



STATE OF WASHINGTON  
ENVIRONMENTAL AND LAND USE HEARINGS OFFICE

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July 19, 2013

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Re: PCHB No. 11-184  
**SIERRA CLUB and CENTER FOR ENVIRONMENTAL LAW & POLICY v.  
ECOLOGY AND SPOKANE COUNTY**

Dear Parties:

Enclosed is the Findings of Fact, Conclusions of Law, and Order of the Pollution Control Hearings Board in this matter.

This is a FINAL ORDER for purposes of appeal to Superior Court within 30 days. See Administrative Procedures Act (RCW 34.05.542) and RCW 43.21B.180. While you must serve the Board and all the parties, it is not necessary to name the Board as a party to perfect judicial review.

You are being given the following notice as required by RCW 34.05.461(3): Any party may file a petition for reconsideration with the Board. A petition for reconsideration must be filed with the Board and served on all parties within ten days of mailing of the final decision. WAC 371-08-550.

Sincerely,

Joan Marchioro, Presiding

JM/jb/P11-184  
Enc.

CERTIFICATION

On this day, I forwarded a true and accurate copy of the documents to which this certificate is affixed via United States Postal Service postage prepaid or via delivery through State Consolidated Mail Services to the parties of record herein.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.  
DATED July 19 2013, at Tumwater, WA

**POLLUTION CONTROL HEARINGS BOARD  
STATE OF WASHINGTON**

SIERRA CLUB and CENTER FOR  
ENVIRONMENTAL LAW & POLICY,

Appellant,

v.

STATE OF WASHINGTON,  
DEPARTMENT OF ECOLOGY and  
SPOKANE COUNTY,

Respondent.

PCHB No. 11-184

FINDINGS OF FACT, CONCLUSIONS OF  
LAW, AND ORDER

Appellants Sierra Club and Center for Environmental Law and Policy (collectively Sierra Club) appealed the NPDES Permit issued by the Department of Ecology (Ecology) to Spokane County for its Regional Water Reclamation Facility (Facility), NPDES Permit No. WA-0093317 (NPDES Permit or Permit). Prior to the hearing on the merits, the Board issued an order on partial summary judgment concluding that the Facility is a new discharger as defined by 40 C.F.R. § 122.2. *Sierra Club v. Dep't of Ecology*, PCHB No. 11-184 (Order Granting Partial Summary Judgment, Jan. 8, 2013). One issue was presented for hearing: Does the NPDES Permit No. WA-0093317 unlawfully authorize PCB discharges that will cause or contribute to a violation of water quality standards, including 40 C.F.R. section 122.4 and WAC 173-201A Part III?

The Board held a hearing in this matter on March 25-28, 2013, at the Board's offices in Tumwater, Washington. The Board hearing the case was comprised of Kathleen D. Mix and

1 Tom McDonald. Administrative Appeals Judge Joan M. Marchioro presided for the Board.  
2 Attorney Richard A. Smith represented Sierra Club. Attorneys John R. Nelson and Lori Terry  
3 Gregory represented the County. Senior Counsel Ronald L. Lavigne represented Ecology. Kim  
4 Otis of Olympia Court Reporters of Olympia, Washington provided court-reporting services.

5 The Board received the sworn testimony of witnesses, admitted exhibits, and reviewed  
6 the arguments on behalf of the parties. Having fully considered the record, the Board enters the  
7 following:

#### 8 FINDINGS OF FACT

9 1.

10 The Spokane River begins in northern Idaho at the outlet of Lake Coeur d'Alene and  
11 flows west 112 miles where it joins the Columbia River. *Ex. A-12* at 12. Approximately 33  
12 miles of the Spokane River forms the southern border of the Spokane Indian Reservation.  
13 Crossley Testimony; *Ex. A-12* at 12.

14 2.

15 Pursuant to Section 303(d) of the federal Clean Water Act (CWA), Ecology<sup>1</sup> is required  
16 to prepare a list every two years of water bodies that do not meet water quality standards (303(d)  
17 list). 33 U.S.C. § 1313(d). Fifteen water body segments of the Spokane River and Lake  
18 Spokane, and one segment of the Little Spokane River are on Washington's current 303(d) list  
19 for not meeting Washington state human health water quality criteria for polychlorinated  
20 biphenyls (PCBs) in edible fish tissue. *Ex. A-12* at 11.

21 <sup>1</sup> The Legislature designated Ecology as the state water pollution control agency responsible for implementing the  
CWA in Washington. RCW 90.48.260.

1 3.

2 Under Washington's water quality standards, the chronic fresh water criterion for aquatic  
3 organisms is 14,000 pg/L. WAC 173-201A-240 (Table 240(3)). The human health water quality  
4 criterion for PCBs applicable in Washington is taken from the National Toxics Rule, which  
5 establishes an ambient water criteria of 170 pg/L and a fish tissue criteria of 5.3 ng/g. 40 CFR §  
6 131.36. Washington's water quality standards identify harvesting as a designated use of the  
7 Spokane River. WAC 173-201A-602 (Table 602). The Spokane Tribe, which received  
8 treatment as a state status under the CWA in 2003, promulgated its own human health water  
9 quality criterion for PCBs. Crossley Testimony. The Spokane Tribe's PCB water quality  
10 criterion is 3.37 pg/L for ambient water and 0.1 ng/g in fish tissue. *Ex. A-12* at 13. Harvesting is  
11 one of the designated uses of the Spokane River under the Spokane Tribe's water quality  
12 standards. Crossley Testimony.

13 4.

14 Although banned from production and use in 1979, PCBs are legacy pollutants that  
15 continue to persist in the environment. *Exs. Ecy-2* at 17, *A-12* at 11, 27. The principal uses for  
16 PCBs are as insulating fluids, plasticizers, lubricants and fluids for hydraulic machinery, vacuum  
17 pumps and compressors. *Id.* Despite being banned, PCBs continue to be introduced into the  
18 environment and are found in wastewater sent to treatment facilities. DeFur Testimony; Rawls  
19 Testimony; *Ex. R-37* (Toxic Substance Control Act allows inadvertently generated PCBs in  
20 products). Due to their stability and resistance to degradation, PCBs are extremely persistent in  
21

1 the environment and are one of the most ubiquitous of all environmental contaminants. *Ex. A-12*  
2 at 28. EPA has classified PCBs as “probable human carcinogens.” *Id.* at 11.

3 5.

4 In 2009, the Washington State Department of Health (DOH) issued a fish advisory for the  
5 Spokane River for PCBs and PBDEs (flame retardants). *Exs. A-31, A-32. See also Ex. A-26*  
6 (August 2011 DOH Health Consultation discussing the potential cumulative health effects  
7 associated with eating fish from the Spokane River and stating that fish advisory should remain  
8 in place). DOH’s fish advisory contains specific fish consumption recommendations: (1) all fish  
9 caught in the portion of the Spokane River upstream of the Upriver Dam should not be eaten; (2)  
10 Largescale Suckers caught between Nine Mile Dam and the Upriver Dam should not be eaten;  
11 and (3) limit consumption of several fishes caught in Lake Spokane (Rainbow Trout and Yellow  
12 Perch two meals per week; Mountain Whitefish one meal per week; Brown Trout and Largescale  
13 Sucker one meal per week). *Exs. A-31, A-32.* Finally, the fish advisory identifies ways to  
14 prepare fish for consumption that will help reduce exposure to PCBs. *Id.*

15 6.

16 Under CWA Section 303(d), when a water body is included on the state’s 303(d) list, a  
17 Total Maximum Daily Load (TMDL) for the pollutant parameter is to be prepared. 33 U.S.C. §  
18 1313(d). A TMDL determines the amount of a given pollutant that can be discharged to a water  
19 body and still meet standards (loading capacity) and allocates that load among the various  
20 sources (load allocation). *Ex. A-34* at 11, 73-81. During 2003-2004, Ecology conducted a  
21 TMDL assessment for PCBs in the Spokane River. *Id.* at 9. Ecology issued a draft PCB TMDL

1 for the Spokane River in June 2006. *Ex. A-34*. The TMDL was not finalized, in part, because  
2 the draft report had deficiencies in monitoring data, especially relating to stormwater discharges,  
3 and Ecology was unable to identify more than 43% of the sources of PCBs being discharged into  
4 the Spokane River. Bellatty Testimony. Ecology also concluded that it did not have sufficient  
5 information to impose the proposed load allocations in the TMDL on known dischargers. *Id.*

6 7.

7 In April 2011, Ecology issued the Spokane River PCB Source Assessment 2003-2007  
8 (Source Assessment). *Ex. A-12*. The Source Assessment included the PCB monitoring data  
9 collected by Ecology from September 2003 through May 2004. *Ex. A-12, Appendix B*. Ecology  
10 decided to prepare the Source Assessment in order to keep track of the data collected through the  
11 PCB TMDL analysis and to convert the TMDL data from draft to final form. Bellatty  
12 Testimony. The only updated data in the Source Assessment that was not included in the draft  
13 TMDL was for stormwater discharges. *Id.*; *Ex. A-12* at 68-76.

14 8.

15 The Source Assessment identified several sources of PCBs discharged to the Spokane  
16 River. *Ex. A-12* at 91. The sources include (a) effluent from industrial and municipal facilities  
17 (Inland Empire Paper, Kaiser Trentwood, Liberty Lake Wastewater Treatment Plant (WWTP),  
18 City of Spokane WWTP), (b) urban stormwater runoff, (c) the Spokane River at the state line  
19 with Idaho, and (d) the Little Spokane River. *Ex. A-12* at 92-98. PCB contribution from  
20 groundwater and atmospheric deposition were considered minimal and, as a result, not  
21 quantified. *Ex. A-12* at 91.

1 9.

2 Efforts to clean up and reduce sources of PCBs in the Spokane River have been pursued  
3 over the past several years. DeFur Testimony; Bellatty Testimony. In 2006, contaminated  
4 sediments were removed from behind the Upriver Dam and a three-layer cap was installed over  
5 the remaining sediments. *Id.* In 2007, PCB clean up occurred on Donkey Island and at the  
6 Kaiser facility, both of which are located upstream of the Upriver Dam. Bellatty Testimony. *Id.*  
7 A 2011 settlement between the City of Spokane and the Spokane Riverkeeper requires the City  
8 to conduct PCB source control reductions into its stormwater system. Bellatty Testimony.  
9 Ecology is monitoring the City of Spokane's work under the settlement, which has included the  
10 removal of PCB contaminated sediments. *Id.*

11 10.

12 Spokane County Public Utilities Division provides wastewater collection and treatment  
13 services to residential, commercial and industrial customers within Spokane County. Rawls  
14 Testimony; *Ex. R-9* at 1-1. Until recently, under the terms of an interlocal agreement with the  
15 City of Spokane, the County's wastewater was sent to the City of Spokane Riverside Park Water  
16 Reclamation Facility (City Plant) for treatment. *Id.* Under that agreement, the City Plant is to  
17 treat up to 10 MGD of County generated wastewater. *Id.* The NPDES permit for the City Plant  
18 includes a compliance schedule requiring the City to upgrade its treatment system in order to  
19 meet the requirements of the TMDL addressing dissolved oxygen. Koch Testimony; *Ex. R-43* at  
20 8, 51-53. It is expected that the treatment technology selected will result in higher PCB removal  
21 from the effluent discharged by the City Plant. Koch Testimony.

11.

Starting in 1980, Spokane County began expanding its sewer collection system to facilitate the conversion of septic tanks to sewer service as a means to protect the Spokane Aquifer. *Id.* The sewer system expansion is expected to continue through 2015 and result in approximately 9,000 additional septic tank customers connecting to the sewer system. *Id.* In order to address the additional customers converting from septic tanks as well as anticipate population growth in the region, in 2001 Spokane County prepared a Wastewater Facilities Plan (Facilities Plan). Rawls Testimony; *Ex. R-10*. The purpose of the Facilities Plan was to provide a long-term management strategy for Spokane County and to identify a phased implementation program designed to meet wastewater capacity and treatment requirements over the next 25 years. *Ex. R-10* at ES-1.

12.

One element of the Facilities Plan was the construction of a new wastewater treatment plant (Facility). *Ex. R-10* at ES-10-12. The Facility's construction is planned for three phases to allow for increases in wastewater collection. Under Phase I, which was completed in 2011, the Facility can accept and treat up to 8 MGD of wastewater. Rawls Testimony; *Ex. Ecy-2* at 4. Phase II provides for expansion of treatment capacity to 12 MGD in approximately 2030 and Phase III would increase treatment capacity to 24 MGD annual average flow. *Id.* Spokane County will continue to use its 10 MGD of capacity at the City Plant to address any influent received in excess of the existing facility capacity. Rawls Testimony.



1 13.

2 Segments of the Spokane River and Lake Spokane are included on the 303(d) list for  
3 pollutants other than PCBs. In 2010, Ecology finalized the Spokane River and Lake Spokane  
4 Dissolved Oxygen Total Maximum Daily Load (DO TMDL), Publication No. 07-10-073. *Ex. R-*  
5 *8* at ES-1. The DO TMDL assessed various pollutants being discharged into the Spokane River  
6 and Lake Spokane which affect DO: ammonia, total phosphorous, and carbonaceous biochemical  
7 oxygen demand. *Id.* at ES-2. The DO TMDL includes load allocations for the Spokane County  
8 Facility for those pollutants. *Id.* at ES-3 – ES-4.

9 14.

10 Construction of the Facility was completed in 2011, with start-up and testing occurring in  
11 August 2011 and treated effluent discharged to the Spokane River in December 2011. *Ex. Ecy-2*  
12 at 4. The Facility is located at 1004 North Freya Street and its outfall discharges to the Spokane  
13 River at River Mile 78.7. *Ex. Ecy-2* at 2, 13. At the present time, the Facility treats and  
14 discharges 7 MGD of wastewater. Rawls Testimony. When the Facility reaches its design  
15 capacity of 8 MGD, excess wastewater will be routed to the City Plant for treatment. Rawls  
16 Testimony. The Facility does not discharge to a segment of the Spokane River on the 303(d) list  
17 for PCBs. Braley Testimony.

18 15.

19 In June 2010, Spokane County prepared an amendment to its Facilities Plan. *Ex. R-8.*  
20 The purpose of the amendment was to update the Facilities Plan to address changes that had  
21 occurred, including the selection of the treatment technology and the publication of the DO

1 TMDL. *Ex. R-8* at ES-1. The treatment technology selected by Spokane County is a step-fed  
2 nitrification/denitrification treatment system with membrane filtration and chlorination, also  
3 referred to as advanced tertiary treatment. *Ex. R-8* at ES-1; Koch Testimony; Abusaba  
4 Testimony.

5 16.

6 The influent into and effluent discharged from the Facility will contain PCBs. Koch  
7 Testimony, DeFur Testimony, Abusaba Testimony. Due to their persistence and prevalence in  
8 the environment, reducing the discharge of PCBs into the Spokane River requires the  
9 implementation of source control activities and use of advanced treatment technology. Koch  
10 Testimony, Rawls Testimony. The advanced tertiary treatment technology employed at the  
11 Facility is AKART and will result in high quality removal of PCBs, as well as address the  
12 requirements of the DO TMDL and the 1998 Dissolved Metals TMDL. Abusaba Testimony,  
13 Koch Testimony; *Ex. Ecy-2* at 13-19. By providing tertiary treatment, the Facility offers the  
14 most advanced treatment of effluent available and deploys the best currently available treatment  
15 technology to reduce the discharge of PCBs to the Spokane River at potentially undetectable  
16 levels. Abusaba Testimony; Rawls Testimony; Koch Testimony. Limited sampling of effluent  
17 from the Facility shows a high removal of PCBs. Abusaba Testimony; Koch Testimony; *Ex. A-*  
18 *35*.

19 17.

20 The use of advanced tertiary treatment results in effluent that meets Class A standards  
21 and would be suitable for re-use. Rawls Testimony; *Ex. R-9* at 5-1. As part of the

1 implementation of the DO TMDL, Spokane County was required to develop a comprehensive  
2 plan for reclaimed water production, reuse, and aquifer recharge of effluent. *Ex. R-12* at 1. In  
3 2009, Spokane County issued its Reclaimed Water Study assessing the potential for reclaimed  
4 water use. *Ex. R-12*. The study concluded that “[w]hile the use of reclaimed water in Spokane  
5 County is feasible from a technical perspective, it could be infeasible from a financial  
6 perspective unless alternative funding sources become available . . . .” *Ex. R-12* at 72; Rawls  
7 Testimony. One reuse option investigated by Spokane County was the feasibility of restoring of  
8 wetlands at Saltese Flats. Rawls Testimony; *Ex. A-24*. Other reuse options are possible,  
9 including industrial reuse and aquifer recharge. Rawls Testimony.

10 18.

11 Spokane County applied to Ecology for a NPDES permit for the Facility on September  
12 30, 2010. *Ex. Ecy-2* at 10. Richard Koch, a water quality specialist with Ecology’s Eastern  
13 Regional Office, was assigned to review the application and prepare the NPDES permit. Koch  
14 Testimony. Mr. Koch was also the permit manager for the City Plant. *Id.*

15 19.

16 In preparing the NPDES Permit for the Facility, one issue of concern was the discharge  
17 of PCBs into the Spokane River and whether the Permit should contain an effluent limit for  
18 PCBs. *Ex. Ecy-2* at 31; Koch Testimony. Ecology’s Permit Writer’s Manual and EPA’s  
19 Technical Support Document (TSD) provide guidance for determining whether an effluent limit  
20 is necessary and, if so, how to calculate such a limit. *Exs. A-17* at VI-25-VI-41; *A-20* at 50-51.  
21 Regarding the first question, is an effluent limit required, the permit writer is to determine

1 whether the discharge has a reasonable potential to cause or contribute to a violation of water  
2 quality standards. *Id.* If the analysis shows that there is a reasonable potential, then the permit  
3 writer evaluates whether there is sufficient information to develop a numeric effluent limit for  
4 the pollutant(s) of concern. *Id.*

5 20.

6 With respect to PCBs, conflicting evidence was presented regarding whether Mr. Koch  
7 performed a reasonable potential analysis. The Permit Fact Sheet states in places that a  
8 reasonable potential analysis was performed. *Ex. Ecy-2* at 21, 30-31, 33-34. However,  
9 Appendix D of the Fact Sheet, which contains the spreadsheet for the reasonable potential  
10 analysis, does not include PCBs as one of the pollutants analyzed. *Ex. Ecy-2, App. D.* At the  
11 hearing, Mr. Koch testified that he did not conduct a reasonable potential analysis for PCBs  
12 because he did not have sufficient data to do so. Koch Testimony.

13 21.

14 EPA's TSD provides guidance on how to determine a permit limit when there is no  
15 effluent monitoring data for a specific facility and lists various information sources that can be  
16 used to perform a reasonable potential analysis. *Ex. A-20* at 50-51. Sources of information  
17 identified include fish advisories or bans and existing data on toxic pollutants. *Id.* Mr. Koch  
18 testified that he was aware of the DOH fish advisory but did not consider the information  
19 pertinent to the reasonable potential to pollute analysis because fish migrate. Koch Testimony.  
20 With respect to existing data on toxic pollutants, Mr. Koch testified that he considered the PCB  
21 load reductions contained in the Source Assessment for purposes of permit structure, not

1 reasonable potential. Koch Testimony. Mr. Koch testified that he did not consider using that  
2 information for a reasonable potential analysis because he did not have monitoring data on PCB  
3 removal from tertiary treatment and it would be too speculative to include the load reduction in  
4 the Fact Sheet. Koch Testimony. As for the PCB monitoring data collected for the Source  
5 Assessment, which is set out in Table 7 of the Fact Sheet, Mr. Koch testified that he did not use  
6 that data because it had been collected several years earlier and he would want more recent data  
7 to conduct a reasonable potential analysis. Koch Testimony; *Ex. Ecy-2* at 14-15.

8 22.

9 Because he determined that he had insufficient data to perform a reasonable potential  
10 analysis for PCBs, Mr. Koch did not calculate a numeric effluent for inclusion in the Permit.  
11 Koch Testimony. Instead, as permitted by EPA regulation, Mr. Koch crafted a narrative effluent  
12 limit comprised of best management practices (BMPs). Koch Testimony; 40 C.F.R.  
13 122.44(k)(3). The BMPs are contained in Condition S12 and Condition S13. Similar conditions  
14 are included in the NPDES permits of other point source dischargers to the Spokane River whose  
15 effluent contains PCBs. Koch Testimony; Bellatty Testimony; *Ex. Ecy-2* at 33. The other  
16 municipal dischargers on the Spokane River will soon be employing tertiary treatment for  
17 phosphorus reduction, which will likely reduce PCBs as well. *Ex. Ecy-2* at 33; Koch Testimony.

18 23.

19 Condition S12 requires Spokane County to prepare an Annual Toxics Management  
20  
21

1 Report (Report) for Ecology's review and approval.<sup>2</sup> *Ex. Ecy-1* at 46. The Report is to identify

2  
3 <sup>2</sup>Condition S12 provides in full:

4 **S12. Toxics Source Control Action Plan**

5 A. An Annual Toxics Management Report shall be prepared by the County and submitted to  
6 Ecology on an annual basis for review and evaluation on the toxics management effort. The Report  
7 shall be submitted by **April 15**. Activities planned for toxics reduction in the subsequent year of  
8 operation shall be jointly reviewed and agreed upon. The toxics of specific concern for this report are  
9 PCBs; 2,3,7,8 TCDDs and PBDE.

10 The Toxics Management Report shall include the toxics monitoring results with attached laboratory  
11 data sheets shall be submitted to Ecology (ERO Water Quality Program permit manager and the urban  
12 waters staff) annually. After each year of sampling for PCBs; 2,3,7,8 TCDDs and PBDE; the  
13 Permittee and Ecology (ERO Water Quality Program Permit Manager and the urban waters staff) will  
14 review the data, including pattern analysis of homologs, detection limits, QA/QC procedures and a  
15 draft action plan listing identified sources, potential sources suggested by data analysis and future  
16 source identification activities. Annually the Permittee and Ecology will confer and revise the  
17 locations and frequency of the raw sewage sampling in the collection system for these pollutants.

18 The Toxics Management Plan must address source control and elimination of PCBs from:

- 19 • Contaminated soils and sediments,
- 20 • Storm water entering the wastewater collection system,
- 21 • Industrial and commercial sources.

22 As an element of the pretreatment program the City and County will expand the scope of their  
23 inspections and monitoring to include PCBs and other toxics as appropriate. The PCB monitoring must  
24 follow an Ecology approved QAPP.

25 A model QAPP has been published by Ecology and is available at  
26 <http://www.ecy.wa.gov/biblio/eap.html>.

27 The action is to address of eliminating active sources such as,

- 28 • Older mechanical machinery
- 29 • Older electrical equipment and components,
- 30 • Construction material content such as paints and caulking
- 31 • Commercial materials such as ink and dyes.

32 The Permittee is to consider changes in procurement practices and ordinances control and minimize  
33 toxics, including preferential use of PCB free substitutes for those products containing PCBs below  
34 the regulated level of 5 ppm, in sources such as:

- 35 • Construction material content such as paints and caulking
- 36 • Commercial materials such as ink and dyes,
- 37 • Soaps and cleaners.

38 The Permittee (individually or in collaboration with other dischargers) must also prepare public  
39 media educating the public about the difference between products free of PCBs and those labeled  
40 non-PCB but which contain PCBs below the TOSCA regulatory threshold of 5 ppm.

1 toxic reduction efforts planned for the subsequent year of operation and those actions are  
2 required to be jointly reviewed and agreed upon by Ecology and Spokane County. *Id.* The goals  
3 of the resulting Toxics Management Plan are to reduce toxicant loadings, including PCBs, to the  
4 Spokane River by reducing concentrations in the Facility's influent as well as reducing PCBs in  
5 the effluent discharged. *Id.* at 47. Through a Toxics Management Plan, Spokane County is  
6 required to address source control and elimination of PCBs in (a) contaminated soils and  
7 sediments, (b) stormwater entering the wastewater collection system and (c) industrial and  
8 commercial sources. *Id.* Condition S12 also requires Spokane County, through its pretreatment  
9 program, to expand inspections and monitoring of PCBs received from its customers and to  
10 consider changing its procurement practices to prefer the use of materials with no or very low  
11 PCBs. *Id.* at 46-47.

12 24.

13 Condition S13 requires Spokane County to participate in the creation of a Regional  
14 Toxics Task Force (Task Force) and to participate in its functions thereafter. *Ex. Ecy-1* at 47.  
15 The goal of the Task Force is to "develop a comprehensive plan to bring the Spokane River into  
16 compliance with applicable water quality standards for PCBs." *Id.* Condition S13 identifies

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The effluent monitoring results shall be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle.

The goals of the Toxics Management Plan are:

- To reduce toxicant loadings, including PCBs, to the Spokane River to the maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants to the SCRWRF over the next 10 years.
- Reduce PCBs in the effluent to the maximum extent practicable so that in time the effluent does not contribute to PCBs in the Spokane River exceeding applicable water quality standards.

1 activities that Ecology “anticipates” the Task Force will undertake, including collecting  
2 additional data on PCBs, analyzing the existing PCB data, preparing recommendations for  
3 controlling and reducing sources of PCBs to the Spokane River, and monitoring and assessing  
4 the effectiveness of toxic reduction measures. *Id.* at 48. Condition S13 does not include any  
5 specific deadlines or criteria that the Task Force is required to meet, providing instead that if  
6 Ecology determines that “measureable progress” toward meeting applicable water quality criteria  
7 for PCBs is not being made, “Ecology would be obligated to proceed with development of a  
8 TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality  
9 standards are met.” *Id.* Bruce Rawls, Utilities Director for the Spokane County Division of  
10 Utilities, testified that the Task Force has been formed, the members agreed to a Memorandum  
11 of Agreement governing its operation, and work is proceeding on developing a cleanup plan in  
12 2013. Rawls Testimony; *Ex. R-21*.

13 25.

14 EPA’s TSD provides that if, after evaluation of available data on the effluent and in the  
15 absence of effluent monitoring data, the permit writer determines that a reasonable potential  
16 analysis cannot be performed, the permittee can be required to monitor and test its effluent.  
17 Koch Testimony; *Ex. A-20* at 51. Pursuant to that guidance, the Permit requires Spokane County  
18 to prepare a Quality Assurance Project Plan (QAPP) detailing its water quality sampling and  
19 analysis protocols for, among other parameters, PCBs. Koch Testimony; *Ex. Ecy-1* at 36-37.  
20 The QAPP is to be submitted to Ecology for its review and approval. *Id.* Spokane County  
21 submitted its QAPP to Ecology and received agency approval. Rawls Testimony; *Exs. R-5, R-6*.



1 Under the QAPP, samples will be analyzed for PCBs using EPA Method 1668. Koch  
2 Testimony, *Ex. R-6* at 11. EPA has not approved Method 1668 for compliance purposes but it  
3 can be used for monitoring. Koch Testimony. EPA Method 1668 is more refined than the  
4 compliance protocol, Method 608, with a reporting limit of 10 pg/L per congener. Abusaba  
5 Testimony; *Ex. R-6* at 11. The effluent monitoring results for PCBs will allow Ecology to  
6 perform a reasonable potential analysis and develop a numeric effluent limit for the following  
7 permit cycle. Koch Testimony, Bellatty Testimony; *Ex. R-1* at 9-10 (n. h).

8 26.

9 Any Conclusion of Law deemed to be properly considered a Finding of Fact is hereby  
10 adopted as such.

11 Based upon the foregoing Findings of Fact, the Board enters the following:

12 **CONCLUSIONS OF LAW**

13 1.

14 The Board has jurisdiction over the subject matter and the parties pursuant to RCW  
15 43.21B.110(1)(d). The burden of proof is on the appealing party as to the legal issue in the case.  
16 WAC 371-08-485(3). The Board considers the matter *de novo*, giving deference to Ecology's  
17 expertise in administering water quality laws and on technical judgments, especially where they  
18 involve complex scientific issues. *Port of Seattle v. Pollution Control Hearings Board*, 151  
19 Wn.2d 568, 593-94, 90 P.3d 659 (2004). Pursuant to WAC 371-08-540(2), "In those cases  
20 where the board determines that the department issued a permit that is invalid in any respect, the  
21

1 board shall order the department to reissue the permit as directed by the board and consistent  
2 with all applicable statutes and guidelines of the state and federal governments.”

3 2.

4 The CWA was enacted with the broad policy objective of restoring and maintaining the  
5 chemical, physical, and biological diversity of the nation’s waters. 33 U.S.C. §1251(a).  
6 Congress created the NPDES permit program to further this goal. *Puget Soundkeeper Alliance v.*  
7 *Ecology*, 102 Wn. App. 783, 788, 9 P.3d 892 (2000). In Washington State, EPA delegated  
8 authority to Ecology to administer the NPDES permit program.

9 3.

10 As required by state and federal law, Spokane County sought and obtained from Ecology  
11 an NPDES Permit authorizing the discharge of treated effluent from the Facility to the Spokane  
12 River. Sierra Club challenged the Permit alleging, in part, that an EPA regulation prohibited the  
13 issuance of an NPDES Permit to Spokane County for an effluent discharge to the Spokane River  
14 that includes PCBs. The legal issue in this case, as identified in the February 17, 2012, Pre-  
15 Hearing Order is: Does the NPDES Permit No. WA-0093317 unlawfully authorize PCB  
16 discharges that will cause or contribute to a violation of water quality standards, including 40  
17 C.F.R. section 122.4 and WAC 173-201A Part III?

18 4.

19 According to Sierra Club, because the Spokane River is included on the 303(d) list for  
20 PCBs and Ecology has not prepared a TMDL, pursuant to 40 CFR §122.4(i) Ecology is barred  
21 from issuing a permit to a new discharger that will cause or contribute to a violation of water

1 quality standards. In support of its interpretation of 40 CFR §122.4(i), Sierra Club relies on  
2 *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9<sup>th</sup> Cir. 2007), *cert. denied*, 129 S.Ct. 896  
3 (2009), where the court overturned EPA’s issuance of an NPDES permit to a new discharger. In  
4 response, Spokane County and Ecology claim that Sierra Club misreads 40 CFR §122.4(i),  
5 arguing that the regulation is inapplicable because the Facility is not discharging to a segment of  
6 the Spokane River included on the 303(d) list for PCBs. They further assert that the court’s  
7 analysis in *Pinto Creek* does not apply as the new discharger in that case was discharging to a  
8 segment that was included on Arizona’s 303(d) list.

9 5.

10 EPA promulgated regulations implementing the NPDES permitting program. 40 CFR  
11 Part 122. Pertinent to this case is 40 CFR §122.4(i), which governs the instance where a new  
12 discharger seeks to discharge a pollutant into a water body that exceeds water quality standards  
13 for that pollutant. Section 122.4 provides in relevant part:

14 No permit may be issued:

15 . . .

16 (i) To a new source or a new discharger if the discharge from its  
17 construction or operation will cause or contribute to the violation of  
18 water quality standards. The owner or operator of a new source or  
19 new discharger proposing to discharge into a water segment which  
20 does not meet applicable water quality standards or is not expected to  
21 meet those standards . . . and for which the State or interstate agency  
has performed a pollutants load allocation for the pollutant to be  
discharged, must demonstrate, before the close of the public comment  
period, that:

(1) There are sufficient remaining pollutant load allocations to allow  
for the discharge; and

1 (2) The existing dischargers into that segment are subject to  
2 compliance schedules designed to bring the segment into compliance  
3 with applicable water quality standards.

4 40 CFR §122.4. As the Board previously held, the Facility is a new discharger. *Sierra Club v.*  
5 *Dep't of Ecology*, PCHB No. 11-184 (Order Granting Partial Summary Judgment, Jan. 8, 2013).

6 6.

7 The Board concludes that the court's holding in *Pinto Creek* is not applicable in this  
8 instance. In *Pinto Creek*, EPA issued an NPDES permit for a mine that proposed a new  
9 discharge to Pinto Creek, a river included on Arizona's 303(d) list as not meeting water quality  
10 standards for dissolved copper. *Pinto Creek*, 504 F.3d at 1009. The construction and operation  
11 of the mine would result in the discharge of dissolved copper into an impaired segment of Pinto  
12 Creek. *Id.* In response to an appeal of the initial NPDES permit issued to the mine, EPA  
13 withdrew portions of the permit and prepared a dissolved copper TMDL for Pinto Creek. *Id.* at  
14 1010. Environmental groups appealed the second NPDES permit alleging, in part, that 40 CFR  
15 §122.4(i) prohibited EPA from issuing a permit to discharge dissolved copper into a segment of  
16 the river listed as impaired under CWA Section 303(d). *Id.* As the court in *Pinto Creek*  
17 recognized, that section in its entirety "addresses the situation where a new source seeks to  
18 permit a discharge of pollutants into a stream already exceeding its water quality standards for  
19 that pollutant."<sup>3</sup> *Id.* at 1011. The court then went on to analyze the exceptions to the prohibition  
20 on permit issuance contained in the first sentence of 40 CFR §122.4(i). *Id.* at 1012-15.

21 <sup>3</sup> As one commentator noted, the court's decision in *Pinto Creek* "was the first federal court decision that squarely  
addressed the interconnection between CWA Section 303(d), TMDLs, the NPDES permitting program, and EPA's

1 7.

2 In this case, unlike the mine in *Pinto Creek*, the Facility discharges into a segment of the  
3 Spokane River that is not on Washington's 303(d) list for PCBs nor is there an applicable TMDL  
4 establishing load allocations for dischargers. With the exception of the court's recognition of  
5 the prohibitory language in the first sentence of 40 CFR §122.4(i), the court's analysis of the  
6 remainder of that regulation is not germane to this case. The test applied to the NPDES Permit  
7 issued to Spokane County is whether, under its terms and conditions, it authorizes a discharge  
8 that causes or contributes to a violation of PCB water quality standards in the Spokane River.  
9 See 40 CFR §122.4(i) (permit may not issue to new discharger if discharge will "cause or  
10 contribute to the violation of water quality standards"); 40 CFR §122.44(d)(1)(i) (all NPDES  
11 permits shall include conditions necessary to achieve water quality standards and must control all  
12 pollutants that "are or may be discharged at a level which will cause, have the reasonable  
13 potential to cause, or contribute to an excursion above any State water quality standard . . .")

14 8.

15 As described above, when preparing an NPDES permit the permit writer is to determine  
16 if the discharge has a reasonable potential to cause or contribute to a violation of water quality  
17 standards. 40 CFR §122.44(d)(1)(i); *Exs. A-17* at VI-25-VI-30, *A-20* at 50-51. If it is  
18 determined that the discharge contains a pollutant that has the reasonable potential to cause or  
19 contribute to a violation, then the permit must include an effluent limit for that pollutant. 40  
20

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21 40 C.F.R. §122.4(i) impaired waters regulation." See, R. Flynn, *New Life for Impaired Waters: Realizing the Goal to 'Restore' the Nation's Waters Under the Clean Water Act*, 10 Wyoming L.R. 35, 51 (2010).

1 CFR §122.44(d)(1)(iii). Where development of a numeric effluent limit is infeasible, the permit  
2 shall contain BMPs to control or abate the discharge of the pollutant. 40 CFR §122.44(k).

3 9.

4 The Board received conflicting evidence regarding whether Ecology performed a  
5 reasonable potential analysis for PCBs. The Permit Fact Sheet states that a reasonable potential  
6 analysis was performed. *Ex. Ecy-2* at 21, 30-31, 33-34. Ecology's permit writer, Mr. Koch,  
7 testified that he did not perform a reasonable potential analysis for PCBs because there was  
8 insufficient data to perform the analysis. Koch Testimony. EPA's TSD lists factors that a  
9 regulatory authority can consider when performing a reasonable potential analysis. *Ex. A-20* at  
10 50-51. Information regarding several of those factors was available to Ecology including: (a)  
11 the type of publicly owned treatment plant seeking a permit (background information on the  
12 Facility supplied by Spokane County); (b) available dilution for the effluent (Fact Sheet  
13 discusses dilution provided by Spokane River); (c) existing data on toxic pollutants (PCB  
14 monitoring data in Source Assessment, effluent will include some quantity of PCBs); (d) the  
15 state's list of waters not meeting water quality standards; and (e) fish advisories or bans (DOH's  
16 fish advisories for the Spokane River). See *Exs. A-12, A-26, A-31, A-32, Ecy-2*; Testimony of  
17 Koch, Rawls, DeFur, Abusaba.

18 10.

19 The Board concludes that Ecology should have used this data to conduct a reasonable  
20 potential analysis for PCBs. The Board also concludes that the evidence presented supports the  
21 conclusion that there is a reasonable potential for the discharge from the Facility to cause or

1 contribute to a violation of water quality standards. Under applicable regulations, once it is  
2 determined that a reasonable potential exists, the next step is the determination of an effluent  
3 limit for PCBs. 40 CFR §122.44(d)(1)(iii).

4 11.

5 Mr. Koch testified that calculation of a numeric effluent limit for PCBs was infeasible  
6 due to the limitations of the available data. Koch Testimony. Sierra Club did not present  
7 evidence to the contrary. The Board recognizes that the PCB monitoring data included in the  
8 Source Assessment was collected a number of years ago and that several PCB clean up actions  
9 have occurred in the Spokane River in the interim. Testimony of DeFur, Bellatty; *Ex. A-12*. As  
10 Mr. Koch testified, those factors limited the usefulness of that data in developing a numeric limit.  
11 While the Board finds that there was sufficient data available for Ecology to conduct a  
12 reasonable potential analysis, we concur with Mr. Koch's determination that the data was not  
13 adequate for preparation of a numeric effluent limit for PCBs. The Board defers to the technical  
14 expertise of Ecology on this matter and accepts his conclusion that calculation of a numeric  
15 effluent limit for PCBs was not feasible.

16 12.

17 Because calculation of a numeric effluent was not feasible, Ecology was required to  
18 include BMPs, or narrative effluent limits, in the permit to control the discharge of PCBs from  
19 the Facility. 40 CFR §122.44(k). The CWA defines "effluent limit" to include "any restriction  
20 established by a State or the Administrator on quantities, rates, and concentrations of chemical,  
21 physical, biological, and other constituents which are discharged from point sources into

1 navigable waters . . . .” 33 U.S.C. § 1362(11). Accordingly, Ecology sought to include  
2 narrative effluent limits in the Permit, Conditions S12 and S13, designed to address PCB  
3 loadings to both the Facility and the Spokane River. Koch Testimony; *Ex. Ecy-1* at 46-48. The  
4 Board concludes that, as written, Conditions S12 does not provide sufficient assurance that the  
5 contemplated PCB control and reduction activities will occur. The Board further concludes that  
6 Condition S13 does not constitute a narrative effluent limit.

7 13.

8 Condition S12, while it has elements of an effective program for control and reduction of  
9 PCBs, fails as a narrative effluent limitation in several respects. In its current form, Condition  
10 S12 is confusing, vague, and lacks definition of key terms. More importantly, it lacks deadlines  
11 by which Spokane County is to undertake and/or complete actions to reduce PCBs in influent to  
12 the facility (e.g. the Plan "must address source control and elimination. . ."). It lacks mandatory  
13 language requiring Spokane County to actually undertake necessary actions to achieve  
14 reductions in PCBs in both influent and effluent (e.g. Spokane County "is to consider changes in  
15 procurement practices. . ."). While Condition S12 sets goals, the standards against which  
16 Spokane County will be measured for accomplishment of those goal are long term and vague in  
17 nature. Finally, rather than requiring Spokane County to meet water quality standards, Condition  
18 S12 only asks that the County take steps so that "in time the effluent does not contribute to PCBs  
19 in the Spokane River exceeding applicable water quality standards." While the Board has said a  
20 narrative effluent limitation may be utilized in circumstances such as are present in this case, the  
21 language of Condition S12 falls far short of such a limitation. The Permit must require Spokane



1 County to comply with water quality standards, and, if a narrative effluent limitation is used due  
2 to the infeasibility of a numeric limit, that narrative limit must require defined steps toward  
3 compliance with standards.

4 14.

5 Condition S12 requires Spokane County to prepare and submit to Ecology an Annual  
6 Toxics Management Report (Report). Condition S12 identifies several measures that must be  
7 included in the Report that are aimed at reducing the PCB content in the influent to the Facility,  
8 including, (1) source control and elimination in certain areas (contaminated soils, storm water,  
9 industrial/commercial sources); (2) expanded inspections and monitoring as part of the  
10 pretreatment program; (3) elimination of active sources; (4) changes in procurement practices  
11 and ordinances; and (5) preparation of a public media campaign. Other than requiring their  
12 inclusion in the Report, Condition S12 does not require Spokane County to take affirmative steps  
13 to implement these measures. The Permit is remanded to Ecology to reissue the Permit with  
14 deadlines and mandatory requirements for identification and implementation of these measures  
15 to reduce PCBs in the Facility's influent.

16 15.

17 The Permit sets forth a long term and undefined goal for the ultimate reduction of  
18 toxicant loadings, including PCBs, to the River, both with respect to influent concentration and  
19 ultimate compliance with water quality standards. Condition S12 requires a reduction of toxicant  
20 loading to the "maximum extent practicable realizing statistically significant reductions in the  
21 influent concentration of toxicants" to the wastewater treatment facility over a ten year period.

1 These terms are undefined and fail to inform Spokane County and others as to what will suffice  
2 to meet this standard. On remand, Ecology shall modify the provisions of Condition S12 to  
3 identify the expected reductions in toxicant loadings, the schedule for initiating such reductions,  
4 and at a minimum, offer greater definition and timelines for/of this expected outcome.

5 16.

6 Condition S12's second goal, to "[r]educe PCBs in the effluent to the maximum extent  
7 practicable so that in time the effluent does not contribute to PCBs in the Spokane River  
8 exceeding applicable water quality standards" is equally frail. As stated previously, the Permit  
9 must require compliance with water quality standards, not set an amorphous goal of some future  
10 date of compliance. The Permit requires Spokane County to monitor its discharge to the  
11 Spokane River. *Ex. Ecy-1* at 36-38. With regard to toxic pollutants, including PCBs, Spokane  
12 County was required to prepare a QAPP and submit it to Ecology for review and approval. *Id.* at  
13 38. Under the QAPP, approved by Ecology November 1, 2012, effluent from the Facility will be  
14 analyzed for PCBs using EPA's Method 1668, which has a lower detection limit than the  
15 analytical methods approved by EPA for use in NPDES permits. Abusaba Testimony. Data  
16 obtained from the effluent monitoring will be used to develop a numeric effluent limit for  
17 inclusion in the next permit. Koch Testimony; Bellatty Testimony; *Ex. Ecy-1* at 9-10 (n. h).  
18 Preliminary monitoring data collected from the Facility's state of the art tertiary treatment works,  
19 which constitutes AKART, shows high quality removal of PCBs. Abusaba Testimony.  
20 Additional sampling rounds need to occur to validate those results and to develop a numeric  
21 effluent limit. Abusaba Testimony, Koch Testimony. Pursuant to Permit Condition G3 and 40

1 CFR § 122.62, Ecology has the authority to modify the Permit before its expiration in November  
2 2016 to include a numeric effluent for PCBs. On remand, Ecology shall modify this provision of  
3 Condition S12 to require the use of ongoing monitoring data to set a numeric effluent limitation  
4 at the earliest possible time, including during the term of the current permit, in order to be in  
5 compliance with water quality standards.

6 17.

7 Condition S13 requires Spokane County to participate in the creation of a Regional  
8 Toxics Task Force and in the functions of the Task Force. *Ex. Ecy-1* at 47. The stated goal of  
9 the Task Force is to develop a plan to bring the Spokane River into compliance with applicable  
10 PCB water quality standards. *Id.* Similar to Condition S12, Condition S13 does not require that  
11 those goals be achieved by a specified date. Nor does Condition S13 establish an objective  
12 standard against which its accomplishments can be measured, providing instead that if Ecology  
13 concludes that the Task Force is “failing to make measurable progress” then the agency would be  
14 obligated to prepare a TMDL for PCBs or an alternative to ensure compliance with water quality  
15 standards. *Id.* at 48. Condition S13 is not a narrative effluent limit as it does not impose any  
16 restrictions on quantities, rates, and concentrations of PCBs being discharged from point sources  
17 into the Spokane River. While the Board finds that the creation of the Task Force is a positive  
18 step toward bringing the Spokane River into compliance with water quality standards for PCBs,  
19 it is uncertain that the Task Force will achieve any of its stated goals or achieve a measurable  
20 reduction in the discharge of PCBs. Although the actions undertaken by the Task Force are  
21 necessary to address the water quality problems in the Spokane River, the work of the Task

1 Force cannot be used as a defense if Spokane County is not meeting the terms of the Permit.  
2 Ecology is directed on remand to modify Condition S13 to make clear that compliance with the  
3 Permit's requirements takes precedence over the work of the Task Force.

4 18.

5 When preparing the Permit, Ecology conducted Tier I and Tier II antidegradation  
6 analyses under WAC 173-201A-310. *Ex. Ecy-2* at 16-22. Based on those analyses, Ecology  
7 concluded that the discharge from the Facility would not cause a measurable increase in the  
8 concentrations of PCBs in the Spokane River. *Id.* Sierra Club failed to offer evidence rebutting  
9 Ecology's antidegradation analyses. The Board concludes that the Permit does not authorize a  
10 discharge that violates the antidegradation policy of the state's water quality standards, WAC  
11 173-201A Part III.

12 19.

13 Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such.

14 Having so found and concluded, the Board enters the following

15 **ORDER**

16 Having concluded that portions of NPDES Permit No. WA-0093317 are invalid, the  
17 Board REMANDS the Permit to Ecology pursuant to WAC 371-08-540, for reissuance  
18 consistent with this opinion:

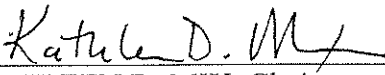
- 19 1. Ecology shall modify Condition S12, the "Toxics Source Control Action Plan"  
20 provision consistent with this opinion by  
21

- 1 (a) including deadlines and mandatory requirements for identification and  
2 implementation of measures to reduce PCBs in the Facility's influent;  
3 (b) identifying the expected reductions in toxicant loadings and the schedule  
4 for initiating such reductions;  
5 (c) requiring the use of ongoing monitoring data to set a numeric effluent  
6 limitation at the earliest possible time.

7 2. Ecology shall modify Condition S13, the "Regional Toxics Task Force" provision  
8 consistent with this opinion by clearly stating that compliance with the Permit's  
9 requirements takes precedence over the work of the Task Force.

10 SO ORDERED this 19<sup>th</sup> day of July, 2013.

11 POLLUTION CONTROL HEARINGS BOARD

12  
13   
14 KATHLEEN D. MIX, Chair

15   
16 TOM MCDONALD, Member

17  
18   
19 JOAN M. MARCHIORO, Presiding  
20 Administrative Appeals Judge  
21