

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

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OFFICE OF WATER AND WATERSHEDS

May 20, 2013

## **MEMORANDUM**

**SUBJECT**: Expression of Total Phosphorus

FROM: John Drabek, PE

The quote in the Fact Sheet and Response to Comments: "The WLA from the TMDL for phosphorus is 5 kg/day. The allocation is based on the operation at design capacity and monthly monitoring of total phosphorus." is based on a telephone conference between Lauri Monnot and me. Lauri consulted with Marti Bridges, the TMDL lead for the Idaho Department of Environmental Quality to reach the decision. The total phosphorus allocation is based on a effluent monthly flow and is therefore a monthly allocation. The effluent limitation is therefore a monthly limit.

The TMDL on page 57 states "...pollutants whose effects are long term, such as sediment and nutrients,"

Generally, daily allocations are not provided by TMDLs to control the long term effects of nutrients and the basis of allocations are not based on daily monitoring but longer term monitoring such as monthly or seasonal averages. That is why the limits for TP are seasonal from May 1 through September 30 and not daily.

This is supported on page 362 the TMDL states referring to nutrients "Regarding the use of annual or seasonal loads, as opposed to daily loads. Many pollutants cannot be meaningfully described as a daily load. As such, seasonal or annual loads are used."

This is the case for the Homedale allocation. The allocation is not based on daily loads as these are not meaningful. Rather the allocation is based on longer term monthly loadings.

The TMDL Program Manager for the Idaho Department of Environmental Quality is Marti Bridges. She confirmed the TP wasteload allocation for Homedale is a monthly allocation. (Private communication from Lauri Monnot, Watershed Manager, IDEQ Boise Regional Office to John Drabek in 2012 and on May 17, 2013.)

Further, IDEQ's 401 Certification states "The EPA approved *Mid Snake River/Succor Creek TMDL(2003)* established wasteload allocations for total phosphorus....the effluent limitations and associated requirements contained in the City of Homedale WWTF permit are set at levels that comply [with] these waste load allocations." This Certification was signed by Pete Wagner the Regional Administrator of the IDEQ Boise Regional Office. The IDEQ Boise Regional Office wrote the TMDL.

Therefore the monthly limit for TP is correctly based on the TMDL, based on IDEQ's TMDL Program Manager confirmation of this fact and based on the IDEQ Boise Regional Office that wrote the TMDL. The 11 lbs/day TP allocation is thus consistent with the assumptions and

requirements of the WLA in the TMDL and appropriately implemented in the permit as a monthly average with units of lbs/day.

The lbs/day (kg/day) units do not make the compliance period a daily average. The permit correctly requires the average of all samples of TP measured for the month to be averaged for compliance with the TP monthly effluent limitation. This is similar to monthly average compliance monitoring of TSS and BOD<sub>5</sub> for compliance with the monthly effluent limitations for TSS and BOD<sub>5</sub>. Even though the limits have lbs/day units the average of all samples over the month are averaged for compliance with the monthly limits.