

April 29, 2013

Commissioner Steve Novick  
City of Portland  
1221 SW 4<sup>th</sup> Ave. Suite 210  
Portland OR 97204

Dear Commissioner Novick:

This letter responds to your February 4, 2013, request for a deferral of completion of the Mt. Tabor and Washington Park Long Term 2 Enhanced Surface Water Treatment Rule (LT2) reservoir compliance projects to December 31, 2024. The compliance schedule currently in effect, proposed by the City of Portland and approved by the U.S. Environmental Protection Agency (EPA) in 2009, requires that the three Mt. Tabor open reservoirs be disconnected by December 31, 2015, and the two Washington Park open reservoirs be disconnected by December 31, 2020.

You cited new information in your request for a deferral, including material economic and regulatory circumstances that have changed since 2009:

1. An open reservoir extension granted to the City of Rochester, New York by the New York state regulatory agency,
2. Increasing water rates,
3. Water demand that is declining steadily,
4. Increasing debt-to-revenue ratio,
5. Water Research Foundation Study 3021 showing no *Cryptosporidium* following extensive sampling in Portland's open reservoirs, and
6. Decision by EPA to review and reassess the LT2 rule in response to President Obama's Executive Order and appeals for municipalities with uncovered reservoirs similar to Portland's.

We have carefully and thoughtfully reviewed and considered each of these issues and the material you submitted, and our findings are presented below, with information source citations.

#### City of Rochester NY Compliance Schedule Extension

The New York State Department of Health has Primacy from EPA for safe drinking water and further delegates implementation of the drinking water program to county health departments with state oversight. The state and Monroe County agreed to amend Rochester's open finished water reservoir compliance schedule based on the following rationale (communication with NY State Dept. of Health):

1. Rochester's water source is filtered and disinfected. *Cryptosporidium* sampling of both the untreated source water and the fully treated water from the filtration treatment plant has shown no detections to date. (Note-Portland's water is not filtered.)
2. Rochester covered one open finished water reservoir as per the original compliance schedule. (Note-Portland has not completed decommissioning of any open reservoirs.)
3. The two remaining reservoirs are not subject to surface water runoff, are equipped with bird deterrence, are inspected daily, have 24/7 video surveillance, and the reservoir effluent water is retreated to inactivate bacteria and viruses prior to reaching the first customer. (Note-Portland does not retreat the water exiting its open reservoirs, and the reservoirs are not equipped to deter birds.)
4. Rochester has critical distribution piping infrastructure leakage problems, resulting in a high rate of water loss and presenting a public health risk from leakage into the piping system during low pressure events. (Portland has not identified water loss as a critical issue, or any other critical improvements that would take public health priority over the open reservoir projects.)
5. Rochester's debt load for construction of the filtration treatment plant extends until 2024.
6. Rochester's extension request included a *Giardia* and *Cryptosporidium* action plan that includes sampling the open reservoir outlets twice per month. No detections have been found to date.

The Portland and Rochester water systems are not similar water systems. Most importantly, Portland does not provide any re-treatment of water that exits the open reservoirs. Any bacteria or viruses, in addition to *giardia* or *cryptosporidium*, introduced into the open reservoirs are a threat to public health and could be passed on to consumers. *E. coli* bacteria were confirmed in the vicinity of the Washington Park reservoirs in November 2009 and July 2012, leading to boil water notices that impacted 135,000 households.

#### Increasing Water Rates

Portland's water bill for a typical single family residential customer for 2012-13 is \$26.65 per month (Portland Water Bureau website). Rochester's is \$28.41 per month (communication with city). Water rates and median household income (MHI) are often used by state and federal agencies to assess affordability of infrastructure projects for financing purposes (communication with the Oregon Infrastructure Finance Authority). The U.S. Department of Housing and Urban Development rate affordability standard for water rates is 1.25% of community MHI. Portland's current water rate is 0.63% of its community MHI (\$50,177/year); Rochester's is 1.1% of its community MHI (\$30,367/year) (U.S. Census Quick Facts).

#### Declining Water Demand

You also cited the impact on water rates of declining water use. From 2000-2010, Portland's water demand has declined by 12%, and rates have increased 89%. During this time period, we note that Portland's population increased by 12.23%. While we recognize that rates do

impact water usage, we also recognize and appreciate the very successful and continuing water conservation and sustainability efforts by the City and regional water providers.

In contrast, Rochester's population declined by 4% from 2000-2010. In the last year of data available (from 2010-2011), Rochester's growth was 0.14%, compared to 1.72% for Portland. In addition, persons living below the poverty level is 30.10% in Rochester versus 16.8% in Portland (U.S. Census Quick Facts).

#### Increasing Debt to Revenue Ratio

You stated that the Water Bureau is currently carrying \$440.1M in outstanding debt, with annual repayments representing 26% of annual revenues. In consultation with the Oregon Infrastructure Finance Authority, we were unable to determine from the submitted materials the amount of this debt load attributable for LT2 regulatory projects, whether there are increases beyond those anticipated in 2009, or the projected impacts to complete the open reservoir projects on schedule in the current favorable interest rate environment.

#### Water Research Foundation Study (WRF 3021)

We sincerely appreciate Portland's continuing participation in national studies which serve to advance the science around safe drinking water. The primary research aim of WFR 3021 was to assess the ability of conventional water treatment plants utilizing filtration and disinfection to reduce *Cryptosporidium* present in the source water to levels in treated water that meet the maximum public health risk level basis of the EPA LT2 enhanced surface water treatment requirements. Although the City does not practice conventional filtration treatment of its source water, we understand that the City did participate in the study by collecting finished water samples from outlets of the open reservoirs. While we appreciate the City's participation, the likely episodic nature of any contamination that could impact open finished water reservoirs, as well as limitations of currently available analytical methods, tend to limit the application of the overall project results to the specific issue of open finished water reservoirs.

#### EPA LT2 Regulatory Review

OHA contacted EPA for the current the current status of the LT2 regulatory review. EPA is conducting this review as required by the 1996 Amendments to the Safe Drinking Water Act. Under this Act, EPA is required to review all national primary drinking water regulations at least every six years. The next six-year review will be completed by 2016 and includes 70 regulations, including review of LT2.

In addition, Executive Order 13563 directed federal agencies to periodically review significant regulations. EPA identified a list of 35 priority regulatory reviews and included LT2 as one of those. EPA's plan for those reviews (see EPA website) divides those into 16 requiring early action, and 19 on a longer action schedule. The LT2 retrospective review is included as one of the longer term actions.

The experience of past six-year reviews of drinking water rules is that resultant rule revisions have been few in number and have been limited in scope. We are following the LT2 public discussions closely. Modifications and improvements to laboratory analytical methods are likely, given recent advancements in this area. However, based on the results of prior EPA regulatory reviews and lack of change in the evidence and science around the public health risks of open reservoirs, wholesale changes in the core aspects of the LT2 are less likely.

#### Conclusion and Decision

Our mission is to protect public health by reducing people's risks and exposures to drinking water contaminants. We are concerned about the detections of E. coli bacteria that occurred in recent years, including both the risk to public health and the impacts of resultant boil water notices on the community.

We understand your interest in the Rochester, NY open reservoir compliance schedule extension. Portland and Rochester are, however, very different communities in terms of water systems, economic conditions and population growth.

We do not approve the extension request for Portland's open reservoir compliance schedule. Portland's schedule approved by EPA and OHA remains in effect. As always, we are available to discuss with you any additional measures to assure drinking water safety that you may be considering.

We appreciate the technical and economic challenges that communities face in providing safe drinking water to their consumers and protecting the public's health. As mentioned in the May 17, 2012 response to Portland's first schedule extension request, there are numerous public health benefits to covered reservoirs. We look forward to continuing to work with you in that effort.

Regards,



David E. Leland, P.E.  
Interim Administrator, Center for Health Protection  
Public Health Division - Oregon Health Authority