File # T3-2022-16220 9/5/23 Cottrell CPO cottrellcpo@gmail.com

We will be responding to two documents in the record:

- Exhibit A.45 E.1 Oregon Water Treatment Plant Operations
- Exhibit I.79 Water Treatment Facility Construction rec 8.7.23

These documents list other water filtration treatment plants, comparing them to the proposed Bull Run Filtration plant.

## Response:

Our original rebuttal to A.45 is contained in *Exhibit H.40 Rural Filtration Plants Comparison Data from CCPO*. We have **updated** this document and it is attached below. Reference websites for each of the plants are also listed below.

The following are some new observations taking into account both A.45 and I.79:

The most important point we wish to make is that all of the large city filtration plants listed on I.79 - Metro Vancouver BC, Houston, Tacoma, and Salt Lake City, are located IN the metro areas themselves, not in Rural Reserves, as Bull Run is proposing to do.

If you expand the search to others not listed in these documents - Chicago, New York, Seattle, Sacramento, etc. this trend holds true. Large filtration plants that serve large cities are located IN the cities themselves.

As our document contained in *Exhibit I.40 Cottrell CPO Written Testimony rec 8.7.23* lays out, the Bull Run filtration facility had an opportunity to locate at Powell Butte, which is within Portland city limits. Powell Butte met all the technical requirements and was initially the site selected, but PWB's fear of delays due to land use battles caused it to move on to Carpenter Lane. Furthermore, the costly filtration project has caused PWB to lose the overwhelming majority of East County customers (see departures of Gresham and Rockwood), causing the plant to not serve its surrounding community.

Further new observations:

• 12 of the 15 comparison plants that PWB refers to in A.45 and I.79 are **smaller** than the proposed Bull Run plant.

- 8 out of 15 Water Filtration plants that PWB uses as comparisons use pumps to carry water from the source to the filtration facility. To add data to the H.40 chart from the new plants listed in I.79:
  - Metro Vancouver (pumped)
  - City of Houston (pumped)
  - Tacoma Water (gravity)
  - Salt Lake City. (gravity)
  - Tualitan Valley (pumped)
  - Lake Oswego. (pumped)
- The largest comparison filtration plant, Metro Vancouver (British Columbia) was completed at today's dollar value of approx. \$900,000,000 million. Its capacity is 3 times larger (476 mgd) than the proposed Bull Run facility at 135 mgd. Yet the overall cost was substantially less.

### **Reference Websites**

### Listed in I.79

Metro Vancouver - metrovancouver.org

City of Houston - houstontx.gov

Tacoma Water - myptu.org

Salt Lake City - mwdsls.org

Tualitan Valley - tvwd.org

Lake Oswego - lotigardwater.org

# Listed in A.45

Joint Water Commission. Jwcwater.org - jwcwater.org

City Salem -Geren is. - aks-eng.com

Medford - medfordwater.org

N. Clackamas Co. Water

City of Bend.- bendoregon.gov

Springfield Utility Board - subutil.com

Corvallis-Rock Creek - corvallisoregon.gov

Hillsboro Water Dept. - hillsborowatersupply.org

Albany -Millersburg - cityofmillersburg.org

# RURAL FILTRATION PLANTS - OREGON (Sampling)

RURAL	Customers	mgd	Filtration	Source	Zoning	Acres	New Pipelines
Bull Run Filtration Proj	960,000	135	Conventional	Bull Run Res.	MUA-20	95	7+ Miles/8' Diameter, HDD Drilling
Joint Water Commission.	400,000	85	Conventional	Upper Tualatin R.	EFU	62	Gravity
City Salem -Geren is.	200,000	45	Ozone / Slow Sand	N. Santiam R.	Public Land		Gravity
Medford Water	140,000	30	Chlorine	Rogue R./ Springs	Open Space		Pump
N. Clackamas Co. Water	80,000	20	Sand/ Membrane	Clackamas R.	Rural/ Residential	4	Pump
City of Bend	67,000	11.8	Membrane	Ground/ Surface	Rural/ Residentail	14	Gravity
Springfield Utility Board	60,000	9	Slow Sand	Ground Aquifer M.	Public Lands/ Open Lands	15	Pump
Corvallis- Rock Creek	17,000	14-20	Rapid Sand	Rock Creek Watershed	Exc. Forest	5	Gravity
Hillsboro Water Dept.		3	Slow Sand	Upper Tualatin R.	Exc. Forest		Gravity
Albany -Millersburg	1300	12	Membrane	Santiam R.	Farm Forest	7.3	Pump

# Observations and Comments on Bull Run Filtration Project

- Joint Water Commission facility is currently the largest treatment plant in Oregon. Joint Water is 40% smaller than proposed Bull Run Filtration facility.
- The rest of the rural treatment plants are clearly much smaller.
- The other plants draw their water from a direct river, groundwater, or spring source with minimal or no intake pipelines.
- Note the number of miles the 8' diameter pipes necessary to bring the water to Bull Run Filtration Project site. Cost and disruption to environment.
- With such an immense facility, the cost factor is undeniably salient and must be a factor in a decision since there are other options for sites.
- The current plan does not include the Ozone treatment which is exactly the reason PWB gave for needing the plant in the first place. The pipeline has also been reduced to one pipe. Those future costs must be evaluated and questioned.