

March 5, 2012

To Whom It May Concern

Re: Request for LT2 Open Reservoir Compliance Schedule Adjustment

We urge the state to support the Portland Water Bureau's reservoir compliance deferral request, but extend the compliance deferral beyond the dates requested by the Portland Water Bureau, taking into account important facts such as the recent \$40 million in security and maintenance upgrades to the City's open reservoirs which were intended to assure safe operation until 2050, and the recent extensive sampling at the outlet of some reservoirs which turned up zero *Cryptosporidium* in 7,000 liters of water samples.

We, the undersigned representing public health, business, environmental, neighborhood, social justice and other organizations request of the Oregon Health Authority a significant deferral adjustment to the City of Portland's compliance schedule for the uncovered finished drinking water reservoir requirements of the federal Long Term2 Enhanced Surface Water Treatment Rule for the following reasons:

- There is no scientific evidence that “treating or covering” the open reservoirs will have a demonstrable public health benefit despite the tremendous cost of such projects; and
- Through advanced testing of over 7,000 liters of water samples taken from the City's open reservoirs in 2008 and 2009 (AwwaRF 3021 study, *Detection of Infectious Cryptosporidium in Conventionally Treated Water*, PWB, Utility ID 10) not a single *Cryptosporidium* oocyst was found. According to AwwaRF 3021 researchers Portland and all participating utilities already meet the goal of the LT2 rule (see attached AwwaRF 3021 published report and Appendix 2, Portland Water Bureau summary statement); and
- Portland's open reservoirs are highly engineered structures that are not subject to surface water runoff; and
- Chlorination facilities located on site are capable of boosting open reservoir chlorine levels when needed; and
- The Portland Water Bureau recently completed \$40 million in security and deferred maintenance capital infrastructure work to ensure that Washington Park and Mt Tabor reservoirs are safe through the year 2050; and
- Portland's open reservoirs have a 100-year history of supplying safe drinking water; and

- On August 19, 2011, the EPA issued a letter to Senator Charles Schumer of New York declaring that the EPA would be reviewing the LT2 rule expeditiously and that alternative compliance options for the uncovered reservoir requirements of the rule would be considered; and
- On October 13, 2011 Senator Merkley, Senator Wyden, Representative Blumenauer, Representative DeFazio, and Representative Schrader sent a letter to EPA Administrator Lisa Jackson in which they 1) expressed enthusiasm that EPA is reviewing its LT2 rule, specifically considering new or innovative alternatives to covering reservoirs and 2) requested that the EPA thoroughly explore whether there are more cost-effective ways to counter the risks of contaminated water, taking in to full account the unique and extraordinary water supply characteristics of Portland's Bull Run watershed and other attributes of Portland's system and 3) requested that while the agency's review is underway, she consider delaying implementation of the LT2 requirement to cover reservoirs, for water systems whose unique characteristics would warrant alternatives to protect public health and 4) requested that the EPA create a working dialogue with the City as the review is conducted; and
- A letter dated December 9, 2011 from the OHA indicated, "...there may be specific articulable facts that warrant compliance schedule adjustments. Many public water systems face multiple challenges as they manage, maintain, and operate their systems. In addition, infrastructure construction projects may also present challenges. Primacy agencies can evaluate these system-specific issues when evaluating a request to adjust a compliance schedule. If a schedule adjustment is appropriate, the public water system should have robust interim measures in place to ensure public health protection and those measures should remain in effect until that system comes into compliance with the rule."; and
- On January 30, 2012 Dr. Thomas Ward submitted a letter to the Portland City Council (see Appendix 1) specifically encouraging the City to have the compliance schedule for the uncovered reservoirs extended to commence in 2020 and to end in 2034. Dr. Ward is employed by Oregon Health Sciences University, where he is Professor of Medicine, head of the Infectious Diseases Training Program and Chair of the Medical School Microbiology Course. He also serves as Board Director for the Research and Education Group (Portland's HIV community clinical research consortium) and is past President of the Oregon Infectious Diseases Society; and
- The PWB faces "multiple challenges as they manage, maintain, and operate their system," and its "infrastructure construction projects...present challenges," for example controlling recently spiraling debt, managing Habitat Conservation Plan projects ( the largest HCP project, Dam2 Tower, is now 200% over budget), and prioritizing system maintenance. It is entirely appropriate and justifiable to seek a

delayed reservoir compliance timeline of 2034 as the City of New York has requested which EPA has indicated they will consider; and

- Portland ratepayers pay the fifth-highest combined water and sewer rates among the 50 largest municipalities in the country and since June of 2008 have seen water rates rise 55%; and
- EPA did not complete a benefit analysis for the requirement to “treat or cover” open reservoirs, thus economics can be considered in compliance extension decisions (EPA underestimated the costs of the “treat or cover” requirement); and
- Portland has existing robust measures in place to ensure public health protection; and
- Portland and other systems should receive the same opportunity as New York City to benefit from the EPA's review of the LT2 rule and any alternative compliance options that become available.

Therefore, we request that the Oregon Health Authority extend Portland's uncovered reservoir compliance schedule.

Floy Jones for Friends of the Reservoirs

Regna Merritt and Theodora Tsongas, PhD for Oregon Physicians for Social Responsibility

Kent Craford for Portland Water Users Coalition

for Members:

ALSCO, American Linen Division

American Property Management

Ashland Hercules Water Technologies

The Benson Hotel

BOMA Portland

Darigold

Harsch Investment

The Hilton Portland and Executive Tower

Mt. Hood Solutions

New System Laundry

Oil Re-Refining Company

Portland Bottling

SAPA Inc.

Siltronic Corp.

Sunshine Dairy Foods

Vigor Industrial

Widmer Brothers Brewing

YoCream

Scott Schlaes for Oregon Wild

Julia DeGraw for Food & Water Watch

David Lorati for Central Eastside Industrial Council

David Delk for Alliance for Democracy

Sandra McDonough for Portland Business Alliance

Peter Stark for Hillside Neighborhood Association

Stephanie Stewart for Mt Tabor NA Land Use Committee

Jeffrey Boly for Arlington Heights Neighborhood Association

Steve Reinemer for South Tabor Neighborhood Association

Franklin Gearhart for Citizens Interested in Bull Run, Inc.

Rod Daggett and Maxine Wilkins for Eastside Democratic Club

Anne Dufay for SE Uplift Neighborhood

Coalition for:

North Tabor Neighborhood Association

Mount Tabor Neighborhood Association

Montavilla Neighborhood Association

Sunnyside Neighborhood Association

Buckman Neighborhood Association  
Hosford Abernathy Neighborhood Association  
Richmond Neighborhood Association  
South Tabor Neighborhood Association  
Foster Powell Neighborhood Association  
Creston - Kenilworth Neighborhood Association  
Brooklyn Neighborhood Association  
Reed Neighborhood Association  
Eastmoreland Neighborhood Association  
Sellwood Moreland Neighborhood Association  
Woodstock Neighborhood Association  
Mount Scott Arleta Neighborhood Association  
Brentwood Darlington Neighborhood Association  
Ardenwald - Johnson Creek Neighborhood  
Association  
Kerns Neighborhood Association  
Laurelhurst Neighborhood Association

## APPENDIX 1

January 30, 2012

Mayor and Commissioners

1221 SW 4<sup>th</sup> Avenue

Portland, Oregon 97204

RE: LT2 Water Mandates and Schedule

Dear Mayor Adams and Commissioners Leonard, Saltzman, Fritz and Fish,

I am writing in support of the City request of the same consideration from the federal Environmental Protection Agency as New York City to evaluate alternative compliance options for the uncovered finished drinking water requirements of the LT2 rule. Specifically, I encourage the City to have the compliance schedule for the uncovered reservoirs extended to commence in 2020 and to end in 2034.

It is my professional belief that there is both sufficient water quality data and excellent epidemiologic data supporting the lack of risk of waterborne illness due to *Cryptosporidium* and other potential enteric pathogens in our water supply. Through advanced methodology testing of over 7,000 liters of water samples taken from the City's open reservoirs in 2009, the City has shown that not one *Cryptosporidium* oocyst could be demonstrated.

There is no scientific evidence that either installation of source water treatment or covering or treating the open reservoirs is likely to have any demonstrable public health benefit, despite the massive cost of such projects.

I remain very impressed by, and appreciative of, the efforts of the Portland Water Bureau and our local and state Public Health officials in rigorously protecting the safety of citizens served by the Bull Run system and area reservoirs.

Sincerely yours,

Thomas T. Ward, M.D.

Infectious Diseases Fellowship Director

Chair, Microbiology Medical School Curriculum

Oregon Health Sciences University

## APPENDIX 2

### **Portland Water Bureau Water Quality**

Rev. Date: 01/28/2010

Author: Ann Richter

#### **Portland Water Bureau's participation in a Water Research Foundation study on infectious *Cryptosporidium* in finished drinking water**

In 2008 and 2009 the Portland Water Bureau participated in the Water Research Foundation (WaterRF) Project 3021, Detection of Infectious *Cryptosporidium* in Water. The purpose of the WaterRF project was to “examine conventionally filtered surface water for the presence of infectious *Cryptosporidium* using both cell culture techniques and molecular methods,” and “attempt to repeat a recent study that reported a risk of infectious *Cryptosporidium* in filtered drinking water so that a scientifically sound consensus may be reached.”

The term infectious for this study meant that the *Cryptosporidium* oocysts would be able to form a cluster of infection in cell culture, detectable using immunofluorescent assay microscopy. The method appears to be specific for the three most common species of *Cryptosporidium* known to infect humans: *C. parvum*, *C. hominis*, and *C. meleagridis*. The method does not detect the presence of nonviable (dead) oocysts.

PWB was one of many anonymous utilities that contributed finished drinking water samples. Portland does not have a filtered drinking water system but was invited to participate nevertheless.

#### **Portland's Samples**

PWB's sample volumes ranged from 83.5 liters to 305.6 liters, for a total volume of about 7,000 liters during the study. Samples were collected approximately two times per month from June 2008 to April 2009. For each sampling day, two samples were collected; one sample was shipped to the Texas AgriLife Research Center at Texas A&M University and the other sample was shipped to the Metropolitan Water District of Southern California for laboratory analysis. Samples were filtered onsite using an Envirochek HV filter. There were 18 sampling dates for a total of 36 samples. PWB's sample location represented the outlet of Reservoir 4 (located at Washington Park). If Reservoir 4 was shut down, PWB sampled from the Westside supply line, which represents water from the outlet of Reservoir 5 (located at Mt. Tabor).

#### **Portland's Results**

The primary investigators of this study have informed PWB by email and phone that no infectious oocysts were detected in any of PWB's samples. PWB received a summary of results from samples collected in 2008, but has not received official final results for all samples collected.

#### **WaterRF Project Results**

The survey phase for WaterRF Project #3021 was completed in July 2009, and as of September 2009 the investigators were in the process of finishing the final report. PWB has been told that no infectious oocysts were detected for any utility participating in this study.

The WaterRF study has not yet been published; however the WaterRF website indicates 2010 for project completion. More information on this study can be found at: <http://www.waterresearchfoundation.org/research/TopicsAndProjects/projectSnapshot.aspx?pn=3021>

**Were Portland's open finished water reservoirs ever tested for *Cryptosporidium* before 2008?**

Yes. In 1994/95, three samples from Reservoir 6 (Mt. Tabor) and three samples from Reservoir 4 (Washington Park) were collected and tested for *Cryptosporidium* and *Giardia*. No *Cryptosporidium* oocysts and no *Giardia* cysts were detected in any of these six samples.