

May 3, 2022

Ms. Diana Washington, P.E. Washington State Department of Ecology Water Quality Program 4601 N Monroe Street Spokane WA 99205-1295 Submitted by email diana.washington@ecy.wa.gov

Subject: Public Review comments on NPDES Permit WA-0093317

Spokane County Regional Water Reclamation Facility

Dear Ms. Washington,

Thank you for the opportunity to provide comments on the Public Review Draft NPDES Permit and Fact Sheet for the Spokane County Regional Water Reclamation Facility. We appreciate the time required for you to prepare the Draft Permit and the revisions that you made to the Permit in response to our previous comments. We hope that these additional comments are helpful to you and Ecology. If you need any additional information or if you would like to discuss these comments, please contact me, 509-477-7576 or rlindsay@spokanecounty.org.

Sincerely,

Rob Lindsay, LHg

**Environmental Services Administrator** 

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CC: file

Enclosure: Public Review comments

# Spokane County Public Review Comments to SCRWRF Draft NPDES Permit and Draft Fact Sheet

Spokane County previously provided comments to the entity review draft NPDES Permit and Fact Sheet. The County provides the following additional comments to the public review draft of the Spokane County Regional Water Reclamation Facility (SCRWRF) NPDES Permit (WA0093317) and Fact Sheet dated March 18, 2022.

#### **Summary**

Spokane County submitted a complete application for renewal of its 2011 NPDES Permit in October 2015. Ecology administratively extended the County's 2011 NPDES Permit in January 2016.

Variance Application for PCBs: At Ecology's request, in April 2019, the County applied for a variance from the PCB water quality standard. As of this date, Ecology has not made a decision on the variance application. If Ecology grants the County a variance from the PCB water quality standard before the final Permit is issued, the Permit should include the variance from the PCB water quality standard. If Ecology grants the County a variance from the PCB water quality standard after the Permit is issued, the Permit should be modified to include the variance from the water quality standard.

Cadmium, Lead, and Zinc Limits: The County requests removal of the proposed cadmium effluent limit because the Spokane River is no longer impaired for cadmium. The County requests that Ecology retain the lead and zinc effluent limits from the previous permit. Because the SCRWRF effluent is well below the surface water quality criteria for lead and zinc, more stringent limits for these parameters is not appropriate. By way of comparison, the Cd, Pb, and Zn effluent limits in the draft permit for Kaiser Aluminum are higher than the proposed SCRWRF effluent limits. There is no reasonable basis for Ecology to impose more stringent limits on the County when both Kaiser and the County discharge to the Spokane River and when the SCRWRF effluent is well below the water quality criteria for these parameters.

**Polychlorinated Biphenyls (PCBs) Limit:** Based on a reasonable potential analysis calculation (page 77 of the Draft Fact Sheet), the SCRWRF should not have numeric PCB effluent limits. Because there is no reasonable potential for the SCRWRF to exceed the PCB water quality standard, the proposed numeric effluent PCB limits should be deleted from the Draft Permit.

Ammonia limits for average month and maximum day: The SCRWRF consistently treats ammonia to a low level making the average month and maximum day effluent limits added to this Draft Permit inappropriate and unreasonable. The reasonable potential calculation in the Draft Fact Sheet uses a higher effluent ammonia concentration than what typically occurs in the effluent. Using a 95<sup>th</sup> percentile effluent concentration or even a 99<sup>th</sup> percentile concentration returns no reasonable potential and no limits are required. The average month and maximum day effluent limits for ammonia should be deleted from the Draft Permit.

#### <u>Draft Permit</u>

## • Page 8, S1, Table 2: Fecal Coliform and E. coli testing

 It is excessive to have two types of bacteria sampling in the effluent through the permit term. The required transition to E. coli sampling is understood, but, following the transition, please delete the fecal coliform testing and limits from the permit requirements.

#### • Page 8, S1, Table 2: Metals (Cadmium, Lead, and Zinc)

- The County requests modifications of the proposed lower effluent limits for cadmium, lead, and zinc. Justification for modifications of the proposed limits includes:
  - The 1999 Spokane River TMDL was developed to achieve compliance with the cadmium water quality standard. Because the Spokane River is no longer impaired for cadmium (i.e., meets the water quality standard), the cadmium effluent limit should be deleted. Alternatively, the permit should retain the existing cadmium effluent limit in the 2011 SCRWRF NPDES permit.
    - Additionally, the Draft Fact Sheet at page 77 establishes there is no reasonable potential for cadmium impairment due to the SCRWRF discharge and, therefore, a limit is not needed. As stated above retaining the cadmium limit from the previous permit would be an acceptable alternative.
  - Effluent limits for cadmium, lead, and zinc can be set for the SCRWRF using an end-of-pipe toxicity calculation similar to that currently used for Kaiser Aluminum. Kaiser Aluminum and SCRWRF have similar effluent hardness which would result in similar end-of-pipe calculated limits. As an alternative, the permit limits in the existing permit can be retained.

# • Page 8, Table 2: Total Ammonia (As NH<sub>3</sub>-N)

- The proposed ammonia average month and maximum day effluent limits are not appropriate and should be deleted.
  - The SCRWRF has consistently removed ammonia from its effluent. From the September 2015 through August 2020 effluent data that the County used to develop the permit renewal application, the 95<sup>th</sup> percentile concentration was 1 mg/L and the 99<sup>th</sup> percent was 2.5 mg/L. Updating the RPA calculator on page 74 of the Draft Fact Sheet with either of these effluent concentration results in no reasonable potential to violate the water quality standard and no effluent limits are need.
  - Further, Attachment G to the SCRWRF NPDES permit renewal application described using effluent and receiving water data that there is

no reasonable potential for exceedances of ammonia toxicity and that daily or monthly limits are not needed.

#### • Page 8, S1, Table 2: PCBs (Total) limits

- Based on the reasonable potential analysis calculation contained on page 77 of the Draft Fact Sheet, the SCRWRF should not have numeric PCB effluent limits. The proposed numeric effluent PCB limits should be deleted from the Draft Permit. Additional factors related to PCB effluent limits include:
  - Narrative water quality standards for PCBs, based on the fish harvest usage, may be appropriate in the permit because PCBs are known to be present in the effluent.
  - If the effluent PCB limits are retained, Ecology should set limits based on the highest attainable condition (HAC) as detailed in the Spokane County PCB variance application submitted at Ecology's request in April 2019.
  - If the effluent PCB limits are retained as written in this Draft Permit, Spokane County requires either a ten-year compliance schedule or a variance consistent with the County's Variance application to allow the County time within which to evaluate additional action that may be needed for consistent compliance with the limits.

#### • Page 12 and 14, S2, Tables 5: Footnote h

O This footnote requires clarification in regards to sampling requirements during weeks with holidays. For example, if there is a holiday during the week, are only four samples required that week? What holidays are included? Often, sampling or testing is required 3 days a week, excluding weekends and holidays, to avoid this confusion. Please consider the following revision: 5/week means five times during each calendar week except weekends and federal holidays. If one or more federal holidays falls during a week day, it is acceptable to sample less than 5 times per week.

#### • Page 13: Dissolved Oxygen, continuous monitoring

O Spokane County cannot comply with this provision because its plant does not currently have DO effluent continuous monitoring instruments. The instruments to monitor DO may require a new housing cabinet on the effluent line and, given the current supply-chain issues in the United States, the continuous monitoring instruments and components may not be quickly available to order. Consequently, the Permit must be revised to include a provision that gives the County a reasonable period of time following the effective date of the permit within which to install the necessary monitoring equipment. Please revise the Draft Permit to allow one year following the effective date of the permit to install the necessary equipment to continuously monitor effluent dissolved oxygen.

#### • Pages 14 and 15, S2, Table 6: Footnotes

- Footnote e
  - 7DAD Max is currently calculated using the day plus the six days prior. The Draft Permit changes that calculation to three days prior plus three days after. The current calculation allows for "real-time" calculation of the value and is already used in the SCRWRF databases. Please retain the six day prior calculation method.
- Footnote h
  - This footnote requires clarification in regards to sampling requirements during weeks with holidays. For example, if there is a holiday during the week, are only four samples required that week? What holidays are included? Often, sampling or testing is required 3 days a week, excluding weekends and holidays, to avoid this confusion. Please consider the following revision: 5/week means five times during each calendar week except weekends and federal holidays. If one or more federal holidays falls during a week day, it is acceptable to sample less than 5 times per week.
- o Footnote k
  - Footnote l is included in footnote k text. Please separate the two footnotes.
- o Footnote p
  - Footnote p appears to be unused and can be deleted.

#### • Page 15, S2, Table 7: Acute and Chronic Toxicity testing, footnote a

The testing frequency is stated as semiannually but footnote "a" provides a schedule for quarterly testing. Please correct footnote "a" to describe semiannual testing.

# • Pages 15-17, S2, Pretreatment Monitoring Requirements

- Change sampling of outfall of the primary clarifier to sampling of effluent (last paragraph on page 15).
- Oil and Grease
  - Spokane County has no local limits for Oil and Grease. Please delete the monitoring for this parameter.
- o Table 8, pH
  - Influent pH is monitored continuously under the NPDES permit.
     Additional grab pH grab sampling for pretreatment is unnecessary. Please delete this monitoring requirement.
- o Table 10, pH
  - The County is not aware of a pH monitoring requirement in biosolids. Please delete this requirement.

- o Table 10, Total Dissolved Solids
  - The County is not aware of a TDS monitoring requirement in biosolids. Please delete this requirement.
- Footnote e
  - Once per year sampling is not currently conducted in rotating quarters. This new requirement to rotate quarters is acceptable, but not preferred because it complicates sample scheduling. Please delete this requirement to rotate quarters, if allowable.

#### • Page 18, Table 11: Receiving water temperature study

O To be consistent with section S11, please update the due date for the Temperature Study QAPP to be one year from effective date of the permit.

# • Page 20, Table 15, footnote b

o Please update the O&M Section to be S5.G.b.10.

#### • Page 23, Section S3.A Discharge Monitoring Reports

- o Items 11, 12, and 13 may be sub-bullets to item 10. Please correct, if appropriate.
- o Item 15 It is not clear what reporting is required by this item.

#### • Page 43, S11. Receiving water study of temperature

- The County has collected ten years of receiving water temperature data as required under the 2011 NPDES permit. These data represent the river over a significant period of time and represents a wide range of summer flow conditions.
- The requirement to expand the receiving water temperature from summer months to year around is excessive and unnecessary. Specifically, this additional sampling:
  - Will occur during periods with river flow conditions higher than summer low flow, well mixed, cooled from melt and runoff.
  - Will likely result in additional monitoring equipment vandalized or stolen, as has occurred during previous years of monitoring.
- Please delete the receiving water temperature study requirement from the Draft Permit.
- o If the receiving water study is retained, please modify Item 3 with the requirement to continue the monitoring for four years.
  - It appears that this requirement is meant to monitor during the final four years of the NPDES permit term, but this schedule does not allow for completion of the study and submission of the data to EIM and the final report to Ecology during the permit term. Please allow at least the final six months at the end of the permit term to finalize the temperature data and report.

# • Page 54, S16.B, Community Based Toxics Reduction

o Spokane County 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 has been eliminated. Nevertheless, the Task Force has performed excellent technical work in documenting the fate and transport of PCBs in the watershed and Spokane County sees value in continuing the process. Spokane County recommends Ecology lead a coordinated multi-agency effort to re-engage tribes, NGOs and other stakeholders to identify sources of PCBs and other toxics in the watershed. But, this process should not be imposed in this NPDES Permit. Federal or state 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 rather that imposing these costs on Spokane County and other permittees. If Ecology believes that a watershed-based approach is necessary for the River, it is unreasonable to impose all of that burden on Spokane County and the other dischargers – especially when this Permit already contains significant requirements and corresponding costs.

#### **Draft Fact Sheet**

#### • Page 1, Summary, paragraph 2

- o For clarity, please revise text to say:
  - ...Under a separate contract, they <u>Spokane County</u> also manages the biosolids...

#### • Page 2, top paragraph

- o Ammonia is not included in the Draft Permit as part of the receiving water study.
  - Please delete ammonia from the list of required parameters.
- The Draft Permit expands the receiving water temperature study from summer time to year around. Please revise the text to:
  - ...The proposed permit eontinues expands the receiving water temperature study....
  - As stated earlier in this letter, the County requests the receiving water temperature study be deleted from the Draft Permit.

#### • Page 7, Table 1: Facility Information

 Due to reorganization at Spokane County, the Responsible Official's title has changed. Please revise Robert Lindsay's title:

#### Robert Lindsay, Environmental Services Administrator

#### Page 10, Pretreatment process, final paragraph

o The program summary states that Ecology delegated Spokane County authority for a Pretreatment Program in 2012. Spokane County believes the pretreatment program authority was delegated from Ecology in 2001.

#### • Page 12, Solid wastes/Residual Solids, first paragraph

o The SCRWRF does not have secondary clarifiers. Please delete the two references in the paragraph to secondary clarifiers.

#### • Page 12, Table 4: Ambient Background Data – Critical Season

- The data provided in the table are taken from various times of the year and do not necessarily represent river conditions during the lowest flow period of the year, typically August and September.
- o Please revise the title to delete Critical Season.

#### • Page 15, Table 5: Wastewater Influent Characterization

- o Final two rows of the table, TCCD
  - The presentation of these influent dioxin data are misleading. Of the 104 samples described, only five samples had results above the laboratory quantification criteria. The use of an average value is not valid and should be revised.
  - An example presentation of these data is in the Spokane County 2022 Toxics Management Plan, Table 2-2.

#### • Page 29, 3. Ecology must consider critical discharge conditions, fourth paragraph

- O Use of the new critical flow of 773 cfs is stated to be conservative and "Ecology expects that a higher critical flow will result when there is enough data...." We agree and offered in Attachment C of the NPDES permit renewal application a critical flow of "at least 800 cfs."
- The use of the conservative critical flow results in unnecessarily restrictive effluent limits.
- Additionally, since the permit renewal application was submitted, the summer 2021 river flows were measured. Similar to previous years since the FERC relicensing, minimum discharge at USGS gage near Post Falls in the end of August was reduced to 500 cfs (7-day average low flow). The corresponding 7day average low flow at USGS gage 12422000 above Greene Street was 829 cfs (data are provisional).
- The consistent relationship between low flow discharges near Post Falls and above Greene Street represent the new low flow conditions at the SCRWRF

outfall. The Draft Permit should be revised to use a receiving water critical flow of at least 800 cfs.

## • Page 35, Total PBDEs, fourth paragraph

The calculation of PBDE percent removal by the SCRWRF appears to be in error.
 Please check the percent removal value.

# • Page 40, Ammonia Maximum Daily effluent limit

- o The value listed in the Draft Fact Sheet differs from the value in the Draft Permit. Please revise to be consistent.
- As stated earlier in this letter, the County calculates there is no reasonable
  potential for ammonia toxicity and the average month and maximum day limits
  should be deleted. Please delete the ammonia average month and maximum day
  limits in the Draft Permit.

#### • Page 43, Total PCBs

o This section refers to "the District" in three locations. Please revise this section to delete the reference to "the District."

# • Page 45, Table 23, Comparison of Previous and Proposed Critical Season limits

- The Draft Permit proposes a nearly order-of-magnitude reduction in the allowable Total Ammonia discharge during the March treatment season due to potential for ammonia toxicity.
- Spokane County requests that the SCRWRF retain use of those pounds of ammonia to potentially be applied for potential future effluent adjustments under the DO TMDL.

# • Page 47, Table 26: Comparison of Previous and Proposed Effluent Limits for Outfall #001 – pH

- o The pH limits in the 2011 permit were water quality based, not technology based (see 2011 Fact Sheet page 33).
- o Please revise the table to describe the 2011 pH limit as WQBEL.

# Page 47, Table 27: Comparison of Previous and Proposed Effluent Limits for Outfall #001 – Chlorine, Cadmium, Lead, Zinc, and PCBs

- The limits for cadmium, lead, and zinc are not water quality based. The limits in the 2011 permit and the Draft Permit are based on the treatment performance, not receiving water requirements.
  - Please revise the table to appropriately describe the metals limits basis in the permit.
- o Footnote d of the table refers to the "District"
  - Please revise footnote d to remove the reference to the "District."

# • Page 49, item C: Effluent limits which are near detection or quantitation levels

• The Draft Permit does not include limits for arsenic or methylmercury. Please delete the reference to these parameters.

# • Page 56, third bullet

• The Draft Permit does not require monitoring for methylmercury. Please delete the methylmercury monitoring plan and sampling requirement.

# • Page 71, Appendix D

 The list of contents does not match the table labels. Please revise the list of contents