



Date: February 21, 2019

Dear WQA Manufacturer Section Member,

The purpose of this letter is to make Manufacturers of Point-of-Use and Point-of-Entry (POU/POE) aware that there will soon be a growing demand in Canada for products that carry a certified health claim for the removal of manganese. As of today, no such products exist, because there is no approved Canadian Standard by which manufacturers can seek such a health claim. WQA, Health Canada, and the Standards Council of Canada are collaborating on an initiative to address this implementation gap.

The driving force behind this effort is that Health Canada is planning to issue a new health-based Maximum Allowable Concentration (MAC) for manganese which will apply to drinking water supplies in Canada. What you may not know is that there are many small drinking water systems in rural Canada, and those small systems often rely on POU/POE devices that carry certified claims in order to meet their national Canadian drinking water requirements.

Manganese in small amounts is essential to human health; however, elevated levels in drinking water have been shown to have negative health impacts. Recent studies suggest an association between exposure to manganese in drinking water and neurological issues in infants and children, such as changes in behavior, lower IQ, speech and memory difficulties, lack of coordination, and movement control. These health related impacts prompted Health Canada, the national drinking water authority in Canada, to issue a public notice on June 3, 2016, which proposes a new enforceable MAC level for manganese. The public notification can be found at <https://www.canada.ca/en/health-canada/programs/consultation-manganese-drinking-water/manganese-drinking-water.html>.

In recent weeks, both Health Canada and WQA have received feedback from Canadian territories that this new MAC will create a potential implementation gap for small systems and private wells in Canada. Many drinking water systems in Canada are small systems that do not have the infrastructure to implement a centralized treatment strategy. These small systems rely on certified POU or POE drinking water treatment products for treatment. In Northern British Columbia (BC), approximately 95% of the public water systems are small systems serving less than 500 people. About 40% of these systems are expected to exceed the MAC, and around 25% of private wells in BC exceed the MAC. Other territories will be highly impacted as well. Because of this, the new manganese regulations will have a large impact on these small systems, and it will be costly and difficult for the systems to remove manganese without the availability of certified products that carry a health-based claim for manganese. Table 2 provides a more detailed analysis of the territories in Canada which will be impacted.

Private well owners in Canada will also be impacted. Although these private systems are not required to comply with the new MAC level, the drinking water consumers who rely on those wells are subject to the same health impacts. In conjunction with the announcement of the new MAC level, it is anticipated that private well owners will also be pursuing drinking water treatment products for the removal of manganese, and independently certified products provide consumers with the highest level of assurance.

While Table 2 only covers the impact in Canada, I also want to make manufacturers aware that this contaminant will continue to receive attention in the U.S. market. Other contaminants have recently captured the spotlight in the U.S., but manganese is discussed at almost every U.S. drinking water conference that I attend. And beyond just the negative aesthetic impacts, there is well established science behind the health impacts, which is why Health Canada decided to move forward with issuing a health-based MAC.



Table 2 – Expected Impact of the new Mn MAC

Provincial and Territorial Anticipated Impacts	Estimated Impact
Newfoundland and Labrador	High
New Brunswick	High
Saskatchewan	High
Nova Scotia	High
British Columbia	High
Quebec	Moderate
PEI, Ontario, Yukon	Low

You may be aware that it is currently possible to obtain an aesthetic claim for the removal of manganese through NSF/ANSI standard 42. However, as part of this initiative WQA reviewed the current product listings for all the Certification Bodies and we could not find any POU/POE products on the market that carry a third-party certified claim for even the aesthetic removal of manganese. Further, anyone familiar with product certification will know that there is a higher bar for achieving a certified health-based claim. And again, you currently have no standard available to you which would allow you to pursue such a claim.

To address this need, WQA will be issuing a new standard titled “WQA ORD1901 - *Harmonized Product Requirements for Drinking Water Treatment Units that make Manganese Performance Claims*” which will allow Certification Bodies to immediately begin testing and certifying products that are capable of removing manganese down to the new MAC level and beyond. The intent of this new standard is to provide a temporary mechanism which will allow the industry and the Certification Bodies to immediately begin addressing this implementation gap. WQA will not be charging any fees for obtaining a copy of the standard, and no royalties will be due to WQA for its use.

Based on the information gathered by WQA, there are four POU/POE drinking water treatment technologies that have the potential to remove manganese down to the new MAC: cation-exchange, distillation, filtration and reverse osmosis. The new WQA standard ORD1901 will provide the mechanism to perform that type of testing for specific models or product lines that fall into one of these four technology categories. The new standard will also provide an immediate pathway towards third-party certification of models and product lines. If new technologies come to light which can remove manganese, those technologies can be added to WQA ORD1901 through this same process.

Per our agreement with Health Canada, the testing procedures in this new standard will be harmonized with the existing NSF/ANSI standards. This harmonization will make it easy for manufacturers to understand the new requirements, and to gauge whether or not their products can comply. The harmonization will also make it easier for Certification Bodies to implement the new test procedure. The standard is also structured in a way that allows Certification Bodies to offer this new claim for their clients under the existing NSF/ANSI standards with appropriate reference to the WQA ORD1901 as the testing procedure. This “preferred listing strategy” was settled upon as the least confusing approach for regulatory officials in Canada, end-users and also the manufacturers. It will also provide a smooth transition towards a more permanent solution to address this standards gap through the existing approved Canadian standards.



In order to avoid duplication of standards, I have recruited the support of NSF International Inc. to promote the consideration of a health-based manganese claim as a permanent addition to the relevant NSF/ANSI standards. Once that permanent solution is in place, WQA intends to withdraw WQA ORD1901 so that there is no duplication of standards. The intent is that any manganese reduction claims which were previously certified using WQA ORD1901 will already have been listed by the corresponding Certification Body under the relevant NSF/ANSI standard, or can be easily transitioned to such a listing under the relevant permanent standard. Meanwhile, WQA will also promote the inclusion of those new versions of the NSF/ANSI standards in CSA B483.1. This will ensure that there is a permanent Canadian Standard which covers health-based claims for manganese removal and will avoid any confusion caused by duplication of standards.

Manufacturers who are interested in helping Canada address this implementation gap, by pursuing a certified health-based claim for the removal of manganese, should contact me by emailing eyeggy@wqa.org. I will add your name to a special distribution list to ensure that you are kept in the loop as WQA works with the authorities in Canada to get the new standard approved for use. Once that approval is in place, you will be able to contact your Certification Body of choice to pursue adding the claim to your product line. Certification Bodies who have expressed interest in providing this service include CSA Group, IAPMO R&T, NSF International Inc., Truesdail Laboratories Inc., WQA Gold Seal, and UL.

In conclusion, WQA is proud to take the lead on this effort as part of our greater mission to be the recognized resource and advocate for the betterment of water quality. It is my sincere belief that POE and POE treatment needs to be leveraged as a vital component of water quality solutions, and this initiative will help make that possible for consumers who are impacted by manganese. Please feel free to reach out to me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Eric Yeggy". The signature is written in a cursive, flowing style.

Eric Yeggy

Water Quality Association
Technical Affairs Director