QMS system, the valve maintenance program needs to have a document to use.
- g) Document Control Tools –Using electronics & media devices. Tablets and electronic log books. Electronic log books are on ITs list, Tablets are budgeted for.
- h) Suppliers and Services – Are they still in business, do they have what we need? GP discussed how we changed procurement rules, are we going to do a procurement approval for contractors. Still subject to dollar amounts. NC would like to have a roster list for engineering.
- i) Audits/Auditors – Should we consider starting internal process audits? This could be possible if we had a full time person. We are keeping NSF as our external audit / accreditation body. GP said that we are going to go with a different auditor, but still keeping with NSF.
- j) Council/Owners – Need to have received their standard of care training. They have been made aware.

11. Currency of Operational Plan

- a) Annual review for all elements is completed, they are all current
- b) As mentioned earlier, our operational manuals are in need of full review and updating.
- c) Encourage staff to check out Compliance Science.
- d) NB will have training for everyone on Compliance Science.

12. Consumer Feedback

- a) No complaints.
- b) Positive feedback about Terry Collins, Mike Quellette, and a summer student. Positive complements from customers about on call visits.
- c) A resident called with questions regarding Microsystin, and was directed to the Health board.
- d) Residents are asking about quality of water for home brews.
- e) Feedback from new homes, because of PVC piping, chlorine hasn't built up a film on the plumbing.

13. New Business

- a) Compliance Science has apps for mobile devices relating to vehicle inspections and traffic control: Job Plan and Traffic Plan.
- b) We know Fluoride is coming to Tecumseh Distribution. When we receive more details from Windsor and Tecumseh, we need to notify our distribution system of the change. We will need to consult the Ministry to find out if we need more sampling for fluoride. GP noted that we can

ask Tecumseh to do their own checks on our system. Discussion will take place when we hear from Tecumseh and Windsor.

14. Next Meeting: March 25th, 2020.

15. Budget Meeting:

- a) Watermain in Wallace Line to support Wallacewood subdivision has been pushed off and will not be completed next year.
- b) Mill St, across the street from W Puce. Drainage is doing drains down this street, potentially doing a full reconstruction. We have identified this main for 2020.
- c) Lalonde St was completed in 2019.
- d) There is a 12 inch and 8 inch behind the LWTP, we will be replacing the 8 inch with a 16 inch, as well as replacing the watermain on Railway, Sixth, and Seventh streets. Engineering is planned for 2020 and construction in 2021.
- e) Decided not to proceed with Chisolm, Evelyn, or Mulhul, since the water levels will impact the cost of these projects. They will be slated to complete in 2021.
- f) Strong road is planned to be engineered in 2020 and will likely be constructed in 2021. Historically, we have had breaks in this system.
- g) On Tecumseh Rd there is a dead end 2 inch at Rochester, eventually the plan is to loop it up to Tecumseh road. The ultimate plan is to isolate the Haycroft Station from the rest of the stations. Intention is to loop the system, and put a check valve on Gracey in 2021.
- h) Goal has been to tackle outstanding cast iron water mains, and chip away at ductile as issues arise. Riviera Estates has had issues with breaks.
- i) Notre Dame was completed this year, eventually the intention is to go down Eleventh all the way to St. Peter.
- j) There is a tower scheduled for 2024 in Stoney Point WSA, was identified in the Master Plan, but KG is not confident that this will take place in this timeframe due to competing pressures from Wallace Woods. Intention is to eventually install a 300mm up Comber Sideroad to the tower from St. Clair.
- k) Lighthouse cove, the intention was to replace Lower Thames Lane, Admiral Drive, Anchor, and Muskey for 2020. Complication is that this is mostly private land, KG reviewed the bylaw and we are allowed to access their property. This will complete all cast replacement in Lighthouse Cove. Ultimately decided to delay this project due to high water levels and dewatering costs. KG will look into alternative rehab methods such as re-lining.
- l) GP and KG discussed interconnecting the two mains in Comber south of County Road 46. If there was an emergency, we could feed from the union system in Staples, the interconnect with the union system is currently closed, but we could open up this intersect and reverse the flow of water and push it up to the 77 main. We could supply water to the Comber area in the event there was a break in the system north of the reservoir.
- m) KG asked if there are watermain issues that need to be bumped up:

- i. Off 22 and Patillo Road, is on the list for 2022, engineered in 2021 in conjunction with Patillo Road reconstruction.
 - ii. Blanchard Park, old system.
 - iii. Beckett and Buckwheat is slated for 2025, but could get pushed up.
 - iv. Flanders has an old system.
 - v. West Belle River Road between the Belle River crossing south of 22 to County Road 22 is in need of replacement.
- n) Regarding sample stations, before anything is put in, KG will be talking to NB and asking if it is needed, in order to not have unnecessary stations that are not able to be checked.

Meeting Adjourned at 11:58am



September 2019
Mngt Review Mtg.ppt

NB/lr

QMS Representative Signature

Printed Sign-off

Date Signed