

Review Comments for Liberty Lake Sewer and Water District Draft NPDES Permit and Fact Sheet

The Liberty Lake Sewer and Water District (LLSWD or the District) respectfully requests that Ecology address the following suggested revisions to and comments on the Draft Permit and Fact Sheet:

Draft Permit Comments

The Fact Sheet and Permit appear to contain several copy and paste errors from other permits and fact sheets, and as a result, that has made it difficult to follow and resolve all of the references and logic errors within the document. We have made an attempt to sort them out.

Comment 1 Table 1, page 5, S3.A, and page 18, S3.A.4

Historically, the District under previous permit cycles has been required to submit only monthly DMR reports and not bimonthly, quarterly, semiannual and annual DMR reports. These are now listed as required submittals. What would be the justification for such an increase in the number of required DMR reports? We request to continue filing only monthly DMR reports.

Comment 2 Table 1, page 6, S12.A.1

The District feels that a time period of 6 months from the effective date for a Mixing Zone Dye Trace Plan of Study is not enough time to effectively complete the study and thus requests additional time. Due to the District's limited staff and resources, the District requests a minimum of 1-year from the effective date of the permit to submit the plan of study.

Comment 3 Table 1, page 6, S15.A and S16.A

There seems to be some inconsistency in the frequency of sampling required for Acute and Chronic Toxicity WET testing.

- 1.) The testing frequency in Table 1, page 6 indicates quarterly in year three of the permit cycle.
- 2.) Table 12 on page 16 indicates the testing frequency is quarterly during year three only.
- 3.) Section S15 and S16 on page 39-40 indicate that the testing frequency is once during the last summer and once in the last winter in the third year of the permit cycle prior to submission of the application for permit renewal.

In addition, page 40 of the LLSWD Fact Sheet says:

WET testing conducted during effluent characterization showed no reasonable potential for effluent discharges to cause receiving water acute or chronic toxicity. The proposed permit will not include an acute WET limit. The District must retest the effluent before submitting an application for permit renewal.

Since the District does not have an acute toxicity limit according to the draft Fact Sheet, nor have any previous WET testing found any toxicity, we feel that quarterly testing in year three is unreasonable and presents an unnecessary financial cost. What is the rationale for increasing testing from 1/permit cycle to quarterly in year three? We suggest that the testing frequency of 1/permit cycle prior to permit renewal is the appropriate requirement that should apply to the District.

Comment 4 Table 3, page 8

WAC 173-201A-200(2)(b) requires the following:

**Table 200 (2) (b)
 Primary Contact Recreation Bacteria Crite-
 ria in Fresh Water**

Bacterial Indicator	Criteria
<i>E. coli</i>	<i>E. coli</i> organism levels within an averaging period must not exceed a geometric mean value of 100 CFU or MPN per 100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained within the averaging period exceeding 320 CFU or MPN per 100 mL.
Fecal coliform (expires 12/31/2020)	Fecal coliform organism levels within an averaging period must not exceed a geometric mean value of 100 CFU or MPN per 100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained within an averaging period exceeding 200 CFU or MPN per 100 mL.

Why are the proposed limits for weekly geometric mean less than the end-of-pipe water quality standards of 200 CFU or MPN/100 mL for fecal coliform and 320 CFU or MPN/100 mL for *E. coli*? The previous criterion for primary contact recreation was based on a weekly geometric mean of 200 organisms/100 mL and the design of the effluent disinfection system is based on a weekly geometric mean of 400 CFU/100 mL.

Also, when accessing Ecology’s online proposed Washington State Water Quality Assessment, fecal coliform was listed as Category 1 on the stretch of the Spokane River to which the District discharges. Category 1 means that the state water quality standards were met. Could Ecology please verify the assessment category for fecal coliform, and whether or not a mixing zone may be allowed for both fecal coliform and *E. coli*?

Comment 5 Table 4: Effluent Limits: Cyanide, Cadmium, Lead, Zinc & Temperature, page 8

1.) The title of Table 4 should include the word “PCB’s” since they are included in the table.

2.) In regards to an effluent limit on Cyanide. The District is aware that the data used to characterize the effluent in terms of setting limits covers the period of January 2018 - October 2021. When running the calculations for determining a limit for cyanide, only one sample value was used. This sample was obtained from the priority pollutant scan from February 2021. We believe the results of the sample are reversed due to either (1) an error during collection through the inadvertent switching of the influent and effluent sample containers, or (2) an error through reversing of the samples during analysis at the lab, as the effluent concentration was higher than the influent concentration. Listed below are the cyanide results for the effluent and influent going back several years including dates both before and after installation of tertiary membranes. Also included are the results from a current analysis done on both the influent and effluent in February 2022. All samples were analyzed by an outside laboratory. Taken as a whole we believe that the historical results do not indicate a reasonable potential or the need for a limit.

8/17/2011, Influent, Non-detect
8/17/2011, Effluent, Non-detect
6/18/2013, Influent, Non-detect
6/18/2013, Effluent, Non-detect
1/22/2016, Effluent, Non-detect
2/24/2021, Influent, 0.0172 mg/L
2/25/2021, Effluent, 0.0511 mg/L
2/14/2022, Influent, Non-detect
2/14/2022, Effluent, Non-detect

Table 4 Temperature (Final Limit)

LLSWD recognizes the Spokane River is listed as impaired for temperature. That listing is, however, based on data from summer months and likely reflects natural conditions. Ecology’s listing information recognizes that: the LLSWD is discharging to a losing reach of the Spokane River that originates from surface-level outflows from Coeur d’Alene Lake; and the Spokane River temperature exceeds the criterion at Stateline Bridge (see 303(d) listing 3737) upriver from the District’s discharge. In turn, Ecology’s Assessment remark states that “*the Spokane River originates from surface-level outflows from a large natural lake that may*

cause temperature criteria exceedances under natural conditions. A rationale with supporting documentation submitted by Lincoln Loehr on 17 December 2002 suggests the high temperature values are a natural condition caused by effects of Lake Coeur d'Alene upstream. However, there is insufficient data to rule out the possibility that human activities have increased water temperatures over natural conditions in excess of allowable limits, such as from dams or point source discharges located on the river. This river also flows into tribal jurisdiction. Until further study is done, it is not possible to rule out that human factors aren't contributing to the problem. (Pickett, ECY/EAP, 2003) (Parodi, ECY/ERO, 2003)."

Given that Ecology recognizes that natural conditions may be the foundation for the listing, LLSWD suggests it delay establishing final permit limits for temperature pending the results of the temperature receiving water studies inherent in the development of a TMDL. See WAC 173-201A-260 (recognizing that when natural conditions exceed the identified criteria those conditions become the pertinent water quality criteria as prescribed by rule).

The District cannot confirm the calculations on the temperature performance based effluent limit because we do not have the data set used for the calculation, and the Fact Sheet does not include all of the calculations performed. The District would like to request the PermitCalc spreadsheet in order to review the accuracy of the calculations.

Furthermore, the following data in the basis statement for the 303(d) Listing 3737 contains the following:

303(d) Listing 3737: Basis Statement from Ecology:

Location IDs: 57A150 / SPOKBD-PB -- In 2009, 3 of 13 sample values (23%) showed an excursion of the criteria (20°C) for this waterbody;

Location ID: 57A150 -- In 2008, 2 of 12 sample values (17%) showed an excursion of the criteria (20°C) for this waterbody;

Location ID: 57A150 -- In 2007, 3 of 12 sample values (25%) showed an excursion of the criteria (20°C) for this waterbody;

Location ID: 57A150 -- In 2006, 2 of 12 sample values (17%) showed an excursion of the criteria (20°C) for this waterbody;

Location ID: 57A150 -- In 2002, between 7/30/2002 and 9/27/2002, the 1-day daily maximum values (1-Dmax) exceeded the criterion for this waterbody (20°C) on 48 of 60 days (80%); The maximum exceedance during this period was 23.6°C on 8/28/2002;

Location ID: 57A150 -- In 2001, between 7/10/2001 and 9/25/2001, the 1-day daily maximum values (1-Dmax) exceeded the criterion for this waterbody (20°C) on 73

of 78 days (94%); The maximum exceedance during this period was 26.2°C on 8/14/2001;

Dept. of Ecology unpublished data from core ambient monitoring station 57A150 (Spokane R. at Stateline Bridge) shows a 7-day mean of daily maximum values of 25.9 for mid-week 14 August 2001.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 57A150 (SPOKANE RIVER AT STATELINE BRIDGE) shows 8 excursions beyond the criterion out of 63 samples collected between 1993 - 2001.

Cusimano (2001) station 57A150 (Spokane R. at Stateline Bridge) shows 6 excursions beyond the criterion out of 8 samples collected between 06/00 - 09/00.

Dept. of Ecology unpublished data from the Spokane River TMDL at RM 96 shows excursions beyond the criterion from a 7-day mean of maximum daily continuous Hydrolab measurements collected during August 2001.

U.S. Geological Survey data from NWIS database station 12419500 (Spokane R abv Liberty Br. Nr Otis Orchard, WA) shows 1 excursions beyond the criterion out of 10 samples collected between 01/93 - 10/00.

Dept. of Ecology unpublished data from the Spokane River TMDL at RM 96 shows excursions beyond the criterion from continuous Hydrolab measurements collected during 16-17 August 1999.

Even if Ecology delays further assessment of the natural conditions of the receiving waters, the proposed performance-based interim limits should not apply end-of-pipe, year-round. The data are, as documented in the proposed Fact Sheet, derived from summer month temperature data. See Proposed Fact Sheet at 37. Given that the stretch of the Spokane River to which the District discharges complies with the temperature water quality criteria outside of the critical season warm weather months, could a mixing zone for temperature be granted outside of those critical months? The Permit Writer's Manual acknowledges that dilution may be available where the listing data may be subject to question. See Permit Writer's Manual at Figure 23. Correspondingly, the District suggests that Ecology reconsider the temperature limits to account for mixing during the majority of the year the river temperature appears to be compliant with the water quality standards.

Table 4 PCB's

LLSWD objects to the requirement that it implement analytical method 1668C as a method for obtaining PCB data. As drafted, the proposed permit would definitively require use of the unapproved method for monitoring wastewater influent and effluent and for submission of PCB data as part of a renewal application, Ecology's Permit Writer's Manual specifies that data generated by Method 1668C "is more complex and extensive" than data generated by other

analytical methods and “must be carefully managed, assessed and applied.” Permit Writer’s Manual at 224. The District suggests that there is no current basis for imposing Method 1668C and requiring its use as a condition of the LLSWD Permit does not necessarily address Ecology’s data needs, imposes substantial costs and is premature.

The congener method (1668) is, according to Ecology’s statements in the proposed Fact Sheet, “needed to characterize influent, effluent, or ambient water quality where PCBs are expected to be below 0.016 micrograms/L. These data may be used to evaluate trends over time and to quantify reductions in influent, effluent and/or receiving waters.” Proposed Fact Sheet at 48. Ecology states that using the results from this method “will enable [the agency] to continue making measurable progress determinations related to reduction of toxicant loading to the Spokane River.” Proposed Fact Sheet at 46. Ecology has not, however, consistently recognized the viability of Method 1668. Specifically, Ecology has stated that the method is “unreliable because that test does not allow Ecology to determine whether any of the PCBs detected come from the discharger, the test container itself, or the ambient air.” *Puget Soundkeeper Alliance v. State*, 191 Wn.2d 631, 642, 424 P.3d 1173, 1178 (2018).

The District recognizes that there is substantial work that will be essential for development of the PCB TMDL for the river. The District does not want its permit to be the vehicle to gather additional data where there are serious underlying questions regarding the viability of the information to be obtained. The District maintains its position is particularly compelling in that Ecology has specifically recognized the discharge has no reasonable potential to contribute to violations of the numeric water quality criteria for PCBs. Proposed Fact Sheet at 42. Accordingly, until an alternative PCB test methodology is identified as approved by EPA in its Part 136 testing requirements, the District should not be obligated to run resource intensive tests that may or may not result in data that are reproducible and defensible. And, notably, despite Ecology’s admonitions regarding use of data assembled pursuant to Method 1668, the proposed permit would require the unreliable method for nearly all the data collection and numeric limit development. Those proposed permit provisions seem at odds with Ecology’s prior reticence to rely on Method 1668.

LLSWD maintains that its permit likely should not be subject to any PCB limitations. As noted, Ecology has recognized that the District has no reasonable potential to violate the numeric PCB criteria; the only reason it is including a permit limit is because it asserts that any discharge of PCBs could contribute to impairment

related to fish tissue concentrations.¹ Ecology should consider eliminating statements that the District's effluent has reasonable potential to violate narrative criteria; those statements are without support. The near-term PCB TMDL will presumably include additional information on the source of PCBs in fish tissue and will provide an opportunity to document, with sound science, information related to PCBs in the fish tissue.

Table 4 Cadmium

The Spokane River is no longer listed as impaired for cadmium under Washington State's most recent Water Quality Assessment. The District requests that a mixing zone be granted for cadmium. The end of pipe limits required as part of the Spokane River Dissolved Metals Total Maximum Daily Load should no longer be applicable.

Comment 6 Table 5, page 9 and footnotes below Table 5, page 10

Footnote "g" is a duplication of footnote "f" and should be removed. As a result, footnote "i" on the Minimum Daily column in Table 5 should be changed to refer to the correct footnote below the table.

Comment 7 S2.A. Monitoring Schedule, page 11

With regards to BOD, CBOD and cadmium sampling frequency – Table 9 and 10:

The District believes that a reduction in sampling frequency for BOD, CBOD and cadmium is warranted based on previous performance.

In accordance with Chapter 13, Section 1.3.3 of the WSDOE Permit Writer's Manual the Liberty Lake Sewer and Water District is requesting monitoring reduction for BOD, CBOD and Cadmium based on plant performance.

The Permit Writer's Manual states that the "*Reduction of monitoring frequency will generally be granted at time of permit renewal by examination of performance in the two years preceding renewal. The amount of reduction is dependent upon the ratio of performance for the last two years to the monthly average effluent limitation (Table 38).*" Attached is the performance data for BOD and CBOD and Cadmium for 2020 and 2021, and the reduced monitoring

¹ Although the Permit Writer's Manual suggests that Ecology should assume any effluent is contributing to impairment if the resident fish tissue concentrations above or below the discharge include PCBs, the District suggests that those assumptions should be supported with data particularly in circumstances where there is no reasonable potential to violate numeric criteria. The listing data for the river point to five samples that are over fifteen years old and do not demonstrate any relationship to the District's discharge (https://apps.ecology.wa.gov/approvedwqa/candidatepages/viewcandidatelistings.aspx?LISTING_ID=8201). The District does not agree that there is a correlation between the District's effluent water quality and the fish tissue concentrations near Plantess Ferry, Spokane River Mile 85.0. Furthermore, the District does not agree that the concentration in fish tissue can be equated to a water quality criterion for the protection of human health.

calculations for those parameters. The average monthly concentration for BOD over this two-year period was 1.28 mg/L. Calculating the ratio of these averages to the permit limit of 5 mg/L monthly yields a ratio below 26%. Applying these ratios to Table 37 of the Permit Writer’s Manual provides a reduction in BOD frequency from 2/week to 2/Month. The average seasonal CBOD loading for 2020 and 2021 was 13.22 Lbs./D. The ratio of this 2-year average to the seasonal permit limit of 45 Lbs./D is 29%. Table 37 supports a reduction in monitoring for CBOD from 2/week down to 2/Month. For Cadmium, the ratio of the 2-year monthly average (.96) to an average monthly limit of 7.0 mg/L is 14%. Using Table 37 results in a reduction from 2/month to 1/quarter.

Based on the procedures outlined in the Permit Writer’s Manual the District requests that the monitoring frequency for BOD, CBOD, and Cadmium be reduced as described above.

2-year Average Cadmium

Test Date	Total Recoverable Cadmium ug/L
January 7, 2020	1
February 3, 2020	1
March 2, 2020	1
April 2, 2020	1
May 5, 2020	1
June 2, 2020	0.05
July 14, 2020	1
August 4, 2020	1
September 1, 2020	1
October 6, 2020	1
November 3, 2020	1
December 1, 2020	1
January 5, 2021	1
February 3, 2021	1
March 2, 2021	1
April 6, 2021	1
5/2021	1
6/2021	1
7/2021	1
8/2021	1
September 7, 2021	1
10/2021	1
11/2021	1

12/2021	1
2 Year Average	0.960

2-year Average BOD

Test Date	Weekly BOD mg/L	Ave. Monthly BOD
January 2, 2020	1.1	
January 8, 2020	1.2	
January 16, 2020	1.2	
January 22, 2020	1.6	
January 29, 2020	1.2	1.26
February 5, 2020	0.8	
February 13, 2020	1.4	
February 18, 2020	0.8	
February 26, 2020	0.4	0.85
March 4, 2020	1.3	
March 11, 2020	0.8	
March 18, 2020	0.6	
March 25, 2020	1.1	0.95
April 1, 2020	1	
April 8, 2020	2.3	
April 15, 2020	2	
April 22, 2020	1.2	
April 29, 2020	1	1.5
May 6, 2020	1.3	
May 13, 2020	1.4	
May 20, 2020	1.7	
May 27, 2020	2.5	1.725
June 3, 2020	1.8	
June 10, 2020	1.7	
June 17, 2020	1.4	
June 24, 2020	1.4	1.575
July 1, 2020	1.1	
July 8, 2020	1.3	
July 15, 2020	1.3	
July 20, 2020	2	
July 29, 2020	2.4	1.62
August 5, 2020	2.1	
August 12, 2020	1.5	

August 19, 2020	1.6	
August 26, 2020	1.5	1.675
September 2, 2020	1.2	
September 9, 2020	1.1	
September 16, 2020	1	
September 23, 2020	0.9	1.05
October 1, 2020	1.3	
October 7, 2020	1.3	
October 14, 2020	1.2	
October 21, 2020		
October 28, 2020	0.9	1.175
November 4, 2020	2.2	
November 11, 2020	1.5	
November 18, 2020	1.6	
November 25, 2020	1.1	1.6
December 2, 2020	1.1	
December 9, 2020	1.1	
December 16, 2020	1.3	
December 23, 2020	1.2	
December 30, 2020	2.6	1.46
January 6, 2021	1.3	
January 14, 2021	1.2	
January 20, 2021	1.1	
January 27, 2021	1.1	1.175
February 3, 2021	1.1	
February 11, 2021	1.3	
February 17, 2021	0.9	
February 24, 2021	1.3	1.15
March 3, 2021	1.2	
March 10, 2021	0.8	
March 17, 2021	1.7	
March 24, 2021	1.1	1.2
April 1, 2021	1.1	
April 7, 2021	1.4	
April 14, 2021	2.7	
April 21, 2021	1.7	
April 28, 2021	1.4	1.66
May 5, 2021	1.5	
May 12, 2021	1.2	
May 19, 2021	0.9	
May 27, 2021	1.2	1.2

June 2, 2021	1.3	
June 9, 2021	1	
June 16, 2021	1.2	
June 23, 2021	1.6	1.275
July 1, 2021	3.3	
July 7, 2021	1.3	
July 14, 2021	0.9	
July 21, 2021	0.4	
July 28, 2021	1.2	1.42
August 4, 2021	1	
August 11, 2021	1.2	
August 18, 2021	1.4	
August 25, 2021	1	1.15
September 2, 2021	1.3	
September 8, 2021	1.6	
September 15, 2021	0.9	
September 22, 2021	1.2	
September 29, 2021	0.8	1.16
October 6, 2021	0.8	
October 16, 2021	1	
October 20, 2021	1.2	
October 27, 2021	0.8	0.95
November 3, 2021	1	
November 10, 2021	0.7	
November 17, 2021	1	
November 24, 2021	0.4	0.775
December 2, 2021	1	
December 8, 2021	1.1	
December 15, 2021	1.2	
December 22, 2021	1.5	
December 29, 2021	1.3	1.22
2-Year Average	1.29	1.28

2-Year Average CBOD

Test Date	CBOD Loading Lbs./D
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March 4, 2020	12.86
March 11, 2020	13.11

March 18, 2020	13.53
March 25, 2020	13.86
April 1, 2020	13.48
April 8, 2020	13.21
April 15, 2020	13.03
April 22, 2020	12.91
April 29, 2020	13.43
May 6, 2020	13.71
May 13, 2020	13.91
May 20, 2020	13.36
May 27, 2020	13.93
June 3, 2020	12.94
June 10, 2020	13.18
June 17, 2020	13.86
June 24, 2020	12.59
July 1, 2020	14.18
July 8, 2020	14.49
July 15, 2020	13.39
July 20, 2020	12.19
July 29, 2020	12.79
August 5, 2020	13.33
August 12, 2020	12.86
August 19, 2020	12.58
August 26, 2020	11.99
September 2, 2020	13.18
September 9, 2020	13.71
September 16, 2020	13.48
September 23, 2020	12.78
October 1, 2020	12.71
October 7, 2020	13.11
October 14, 2020	13.74
October 21, 2020	
October 28, 2020	14.04

March 3, 2021	14.26
March 10, 2021	14.16
March 17, 2021	14.09
March 24, 2021	14.85
April 1, 2021	13.41
April 7, 2021	12.38
April 14, 2021	12.38

April 21, 2021	12.98
April 28, 2021	12.88
May 5, 2021	14.34
May 12, 2021	12.61
May 19, 2021	13.39
May 27, 2021	13.58
June 2, 2021	13.34
June 9, 2021	14.29
June 16, 2021	13.86
June 23, 2021	13.06
July 1, 2021	15.41
July 7, 2021	12.43
July 14, 2021	13.19
July 21, 2021	11.88
July 28, 2021	12.58
August 4, 2021	13.71
August 11, 2021	12.23
August 18, 2021	12.63
August 25, 2021	12.64
September 2, 2021	11.86
September 8, 2021	13.16
September 15, 2021	12.68
September 22, 2021	12.23
September 29, 2021	13.99
October 6, 2021	12.24
October 16, 2021	11.53
October 20, 2021	12.84
October 27, 2021	13.24
2-Year Seasonal Average	13.22

Monitoring Reduction Calculations:

	2-Year Average	Permit Limit	Ratio	Baseline Mon. Frequency	Reduced Monitoring
Cadmium	0.96	7	13.7%	2/Month	1/Quarter
BOD Weekly	1.29	7	18.4%	Reduction based on Monthly	
BOD Monthly	1.28	5	25.6%	2/Week	2/Month
CBOD Seasonal	13.22	45	29.4%	2/Week	2/Month

Baseline Monitoring from Table 40, Part C of Permit Writers Manual
 Reduced Monitoring from Table 37 of Permit Writers Manual

With regards to Cyanide sampling frequency – Table 10:

The District is aware that the data used to characterize the effluent in terms of setting limits cover the period of January 2018 - October 2021. When performing the calculations for determining a limit for cyanide, only one sample value was used. This sample was obtained from the priority pollutant scan from February 2021. We believe the results of the sample are reversed due to an error during collection of the sample into the wrong sample container or through reversing of the samples during analysis at the lab as the effluent concentration was higher than the influent concentration. Influent results were 0.0172 mg/L and effluent results were 0.0511 mg/L. Listed below are the cyanide results for the effluent and influent going back several years including dates both before and after installation of tertiary membranes. Also included are the results from a current analysis done on both the influent and effluent in February 2022. The District believes that the reasonable potential does not exist for cyanide, and thus it does not require a limit and should also be removed from any increased monitoring.

8/17/2011, Influent, non-detect
8/17/2011, Effluent, non-detect
6/18/2013, Influent, non-detect
6/18/2013, Effluent, non-detect
1/22/2016, Effluent, non-detect
2/24/2021, Influent, 0.0172 mg/L
2/25/2021, Effluent, 0.0511 mg/L
2/14/2022, Influent, non-detect
2/14/2022, Effluent, non-detect

With regards to lead and zinc sampling frequency - Table 10:

The District requests that the sampling frequency remain at 1/month for lead and zinc as specified in the current permit. What is the rationale for doubling the sampling frequency to 2/month?

With regards to arsenic, chromium, nickel, copper, silver and mercury sampling frequency - Table 10:

The District asserts that the insertion of these 6 parameters are in error. What would be the rationale for listing them separately for increased monitoring on a quarterly basis when we have not previously had to sample them outside of a routine priority pollutant scan? We suggest Ecology remove these 6 parameters from the monitoring requirements.

In addition, Page 35 of the draft Fact Sheet says:

Ecology determined that arsenic, copper, mercury, nickel, pose no reasonable potential at the critical condition using procedures given in EPA, 1991 (Appendix D) and as described above.

With regards to fecal coliform and E. coli sampling frequency - Table10:

(1) We suggest that the sampling frequency should remain at 2/week and not increased to 3/week. Given that our fecal results over several years have a monthly average of 1.39 CFU/100 mL, what is the rationale for the increased testing frequency at such low bacterial levels?

(2) We suggest that it is not necessary to test for both fecal coliforms and E. coli

The District recognizes that E. coli has become the new bacterial water quality criterion for protecting water quality standards, replacing fecal coliforms as the indicator group. The District believes that in our specific situation, dual monitoring for both fecal coliforms and E. coli are not necessary.

From page 44 of the Fact Sheet under Wastewater Monitoring:

“Ecology has required monitoring of both fecal coliform and E. coli in the proposed permit for the first two years of the proposed permit cycle. This dual monitoring will help inform both Ecology and the District of the correlation between the two indicators.” We suggest that in our case there is no value in dual monitoring at such low levels of bacteria.

Our monthly fecal coliform average over the last several years is 1.39 CFU/100 mL (most all growth plates show zero colonies, and are reported as <1 CFU/100 mL). At such low levels of growth, it seems unreasonable to try and develop a ratio of fecal bacteria to E. coli. Dual monitoring would have the effect of increasing costs with no added benefit. What is the rationale Ecology is using for requiring dual monitoring? We suggest that we be removed from the dual monitoring requirement. Please see comment 18 for related information.

With regards to PCB analytical method – footnote ‘w’ – Table 10:

This footnote requires that EPA Method 1668 be used for monitoring effluent PCBs, however, as noted above, this method has not yet been approved under 40 CFR Part 136 for use in NPDES permit compliance monitoring, whereas EPA Method 608.3 is approved for compliance. Please clarify how PCB effluent limit compliance will be determined if only EPA Method 1668 is used for monitoring. Furthermore, the footnote does not specify the blank correction factor for reporting using EPA Method 1668, or if instead the raw data from the analytical report should be submitted to Ecology for Ecology’s analysis.

In its comments, EPA has recommended that Ecology include a discussion in the Fact Sheet of another PCB congener method (1628). While the District has no objection to a review of the various ways PCBs can be analyzed, it underscores that, unless adopted as 40 CFR Part 136-approved analytical methods, alternative methodologies should not be implemented in any aspects of the permit.

Comment 8 Table 13, Permit renewal application requirements, page 17

Comments here are in regard to the priority pollutant scans associated with permit renewal and with regards to the monitoring frequency of priority pollutants in general. Could Ecology clarify in Table 13 both the frequency and timeframe of the required priority pollutant scan in connection to permit renewal and also clarify in the permit if priority pollutant scans are required as part of routine monitoring, and if so, at what frequency, as this is not clearly communicated in either the Permit or Fact Sheet.

Comment 9 Table 14, Temperature Receiving Water Study, Page 18 and S13. Temperature receiving water study, Page 38

The District completed a QAPP and receiving water temperature monitoring study during the last permit cycle. The District has collected river temperature data every year since 2012. Ecology also has temperature data for the Spokane River from other organizations reaching back many years.

Could Ecology address the following questions:

1. What is the rationale or purpose of continuing to collect additional temperature monitoring data in general, when so much data has already been collected, and specifically the listed requirement to now collect data year-round?
2. Why do we need to submit an updated QAPP when one has already been completed?
3. Why is the District the only discharger with a receiving water interim and final temperature limit in our permit?

In light of all the data that has been collected, the District requests that the ongoing temperature study and data collection requirement be removed from the permit.

If this is not granted, we at least request that temperature data collection be limited to the July 1 through September 31 monitoring period required in the previous permit and to also change the requirement to allow the submission of temperature data at the end of the data collection period rather than with monthly DMR's.

Comment 10 Section S5.G.b Operation and Maintenance (O&M) Manual Components, Page 30

Item 9 and 10 are unnecessary to be included in the O&M Manual and these items are not listed in the Orange Book for O&M Manuals. The District's effluent

complies with state ground water standards and most state drinking water standards. Thus, we request the language requiring the monitoring of irrigation water be removed from the permit including Table 15, Page 18.

Comment 11 Number 4 a-f, page 20

Is the inclusion of quarterly, bimonthly, semiannual and annual DMR's an error? The District has only ever been required to submit monthly DMR's in the past. What is the rationale for requiring all of these extra DMR reports?

In addition, Bi-monthly DMR's are not listed on Table 1: Summary of Permit Report Submittals.

Comment 12 A slight re-listing is needed in Number 11 and 12 on page 21.

These two should be re-labeled as “a” and “b” respectively under Number 10 (i.e., 10a, 10b)

Comment 13 S10, Engineering Documents, page 34

There is no need for an Engineering Report or Facilities Plan for reclaimed water until improvements to the facility is required. Upgrades to reclaimed water standards are not required at this time and the District has not determined that the effluent will be put to beneficial use.

In addition, the document reference listed under 3c, Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems (Washington State Department of Ecology, Publication No. 93-36, 1993) is not applicable to the District.

Comment 14 S14. Conduct DO, pH and alkalinity receiving water sampling, page 39

Why do we need to monitor for DO in the receiving water when there is already a DO TMDL for the river and limits are already established? In addition, Ecology has included in the draft permit a requirement to install a DO meter on the effluent discharge with a numerical limit as described in Table 5.

Furthermore, if the facility is meeting its pH limits, then what is the rationale for us to monitor pH and alkalinity in the river?

Comment 15 S15. Number 7, page 40 and S16. Number 7, page 42

Indicates the permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. We don't believe this applies to the District.

Comment 16 S17.A, Number 1, page 43

The District has under substantial cost, previously performed source identification testing with regards to PCB's. No definitive source could be identified as PCB's were found to be ubiquitous in the collection system. The 2016 Toxic Management Plan discussed the varied results of the data from testing completed on samples taken from the collection system and recommended that testing be focused on influent and effluent at the WRF. WSDOE agreed that the results from tests taken from the collection system were not useful in determining controllable sources and allowed the District to test at the WRF only. We request to be removed from the requirement to perform continual source testing.

Furthermore, the permit includes a numeric limit on PCBs with which the District is in compliance with using all known, available, and reasonable methods of prevention, control, and treatment (AKART). It is unnecessary to require a Toxics Reduction Best Management Practices Plan.

Comment 17 S17.B., page 43

This proposed Permit includes a provision stating the permittee must continue to work with the Spokane River Regional Toxics Task Force to identify strategies for reducing toxics in the Spokane River Watershed. The District requests that participation not be mandatory (and questions the authority for including that requirement) particularly given the near-term development of the PCB TMDL. As described below, the District will want to assess the nature and extent of its participation in advisory organizations in the context of TMDL development and implementation.

LLSWD supports the concept of Community Based Toxics Reduction, but not via the Spokane River Regional Toxics Task Force (Task Force). The Task Force was proposed and developed by local NPDES permittees to conduct a voluntary alternative to a traditional TMDL process to identify and reduce sources of PCBs in the Spokane River. Now that the EPA has committed to develop a TMDL for PCBs in the Spokane River, the fundamental purpose for voluntarily participating in the Task Force is eliminated. Nevertheless, the Task Force has performed excellent technical work in documenting the fate and transport of PCBs in the watershed and the District sees value in continuing the process. The District recommends Ecology lead a new, coordinated multi-agency effort to re-engage tribes, NGOs and other stakeholders to identify sources of PCBs and other toxics in the watershed. Funding of projects to reduce toxics in the watershed could be an open process via grants to various qualified organizations to conduct projects as appropriate.

Comment 18 Appendix A, List of Pollutants and Recommended Analytical Protocol

With regards to Fecal Coliform, page 51 and E. coli, page 52:

The District currently uses method SM922D, membrane filtration on m-FC media for detection of fecal coliforms. The methods listed for E. coli in Appendix A are multiple tube fermentation or quanti-tray methods that require additional time and equipment to complete compared to membrane filtration. If monitoring for E. coli is required then we would like to suggest the inclusion of EPA method 1603 as an appropriate method. This is a membrane filtration method developed specifically for E. coli. This method is performed just like SM9222D that we already use and thus it would be compatible with the experience and training of lab personnel and not require any additional lab equipment.

Fact Sheet Comments:

Comment 1 Facility description, page 8

The following sentence should be deleted as the digester blowers were not replaced:

“The District replaced the aerobic digester blowers in 1998”

Comment 2 Description of the receiving water, page 12

The last sentence in the paragraph says “*The propose(d) permit will require Liberty Lake to collect annual samples upstream out of the influence of their outfall for PCBs.*”

There is no mention elsewhere in the Permit or the Fact Sheet of having to collect PCB samples from the receiving waters. Is this sentence in error? We request to be removed from any requirement to collect PCB samples from the river. Could Ecology please clarify this statement?

Comment 3 Table 10, page 18

The table indicates that the Local Limit Development and the Industrial User Survey Update submittals have not been received. Please see “Appendix A” with supporting documentation showing Ecology’s receipt of the documents.

Comment 4 Table 17, Page 27

The Table specifies the critical conditions with the 7Q10 flow specified as 500 CFS, uncertain what “verification” is needed, request that this is removed from paragraph below the table.

Comment 5 Under Notes, page 42

It says “*For PCBs, the data collected for the new treatment system indicated that the facility does not have a reasonable potential to exceed the numeric criteria.*”

However, the discharge does have a reasonable potential to effect the narrative criteria for PCBs. As a result, the District will have a numeric and narrative limit for PCBs.”

If no reasonable potential exists for PCBs, then PCB numerical limits should not be required and narrative limits should also be removed as they are unnecessary.

Comment 6 Appendix D – Technical Calculations, page 68

The following table headings listed on page 68 have typos that do not match the table headings that follow on pages 69-79.

Table D-3: RPA Inputs

Table D-4: Freshwater Un-ionized Ammonia Criteria Calculation

Table D-5: RPA Calculations

Table D-4: PCB RPA Calculations No Dilution

Table D-14: Dissolved Oxygen WQBEL

Comment 7 PCB RPA Calculations, Page 72

The reasonable potential calculation Max. or 95th Percentile input for PCBs is listed as 1.27×10^{-7} µg/L. This does not appear to be the correct value for the units of µg/L.

Comment 8 Section III.B, Page 21

The Fact Sheets states: *“The table below identifies technology-based limits for, fecal coliform, CBOD5, BOD5 and TSS, as identified in the Design Criteria Phase 2 upgrade As-built Drawings Page 5 of 205 for the tertiary treatment system provided with the permit application for renewal. These limits are more stringent than the secondary treatment technology-based limits in chapter 173-221 WAC. Chapter 173-220-130 requires that “effluent limitations shall not be less stringent than those based upon the treatment facility design efficiency contained in approved engineering plans and reports.”*

This statement is incorrect. The As-Built Drawings and the Engineering Report list the current effluent fecal coliform design criteria as 200 CFU/100 mL Monthly Geometric Mean and 400 CFU/100 mL Weekly Geometric Mean. These design criteria are not more stringent than the secondary treatment technology-based limits in chapter 173-221 WAC.

Comment 9 Fact Sheet, Bacteria, Page 34 and Table 26, Page 41

The Fact Sheet states: *“The water quality bacteria criterion has changed from fecal coliform to E. coli. Because the transition is a change in bacterial indicator not more or less stringent than the current standards, the proposed permit includes an interim fecal coliform effluent average monthly geometric mean limit of 100*

organisms/100 mL and a weekly geometric mean of 150 organisms/100 mL based on the previous criterion for primary contact recreation. In addition, the Permittee will be required to monitor for both fecal coliform and E. coli in order to develop a site-specific correlation. The proposed permit will implement the E. coli limit after three years.

The previous criterion for primary contact recreation was based on a weekly geometric mean of 200 organisms/100 mL. Therefore, if no mixing zone is allowed, the criterion for fecal coliform should be a weekly geometric mean of 200 organisms/100 mL.

Appendix A

Supporting documentation for Fact Sheet Comment 3 on page 19 above:

The Industrial User Survey was emailed to both Richard Koch and Scott Mallery on Feb. 9 2012. We also received an extension on submission of Local Limits as the District's Sewer Bylaws required updating and it seemed reasonable to establish new local limits with the Bylaw updating. We received an email from Scott Mallery with a June 2012 extended submission date. The bylaws and local limits were adopted by the Board of Commissioner in May and the documents were hand delivered by then District Manager Lee Mellish.

From: Mallery, Scott (ECY) [SMAL461@ECY.WA.GOV]
Sent: Wednesday, December 14, 2011 4:22 PM
To: Dan Grogg; Koch, Richard A. (ECY)
Cc: Lee Mellish
Subject: RE: Follow up to Conversation 12/8/11
Attachments: 2007 WA Model SUO.DOC

Hi Dan!

Richard and I chatted about the following paragraph you sent to us:

We also discussed upcoming permit report submittals. As you are aware we have a January 15, 2012 deadline for submission of updated Local Limits. In researching the current Ordinance (Resolution 15-76) originally drafted in 1976, it is readily apparent that the entire resolution requires serious updating and revisions. The permit calls for an update of these regulations with completion in October of the coming year. In the interest of continuity, I requested that local limit submission be postponed so that both limits and Resolution updates could be submitted at the same time, with a target date of June 2012.

Richard and I agree that local limit submission and ordinance can be submitted in June 2012. We would like to see those items by June 15, 2012. Ecology needs to review them before you submit them to your 'board'. That way we can discuss if there should be any changes or not.

Here are the links to the EPA Local Limits Development Guidance manual:
http://www.epa.gov/npdespub/pubs/pretreatment_local_limits.pdf
http://www.epa.gov/npdespub/pubs/final_local_limits_appendices.pdf

Here are some tools from Washington State Ecology to help in the development of local limits:
<http://www.ecy.wa.gov/biblio/1010063.html>
(guidance manual on how to use the excel spread sheet for local limits)

<http://www.ecy.wa.gov/programs/wq/permits/newll11blank.xlsm>
(excel spread sheet for local limits)

The following are several links for Pretreatment Ordinance you can consider and would get you updated with the changes that have occurred over the years. Also, attached in the Washington state model ordinance. Hope this helps.

And here are the EPA Links:

http://www.epa.gov/npdes/pubs/pretreatment_model_suo.doc

http://www.epa.gov/npdes/pubs/pretreatment_model_suo.pdf

http://www.epa.gov/npdes/pubs/pretreatment_legal_checklist.doc

[http://yosemite.epa.gov/r10/water.nsf/95537302e2c56cea8825688200708c9a/443c43684963509c88256665007b5878/\\$FILE/R10ModelSUOFeb%2008.pdf](http://yosemite.epa.gov/r10/water.nsf/95537302e2c56cea8825688200708c9a/443c43684963509c88256665007b5878/$FILE/R10ModelSUOFeb%2008.pdf)

Here is the last LOTT pretreatment ordinance:

<http://www.lottcleanwater.org/pdf/pretreatReg.pdf>

Here is a link to Vancouver's Ordinance as well:

http://www.cityofvancouver.us/MunicipalCode.asp?menuid=10462&submenuID=10478&title=title_14&chapter=10&vmc=index.html

If you have any questions, please let me know.

Thanks and happy holidays...

Scott Mallery, P.E.
Eastern Regional Office
Water Quality Program
Phone: (509) 329-3473
Fax: (509) 329-3529
email: smal461@ecy.wa.gov

From: Dan Grogg
To: Richard Koch (rkoc461@ecy.wa.gov)
Cc: Scott Mallery (smal461@ecy.wa.gov); Lee Mellish
Subject: Liberty Lake Industrial User Survey
Date: Thursday, February 09, 2012 2:27:00 PM
Attachments: User Survey Cover.docx
Survey Submittals.zip

Richard,

Please find attached cover and attachments containing Industrial User Survey information from Liberty Lake Sewer and Water District. Let me know if you have any issues with the format or opening any of the attachments.

Dan Grogg
Chief Operator
Liberty Lake Water Reclamation Facility
22510 E. Mission Avenue
Liberty Lake, WA 99019
509-922-5443 ext. 236
509-370-1453 cell