

MWH AMERICAS CONTRACT FOR KELLY BUTTE RESERVOIR

IF YOU WISH TO SPEAK TO CITY COUNCIL, PRINT YOUR NAME, ADDRESS, AND EMAIL.

NAME (print)

ADDRESS AND ZIP CODE

Email

NAME (print)	ADDRESS AND ZIP CODE	Email
✓ Beth Giansiracuse	630 NE LAWRENCE AVE 97232	goldanagemuse@ychea.com
✓ Gilly Burlington	2536 SE Morrison	gillyqb@yahoo.com
✓ Floy Jones	2204 S.E. 59th PDX 97215	
✓ BRAD YAZZOLINO	6451 SE MORRISON CT PDX 97215	brad@bradyazzolino.com
✓ Mary Saunders	2937 NE 22 Pdx 97212	swirlingtheuniverse@gmail.com
✓ Antonia Giedwoyn	6133 SE Grant St. PDX 97215	agiedwoyn@yahoo.com
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✓ JERZY GIEDWOYN	6805 SE PINE CT.	jgiedwoyn@ORC2WIC.com
✓ Sarah Adams	12145 SE Brookside Dr. PDX 97266	sarahsparkle65@comcast.net

Brad Yazzolino's comments to City Council March 17, 2010 regarding Item 384.

This building – Portland City Hall -was first opened on January 2, 1895. that same day Portland received it's first water from the Bull Run System. at that time drinking water was free to every city tax payer. In 1948, City Council approved the first "test" logging of huge old growth timber within The Bull Run Watershed. I know because I have the article from the Oregonian newspaper describing it. That destructive logging went on for 30 years or so until almost 25% of our watershed was logged.

That logging sediment contributes greatly to why we can't draw as much water for city use during mid summer. That led to our yearly need for mixing our Bull Run drinking water with lower quality Columbia well water. Otherwise our over 110 year old water system system, is an endlessly sustainable one, with proper maintenance. It would be a service to the world to preserve it to illustrate to all with eyes to see-- that as with valuable old buildings, "old is the new green" The most sustainable building is an old one, with the right energy improvements. What Portland has is an eternal city water system not now under corporate control. With the Water Bureau's debt load, this city council will be likely seen by history as opening the door to that endless expense. Please don't allow Portland to be manipulated into destroying it as the water industry wants. Portland's present open reservoir system is time tested to be safe, and the unscientific , industry-serving LT2 law has no relevancy regarding the Bull Run.

This City Council can try to deny that giving these contracts constantly to Montgomery Watson Harza and other greedy water industry giants doesn't move our water system one step closer to privatization, but that doesn't mean you are not wrong about that.

Portland's is trying to present itself as one of the greenest and most

progressive cities on the planet , yet it's ridiculous that our city council is throwing the greenest, most sustainable part of Portland "under the bus". Portland should demand a variance from the EPA, risk the so called fines, and in short, do the right thing, and actively defend our water system instead of saddle Portlanders, with ever rising water rates in a part of the country where plentiful water rules the ecosystem.

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EPA on Storage Reservoirs

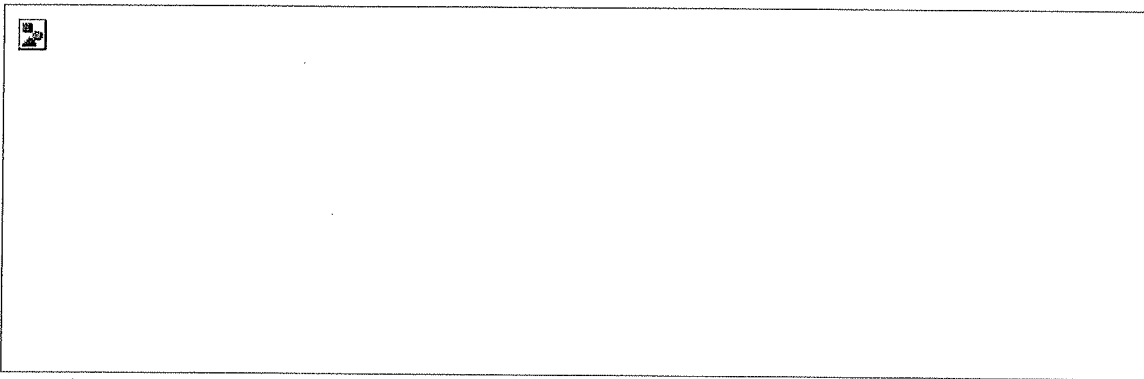
	Open Reservoirs	Closed Reservoirs
Scientifically Documented Public Health Problems	NO	YES - Multiple cases of death/illness; read: <i>Finished Water Storage Facilities</i> http://www.epa.gov/safewater/disinfection/tcr/pdfs/whitepaper_tcr_storage.pdf
Unique Public Health Risks	NO	YES - Nitrification; read EPA white paper: http://www.epa.gov/ogwdw000/disinfection/tcr/pdfs/whitepaper_tcr_nitrification.pdf
Scientific Data or Research to Support EPA Regulation	NO	YES - See EPA Total Coliform Rule Revision white papers: http://www.epa.gov/ogwdw000/disinfection/tcr/regulation_revisions.html#whitepapers

Item 384
Flora Jones
March 10, 2010

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floy jones

From: "floy jones" <floy21@msn.com>
To: "Amanda Fritz" <amanda@ci.portland.or.us>; "Nick Fish" <nick@ci.portland.or.us>; "Dan Saltzman" <dansaltzman@ci.portland.or.us>; "Sam Adams" <samadams@ci.portland.or.us>; "Randy Leonard" <randy@ci.portland.or.us>
Cc: "Gary Oxman" <gary.i.oxman@co.multnomah.or.us>; "Jeremiah Baumann" <Jeremiah_Baumann@merkley.senate.gov>; "Bell, Johnell (Merkley)" <Johnell_Bell@merkley.senate.gov>; <floy21@msn.com>
Sent: Tuesday, March 16, 2010 1:07 PM
Attach: SDWA reservoir variance2.doc; WTR contract 37524 deferred maintenance and interim security.pdf
Subject: New York Communications on Available Open Reservoir Variance



March 16, 2010

Mayor Sam Adams and City Commissioners
 1120 SW Fifth Ave
 Portland, Oregon 97204-1926

RE: SDWA Open Reservoir "Treatment Technique" variance

Dear Mayor Adams and Commissioners,

As The Friends of the Reservoirs advised in our January 17, 2010 letter (attached), the City must follow the lead of New York City DEP and prepare a scientific data report that supports that there is no scientific basis for EPA requiring that Portland treat the open reservoirs for Crypto, Giardia and viruses (covering or treating are considered "treatment techniques" for contaminants), problems that DO NOT EXIST in our open reservoirs. The LT2 rule's goal (both for source water and reservoirs) is to reduce the level of disease in the community from the contaminant for which the rule was developed, Cryptosporidium. See The Friends of the Reservoirs January 17, 2010 letter and my March 14, 2010 communication for details and citations.

Copied below are some of the City of Portland's recent open reservoir variance communications: 1) NY DEP Scientist communication with Commissioner Leonard on the available open reservoir variance 2) Eddie Campbell's communication with Water Bureau engineers addressing NY's efforts to retain their open reservoir 3) Excerpt from NY legal brief on the clear availability of a the Safe Drinking Water Act (SDWA) open reservoir "treatment technique" variance.

New York's 161-page scientific data document referenced in our January 17 2010 letter to Council,

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was prepared in support of the available Safe Drinking Water Act (SDWA) open reservoir "treatment technique" variance. The point in referring to the efforts of others is to bring focus to the point that there is an approvable SDWA reservoir variance available and to emphasis that this variance is approvable with supportive scientific data, the collection of which the public has already financed. Recent open reservoir upgrade projects have involved four corporate contracts (one \$23 million Slayden corp.contract attached), projects that will be completed in 2010, designed with a 50-year life span. Upon completion of the projects, the corporate-designed open reservoir elimination plan is to reduce the value to ratepayers from 50 years to 4 years while requiring that ratepayers pay for these upgrades over the next 25 years nearly doubling the cost of the upgrade projects to well over \$90 million excluding the secondary water main at Mt. Tabor.

Recommendation:

Direct the Portland Water Bureau to prepare an LT2 open reservoir data report utilizing the already collected and supportive scientific AwwaRF 3021 Cryptosporidium study data alongside open reservoir data collected in conjunction with the Total Coliform Rule in preparation for a submitting an open reservoir application.

Sincerely,

Floy Jones
On Behalf of the Friends of the Reservoirs

Cc Dr.Gary Oxman, Multnomah County Public Health
Senator Merkley
Interested Parties

1) _____

From: DiLonardo, Steve [DiLonardoS@dep.nyc.gov]
Sent: Thursday, September 24, 2009 7:36 AM
To: Leonard, Randy
Cc: Alderisio, Kerri
Subject: Inquiry: Reservoir Cover Avoidance - LT2

Mr. Leonard,

I work for NYC Dept. of Environ. Prot. in the pathogen program. I am involved in a reservoir cover avoidance study for NYC as part of a variance request that has been submitted to EPA. I have read that Portland has applied for a similar variance. I was wondering whether a study was conducted to support this variance. If so, would the study be available for reference? Our study was designed to test for Crypto and Giardia occurrence and abundance at the influents and effluents to determine whether there was an increase at the effluents.

If I am not speaking to the right person, can you please direct me to someone within your organization that may be able to field my question?

Best Regards,

Steve

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Steve S. Di Lonardo
Scientist / Water Ecologist III
Division of Watershed Water Quality Science & Research
Pathogen Research & Development Group
New York City Department of Environmental Protection
465 Columbus Avenue
Valhalla, NY 10595
Off: (914) 773-4414
Cell: (718) 514-4056
Fax: (914) 773-0365

From: Leonard, Randy
Sent: Thursday, September 24, 2009 7:58 AM
To: DiLonardo, Steve
Cc: Alderisio, Kerri; Shaff, David; Kovatch, Ty; Campbell, Edward
Subject: RE: Inquiry: Reservoir Cover Avoidance - LT2

David-

Can you get Steve the information he requests? Thank you.....Randy

2)

From: Campbell, Edward
Sent: Monday, September 14, 2009 12:49 PM
To: Shaff, David; Stuhr, Michael; Wanner, Chris; Akagi, Yone
Subject: Has NYC Really Applied for an Open Res Variance? -- No.

Here's the deal on what NYC is doing regarding it's open reservoir:

NYC is NOT pursuing a variance to the LT2 requirements for open reservoirs AT THIS TIME. What they are doing instead is formally requesting a deferral of the deadline requirement for them to cover their large finished water reservoir (Hillview) which was established by an administrative order from the State of New York. The current deadline for them to complete reservoir covering is 2016. I believe the deferral request would extend that to 2026 if it is granted.

The reasons for the deferral request appear to be the following:

1. NYC, like Portland, received notice from the federal EPA that it believes it lacks any basis for granting a variance to the open reservoir requirement of LT2. NYC disagreed with EPA on this point and the two entities exchanged legal memos on this question. I have requested these legal memos from NYC and my contact there is checking to see if she can release them to me or if there are any sensitivities which might preclude them from sharing the documents. After the exchange of memos, NYC concluded it would be better served by requesting for a time extension instead of a full variance.
2. NYC is conducting several capital improvement projects on its system, which would apparently make this large covering project difficult to do simultaneously. Part of the logic of NYC's deferral request is that sequencing these projects so that the reservoir covering comes last makes the most sense. NYC is also using the information they were intending to include in a variance application to

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floy jones

From: "floy jones" <floy21@msn.com>
To: "Amanda Fritz" <amanda@ci.portland.or.us>; "Nick Fish" <nick@ci.portland.or.us>; "Dan Saltzman" <dansaltzman@ci.portland.or.us>; "Sam Adams" <samadams@ci.portland.or.us>; "Randy Leonard" <randy@ci.portland.or.us>
Cc: "yahogroup-reservoirs" <reservoirs@yahoogroups.com>
Sent: Saturday, March 13, 2010 6:37 PM
Attach: EPA data chart for FOR.pdf
Subject: Facts from \$73 million Water Bond document/ Budget & Council agenda 384

Dear Mayor Adams and Commissioners,

By now I hope that you have reviewed the tape of the PURB hearing that included testimony from at least two if not three physicians among the 23 members of the public representing a variety of organizations who testified unanimously in opposition to the opinions of Dave Johnson and Lila Wickham. The only comment from the PURB was at the end of the 2-hour meeting when a member asked if anyone from the Mayor's office was present or any Commissioner's office. Well researched material was presented by a broad-based group of community stakeholders. No information presented supported burial of the reservoirs.

I also hope that it is clear to all of you that both the EPA LT2 reservoir requirement and the source water requirement are requirements to address the LT2 rule's stated goal to reduce the incidence of disease in the community from Crypto, Giardia and viruses. These **contaminants are not found in the open reservoirs**. Scientific study shows the absence of Crypto in the open reservoirs. Beavers in the watershed are the only known potential source of Giardia. Beavers are trapped and killed in the watershed. There are no beavers at the open reservoirs. Giardia is treated with chlorine. No one including public health, PWB, local physicians nor EPA in the LT2 rule has identified any virus that could potentially pose a public health problem with the open reservoirs. All of this was thoroughly and comprehensively addressed by the \$5-\$600,000 2004 City-selected reservoir panel led by an EPA LT2 consultant (\$325,000 + \$30,000 for a facilitator) with information provided by MWH global who was under multiple related contracts at that time, as well as the many at the PWB.

The Clean Water Act is not applicable here; the Safe Drinking Water Act (SDWA) is the applicable law.

Why over the last year has the Water Bureau failed to compile the already collected supportive scientific AwwaRF Crypto and Total Coliform data necessary to secure the available and approvable SDWA open reservoir variance? New York has taken this step and has done so after receiving the same form letter reply from EPA. And why does the Water Bureau refuse to post the open reservoir Crypto data online alongside the source water sampling data?

When stakeholders including Oregon Wild, Large Water Users Coalition, Friends of the Reservoirs, the State Drinking Water Program, PWB and others testified before the state legislature a few years ago in support of passing a state law in line with the SDWA act which provides for variances from "MCL" (source water) and "treatment techniques" (open reservoirs), it was made clear that Portland would be seeking the available and approvable open reservoir variance, a **"Clean Water " Variance** ; seeking both source water and open reservoir variances. The PWB represented such to a state representative after the session. The State passed the "clean water variance" legislation unanimously and it was signed into law.

EPA issues dirty water variances all the time. There were \$800 million reasons (with debt

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service) to secure the available and approvable reservoir variance (with the construction of the \$137 million Powell Butte II underway the savings are reduced to \$630 million). A reservoir variance is compliance just as with source water.

Attached find a **chart** that addresses EPA on storage facilities. In a separate e-mail I will send copy of the 2007-2010 \$23 million Slayden Corporation open reservoir upgrade contract. Upwards of \$45 million have been spent on open reservoir upgrade projects between 2003 and 2010 (excluding the cost of a secondary Tabor water main), **projects that have a 50-year plus life span**, but if YOU continue to award corporate burial-related contracts (Wednesday, March 17, 2009, item 384), the life span value of many of these upgrades will be reduced to 4 years even though ratepayers will pay for these projects for the next 20-25 years in addition to the new corporate contracts.

BOND STATEMENT

As noted in the City's official statement, the rule does not require burying covering or closing the open reservoirs (see page 23), it requires use of a "treatment technique" (treat or cover are both considered "treatment techniques") to treat for the contaminant for which the rule was promulgated, just as with source water, requiring us to spend hundreds of millions to address organisms not present in Portland's open reservoirs. Burying reservoirs will not reduce the presence of contaminants to below the current level of Zero.

CITY'S OFFICIAL WATER BOND STATEMENT

The following information is quoted from the City's official statement addressing the \$73 million water revenue and refunding bonds,

<http://www.portlandonline.com/omf/index.cfm?c=31438&a=287469>

You may have already received this information in that I've distributed it to the Friends of the Reservoirs distribution list, the PURB, Jim Redden and others five or six weeks ago. I recommend that you or your staff read it or at least carefully review the sections I've highlighted.

LT2 and LT2 COSTS:

Page 23 of the bond statement:

"First, the rule requires that by April 1, 2014, the City provide additional treatment to its Bull Run supply to either remove or inactivate Cryptosporidium."

"Second, the rule would require changes to how open finished drinking water reservoirs are utilized, managed and/or operated. The rule requires that water systems with uncovered finished water reservoirs, like those at Mt. Tabor and Washington Parks, either cover the reservoirs or provide treatment at the outlets of the reservoirs to inactivate Cryptosporidium, Giardia and other viruses."

"In addition, Commissioner Leonard has directed the Bureau to pursue variances from the rule requirements with EPA. A variance could conceivably enable the Bureau to avoid the expenses associated with building an ultraviolet treatment facility or replacing its open reservoirs if the City can demonstrate to EPA that, due to the nature of the Bull Run source and the open reservoirs, neither action is necessary."

page 16:

"Secondary disinfection treatment facilities are located at the Mt. Tabor Park and Washington Park terminal reservoirs. These facilities are designed to add chlorine to ensure that an accurate chloramination ratio is maintained.

From page 24 of the bond document : "In May 2009, the City Council voted to implement ultraviolet treatment if a treatment variance proposal is not approved. About \$500 million in total capital expenditures over the next fifteen years may be needed to comply with the LT2 Rule. The estimate includes 1) UV treatment capacity of up to 225 MGD and 2) construction of up to 90 MG of in-town enclosed finished water storage, including land acquisition, access ways, pipelines, chemical addition facilities, electrical subsystems and site restoration. When complete, the UV improvements will require an additional \$3 million annually for operating expenses. The FY 2009-10 budget includes funds to begin the design of the UV treatment plant, site improvements and design of water storage at Powell Butte, and planning for an additional 25 MG storage facility."

WATER RATES:

The bond Table 22 (see below) DOES NOT include all of the \$403 million reservoir burial costs as some of the costs are outside the 5-year period the bond addresses, but it does include \$100 million for the UV Radiation treatment plant. The information also makes a lot of assumptions, no cost of living increase this year (contracts are being negotiated), no Water Bureau police force, etc.

From water bond document page 60- All classes of water bills will double by 2014 : "The typical 6 ccf single residential family monthly water bill is projected to increase from **\$22.02 in FY 2009-10 to \$41.18** in FY 2014-15."

**Table 22
CITY OF PORTLAND, OREGON
Water Bureau**

Current and Forecasted Water Rates and Water Bills

Fiscal Year Ending June 30	2009-10 (1)	2010-11	2011-12	2012-13	2013-14	2014-15
WATER USAGE RATES						
Retail Volume Rate (per ccf) (2)	\$2.44	\$2.75	\$3.12	\$3.54	\$4.02	\$4.56
BASE CHARGE (3)						
Total Base Charge per Bill	\$22.13	\$24.98	\$28.35	\$32.18	\$36.52	\$41.45
Quarterly Billed Customer per Month	\$7.38	\$8.33	\$9.45	\$10.73	\$12.17	\$13.82
Monthly Billed Customer	\$22.13	\$24.98	\$28.35	\$32.18	\$36.52	\$41.45

MONTHLY WATER BILLS

Residential (6 ccf)	\$22.02	\$24.83	\$28.17	\$31.97	\$36.29	\$41.18
Medium Commercial (200 ccf)	\$510.13	\$574.98	\$652.35	\$740.18	\$840.52	\$953.45
Large Commercial (20,000 ccf)	\$48,822	\$55,025	\$62,428	\$70,832	\$80,437	\$91,241
Low Income Residential (5 ccf) (4)	\$9.79	\$11.04	\$12.53	\$14.21	\$16.14	\$18.31
Retail Effective Rate Changes	17.9 %	12.9%	13.5%	13.5%	13.5%	13.5%

- Notes:
- (1) Reflects rate schedule approved by the City Council on May 27, 2009. Rates shown for future years are based on projections which may be updated or revised. Future year rates are subject to Council review and approval.
 - (2) Applies to substantially all retail customers.
 - (3) Beginning in FY 2007-08, the Bureau is responsible for the total base charge.
 - (4) Bills for low income residential customers include a discount on water usage and the base charge.
- Source: City of Portland.

Consultant Spending and Salary Costs Skyrocket

From the water bond document appendix : Between 2005 and 2010 dollars spent on consultants increased 100% from \$9 million in 2005 up to \$19 million in 2009; \$67 million spent on consultants in 5 years! A few years back when Budget committee members balked at the Water Bureau hiring 14 additional engineers we were told that doing so would result in fewer dollars spent on

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consultants. During this same period Water Bureau salary and wage costs also increased, they increased by 50% , going from \$24. 5 million in 2005 to \$35.8 million. The engineering group benefited from an upward classification this last year.

From the appendix:

**Statement of Revenues, Expenses, and Changes in Fund Net Assets
For the Years Ended June 30**

	2005	2006	2007	2008	2009
Professional services	9,203,885	13,448,996	11,783,049	12,606,404	19,163,084
Salaries and wages	24,467,686	23,516,402	28,640,782	34,693,069	35,779,508

Debt Service Costs Triple:

From page 59 Debt service costs triple from \$22 million projected this year to \$66 million by 2014-15. Projected Forecast

Fiscal Year Ending June 30	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
DEBT SERVICE (2)						
First Lien Bonds				\$17,667		
\$22,822	\$29,954	\$29,949	\$40,205	\$50,753		
Second Lien Bonds				\$4,551		
\$4,546	\$4,550	\$16,329	\$16,329	\$16,326		
G.O. Bonds		\$1,624	\$1,617	\$0	\$0	\$0

From Page 52

Comparison of current water bill

Table 16

CITY OF PORTLAND, OREGON

Water Bureau

Comparison of Residential Monthly Water Bills

Residential Residential

Monthly Bill Monthly Bill

WATER UTILITY (Effective Date) For 6 ccf For 10 ccf

Local: (1)

Milwaukie, City of (2009)	\$14.19	\$21.11
Rockwood Water PUD (2006)	16.33	23.18
Lake Oswego, City of (2009)	18.88	23.38
Tigard, City of (2009)	19.51	30.23
Tualatin, City of (2008)	20.64	29.80
Tualatin Valley Water District (2009)	21.19	30.99
Beaverton, City of (2010)	21.32	30.20

PORTLAND, CITY OF (2009) 22.02 31.78

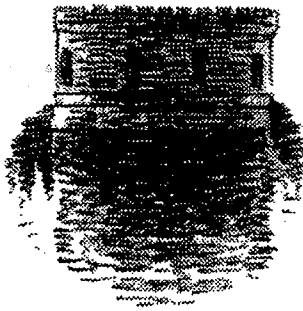
West Slope Water District (2009) 27.75 41.67

Gresham, City of (2009) 30.17 38.13

National (3):

Charlotte	\$19.57
Denver	21.36
Cincinnati	22.84

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FRIENDS *of the* RESERVOIRS

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Citizens joining to protect Portland's historic reservoirs and water system

3534 S.E. Main Street, Portland, OR 97214 www.friendsofreservoirs.org

www.lists.pdx.edu/mttabor

January 17, 2010

Mayor Sam Adams and City Commissioners
1120 SW Fifth Ave
Portland, Oregon 97204-1926

RE: SDWA Open Reservoir Alternative Compliance

Dear Mayor Sam Adams and City Commissioners,

On December 16, 2009 EPA replied¹ to Commissioner Leonard's November 2009 request for clarification regarding the reservoir Variance application process. In this reply the EPA contends that the Variance provided for by Congress within the Safe Drinking Water Act (SDWA) is not available for the open reservoirs.

Ten months ago in March 2009 EPA responded in the same manner to New York City, another city seeking to retain their large Hillview open reservoir. New York was not deterred by EPA's response² and New York's legal team advised the Portland Water Bureau that the EPA's interpretation of the variance applicability is in fact wrong. We agree EPA is wrong. The SDWA clearly authorizes EPA to grant a variance from the LT2 "cover or treat" Cryptosporidium "treatment technique" requirement.

New York's Department of Environmental Quality spent more than a year compiling data, 161 pages, to support the retention of its Hillview reservoir. Unfortunately, during that same period of time the Portland Water Bureau focused a majority of its resources on developing and implementing fast-tracked reservoir burial projects, doing so without any public involvement.

New York City's extensive undeterred efforts to preserve their open reservoir provide a clear blueprint for action by the City of Portland. The community expectation is that the City makes a serious effort to secure the available SWDA reservoir variance, an effort

¹ On January 12 during a Council session the community was told that a reply from the EPA on a reservoir variance had not been received; then on January 13 the Water Bureau issued a press release advising of the December 16 EPA response indicating that the original letter was somehow lost.

² Based on extensive review of water-quality data and other information collected by the Department of Environmental Protection, New York believes they can make the requisite showings required by the variance from the reservoir cover or additionally treat requirement. Portland's data is superior to that of New York. Portland can make the requisite showing that our open reservoirs have not caused Cryptosporidium or other drinking water related disease.

evidenced in part by a Water Bureau work product. A single late-date letter to the EPA regarding a reservoir variance is not enough.

The Friends of the Reservoirs offer the following advice:

1. Stop approving consultant contracts. The plan filed with the EPA in March 2009 gives YOU, City Council the power to alter the plan or the pace at which it is implemented. As noted in the fine print, the reservoir burial plan is contingent upon City Council approval of individual projects, it can be renegotiated with the EPA if the City Council does not approve the current schedule for any particular project within it.
2. Require the Portland Water Bureau to prepare a detailed report documenting relevant scientific data in support of a reservoir variance.
3. Seek an extension or deferral from the EPA from the burial projects. Community stakeholders have long recommended this action for both the open reservoirs and the source water requirement.
4. Engage the assistance of the City Attorney and/or outside counsel Foley Hoag.
5. Seek further assistance from Senator Jeff Merkley who has demonstrated his support for retention of the open reservoirs.
6. Submit the data to the EPA or state of Oregon if the state has assumed Primacy for the regulation; in 2006 the state legislature unanimously approved and the Governor signed into law a state provision for variances with the full knowledge that Portland would be seeking such a variance for its open reservoirs.
7. Do not rule out legislation. The opportunity for further Congressional intervention is not only possible but also likely in light of the acknowledged flaws with EPA's source water variance plan³.

The American Water Works Association Research Foundation 3021 study preliminary report addresses the flaws of EPA's LT2. This report is discussed in the Friends of the Reservoirs September 2, 2009 letter to City Council.

In an internal EPA memo (3/31/09) addressing the reservoir applicable SDWA variance provision EPA's legal council states "The alternative treatment technique is available but not approvable because the only alternative EPA is *aware of* is a risk mitigation plan ... (emphasis added)" EPA states that it wants to be *consistent* in its denial. Scientific data

³ EPA moved the goal post twice on the source water variance plan, which consumed more than 17 months. If EPA refuses to accept the new science that supports genotyping, confirming whether any oocyst is harmful (dead or alive, "viability of the oocyst), and insists on sampling away from our source water out in the tributaries then further federal intervention will be necessary

is an "approvable" way of demonstrating that our open reservoirs pose no greater risk to public health than covering or additionally treating⁴.

The goal of the rule is to reduce disease incidence associated with *Cryptosporidium* and other disease-causing microorganisms in drinking water through "treatment techniques". Scientific data from the recent American Water Works Association Research Association Foundation study AwwarF 3021 testing large volumes of water at the outlets of Portland's open reservoirs demonstrated that there are zero infectious *Cryptosporidium* in our open reservoirs. Burying, covering, or additionally treating the open reservoirs will not reduce the level of infectious *Crptosporidium* to below Zero. Portland's Total Coliform Rule data meets EPA standards. Our reservoirs are not subject to surface water runoff; they are cleaned twice a year.

As Commissioner Saltzman said last July about LT2, "this is a regulation in search of a problem... we should continue to pursue all alternative options beyond a large capital project."

Given the extensive scientific data in support of retaining Portland's open reservoirs, the broad-based community support for retaining our open reservoirs, the exorbitant cost of burial (\$403million, \$800 million with debt service) and the new public health risks⁵ associated with covered reservoirs, it is incumbent on the City to push back and push back hard.

Sincerely,

Floy Jones
On behalf of The Friends of the Reservoirs

Cc Interested parties

⁴ While EPA has documented public health illness and deaths only with buried and covered storage, EPA failed to establish the general level of contamination in buried and covered storage thus EPA cannot factually state that buried and covered storage is more protective than open storage. See EPA white paper http://www.epa.gov/safewater/disinfection/tcr/pdfs/whitepaper_tcr_storage.pdf.

⁵ EPA in its own white paper acknowledges that cancer-causing nitrification could be an unintended consequence of its LT2 reservoir requirement. Nitrification occurs in the absence of sunlight in chloraminated systems, see section 3.2 Absence of sunlight, pg.11 http://www.epa.gov/ogwdw000/disinfection/tcr/pdfs/whitepaper_tcr_nitrification.pdf.

Radon gas is a recognized toxic contaminate that is found in Portland's Columbia South Shore Well Field ground water aquifers, which are Portland's backup water supply. This gas is a serious problem in NE Portland. Burying the reservoirs risks additional radon venting into Portland homes.