SUMMARY

Spokane River TMDL Collaboration

Technology Workgroup
June 9, 2005 3:00 PM – 5:00 PM

Member Attendance:

Here	Name	Sponsor	e-mail	Phone
Yes	Blau, Pat	Petitioners	Pat.Blau@kaisertwd.com	(509) 927-6350
No	Bramble, Len*	Ecology	lbra461@ecy.wa.gov	(509)-329-3504
Tele	Cupps, Kathy	Ecology	kcup461@ecy.wa.gov	(360) 407-6452
Tele	Fredrickson, Sid	Petitioners	SidF@cdaid.org	(208) 769-2277
Yes/ Yes	Hendron, Lars/Arnold, Dale*	Petitioners	Lhendron@spokanecity.org	(509) 625-7929
Yes/ Yes	Krapas, Doug/Fink, Rick	Petitioners	Doug_Krapas@iepco.com	(509) 924-1911
No/ Yes	Massman, Joel/Beavers, Bonne	Ecology	bbeavers@cforjustice.org	(509) 835-5211
Yes	Peterson, Mike	Ecology	mpetersen@landscouncil.org	(509) 838-4912
Tele	Ragsdale, Dave (EPA Advisor)	Ecology	rags461@ecy.wa.gov	
Yes	Rawls, Bruce	Petitioners	Brawls@spokanecounty.org	(509) 477-3604
Tele	Werner, Terry	Petitioners	Twerner@postfallsidaho.org	(208) 777-9857

Attach Audience Attendance Roster

1. Dave Clark, HDR, attended and participated in the meeting on behalf of Spokane County.
2. Rick Eichstaedt attended and participated in the meeting on behalf of Bonne Beavers
3. Mike Sharar attended and participated in the meeting as on observer on behalf of Ecology.
4. Dave Peeler attended and participated in the meeting on behalf of Ecology.
5. Neil Beaver (456-2760; beaver.neil@leg.wa.gov) attended and participated in the meeting on behalf of Senator Lisa Brown's office.
6. Larry Esvelt (509-926-3049) attended and participated in the meeting (consultant for City of Spokane).
7. Arianne Fernandez, Ecology, attended the meeting.

Meeting Summary:

1. Fundamental Question 1; With added detail for the O&M criteria and a minor correction for the Scientific Principles criteria, they are probably ok. Group felt that a Review Panel had merit and they should have the opportunity to modify the criteria in order to answer FQ 2.
2. Fundamental Question 2; Blue Ribbon Panel idea ok. OK to evaluate averages; lowest may be too variable; 95% may be too tricky. For the purposes of screening criteria for evaluating technologies, the lowest and 95%-tile are unnecessary statistical tests.
3. Fundamental Question 5; The draft TMDL report uses annual average concentration. Seasonal and 90 day rolling average are also possible permit conditions used elsewhere.

4. Other notes from meeting:
    1. Kathy Cupps: need to fix error on page 2 of the Criteria (August 2004 Treatment Technology Workshop … under Scientific Principles, the "4" and "6" scores have the same description)
    2. Dave Ragsdale: could we simplify the criteria? I think we concluded they were appropriately comprehensive.
    3. Rick Eichstaedt: wants more detail re: O&M evaluation criteria … does it include training? Materials & supplies? Other?
    4. Neil Beaver: wishes to include other groups [on the review panel] and wants the report (or an exec summary) to be written for layman and elected leaders as those paying for implementation.
    5. Let Review Panel adjust the criteria of Question 1 in order to answer Question 2.
    6. Lars: distributed sheet showing apparent P loading following effluent filtration (for plants) … suggesting that modest reductions of "non-Plant" sources may offer more potential than further plant reduction.
    7. Lars: Tom Eaton offered someone for Blue Ribbon panel.
    8. 5/26 notes would be clarified re: Bonne's comment and sent around for review before posting.
    9. Does 95% confidence make sense with rolling averages? Possibly not. (this regarded compliance, FQ 5) Tricky at best.
    10. Neil: implement the technology that does the best P removal.
    11. Rick Fink: interested in Vendor input.
    12. Bruce: run model at 10, 30, 50, 70 ppb P to see what the effect on DO is…
    13. Dave R: something about email re: plant outputs (???).
    14. Lars: RPWRF staff working with IEP to visit Pilots in order to determine whether we can host a second round at Spokane.
    15. Doug K: when Pilots running it will be ok for Work Group to visit, too.

Notes on Status of Fundamental Questions:

1. What are the criteria to be used to qualify treatment technologies as ready for implementation for industrial and publicly owned wastewater treatment plants, using current industry knowledge?

The TWG continues to agree that the evaluation criteria used at the August 23, 2004 Advanced Wastewater Treatment Technology Evaluation Workshop held in Spokane should be utilized as the basis for this continuing effort, that modifications to that evaluation criteria may be in order, and that pilot testing results should be taken into consideration as well. The workgroup continues to give this question attention.

2. What is the lowest, average and median final effluent concentration of phosphorus that can be achieved by municipal and industrial treatment plant technologies that are ready for implementation for industrial and publicly owned wastewater treatment plants? What final effluent concentration for phosphorus is achieved at the 95th percentile among qualified technologies?

The TWG continues to agree that the answer to this is largely a function of available performance data for treatment technologies most able to meet TMDL requirements, and that the TWG members should strive to acquire as much appropriate data as possible to aid in this effort. It was also acknowledged that pilot testing is also a great way to provide meaningful data.

3. What is the total number of pounds of phosphorus to be released to the Spokane River from municipal and industrial point sources including the proposed Spokane County Treatment Plant during the period April to October 30? To answer this question, use the results of #2. What is this poundage at the end of each 5 year increment over the next 20 years, from 2008 to 2028?

To be determined through future meetings of TWG following input from the Flows & Loading Workgroup.

4. Taking into account; (1) the flows and loadings developed by the Flows and Loadings Workgroup and (2) conservation and re-use recommendations of the Conservation and Re-use Workgroup and (3) the effluent loading reductions resulting from source control, what is the range of point source loading of phosphorus to the river over the next 20 years, 2008 to 2028?

To be determined through future meetings of TWG.

5. What are the measures to be used for determining the phosphorus loading limits to the river; daily, weekly, monthly, seasonally?

The TWG members are in general agreement that this item will likely be able to be proposed after accumulation and review of operational and performance data for treatment technologies that may be appropriate for implementation in our area.

Topics for Next Meeting:

- Continue to make substantive progress on responding to Fundamental Questions 1, 2, and 5 (those not requiring input from other workgroups at this time).
- If input is available from the Flows & Loadings Workgroup, seek to address Fundamental Questions 3 and 4.
- Continue to discuss and plan for pilot testing at a local municipal wastewater treatment facility (hopefully the City of Spokane) following the pilot testing currently in-place at Inland Empire Paper (July/August/Sept?).

Next Meeting Time and Place:

- June 22, 2005 from 1:30 P.M. to 4:00 P.M. at Spokane Wastewater Management Department, 909 E. Sprague, Spokane