**APPENDIX D2 - RESPONSE TO COMMENTS FOR AMENDMENT TO PROPOSED NPDES PERMIT WA-0000825**

**INLAND EMPIRE PAPER COMPANY**

The Department received written comments and public hearing testimony on the amendment to the proposed permit (comment period end date of June 30, 2011) from the Permittee and the following Indian Tribes, Agencies and Individuals:

| List of Tribal Respondents |
|---|
| Spokane Tribe of Indians (ST) |
| List of Organizational Respondents |
| Sierra Club (SC)<br>Spokane Riverkeeper (SR)<br>Lands Council (SR)<br>Gonzaga University, Legal Assistance Environmental Law Clinic (SR) |
| One Individual Respondent (C) |

The following pages contain the written comments along with Ecology's response to each comment. Ecology considered these comments and made changes in the final permit as determined appropriate.

| COMMENTS TO NPDES WA-0000825, INLAND EMPIRE PAPER | RESPONSES |
|---|---|

**Hallinan, Patrick J. (ECY)**

**From:** Faye Krenkel (Rich) [rfkrenkel@ptera.net]
**Sent:** Friday, June 24, 2011 7:37 AM
**To:** Hallinan, Patrick J. (ECY)
**Subject:** discharge of Inland Empire Paper waste water permit

**C-1** I'm not thrilled with the relaxed standards during the low water volume months in the summer. This is when the real problem happens and IEP will be causing a major problem in the river. I understand the problem of not having the technology to reduce the phosphorus to an acceptable safe level by the company. I thought your solution did not fully address the problem by extending the lower river level of phosphorus by one month (to start in February) . You should have extended the time line by 2 months to more than make up for the excess river discharge during the critical months of the summer when the river volume is extremely low. You are letting the company get around meeting the meeting the requirement needed for a clean river just because of the bottom financial line of the company. Extending it 2 months would result in a cleaner river. Please extend the required time by 2 months instead of one.

**C-2**

**C-3**

Rich Krenkel
16115 E. Temple Rd.
Spokane WA. 99217

1

C-1. Results from modeling indicate the alternate loading scenario between multiple dischargers will result in substantially equal, or improved, dissolved oxygen levels in Lake Spokane during the summer low flow period. With an extended the critical season from February to October, the group of dischargers will remove an additional 2,703 pounds of phosphorus from the system (compared to the previous critical season running from March to October; see Table below).

C-2. Modeling also indicates that extending the critical season into January results in little, if any, differences in dissolved oxygen for Lake Spokane in the summer low flow period.

C-3. The company, and other dischargers with an extended season, are not avoiding their requirements for meeting receiving water quality criteria. See response to C-1 and C-2.

| Month | TP Load (kg) | | Net Difference kg (lbs) |
|---|---|---|---|
| | TMDL | Ext Season | |
| January | 23,585 | 23,585 | 0 (0) |
| February | 21,847 | 20,598 | -1,249 (-2,754) |
| March | 6,533 | 6,334 | -199 (-439) |
| April | 5,016 | 5,079 | 63 (139) |
| May | 8,430 | 8,466 | 36 (79) |
| June | 2,886 | 2,892 | 6 (13) |
| July | 1,289 | 1,313 | 24 (53) |
| August | 789 | 804 | 15 (33) |
| September | 1,021 | 1,050 | 29 (64) |
| October | 2,053 | 2,102 | 49 (108) |
| November | 20,503 | 20,533 | 30 (66)* |
| December | 22,830 | 22,830 | 0 |
| Total | 116,782 | 115,586 | -1,226 (-2,703) |

* - not counted in total net difference (outside of critical season)

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**SENT VIA ELECTRONIC MAIL**

**RE: Amending the NPDES Permit for Inland Empire Paper**

The following comments on the Department of Ecology's amendment of the draft National Pollutant Discharge Elimination System ("NPDES") Permit No. WA-000082-5 for Inland Empire Paper Company ("IEP") are submitted on behalf of the Environmental Law Clinic at Gonzaga University School of Law ("ELC"), the Spokane Riverkeeper ("Riverkeeper"), and the Lands Council.

ELC provides legal representation to not-for-profit environmental programs in the Inland Northwest, and strives to protect and restore the quality and integrity of the region's natural resources through advocacy and public interest litigation. ELC provides real world experience for second and third year law students under the oversight of a supervising attorney, including this opportunity to participate in the public comment process of a Clean Water Act permit adoption.

The Riverkeeper is a program of the Center for Justice ("CFJ"). CFJ is a not-for-profit legal organization, which provides legal services to individuals and public interest organizations in the Inland Northwest. CFJ works to ensure that all individuals and public interest organizations of limited means have access to justice, including a clean and healthy environment. Riverkeeper conducts surveillance of the Spokane River and its tributaries and reaches out to river users who share its commitment to a river that is swimmable, fishable, and properly regulated. To further these goals, Riverkeeper actively seeks Federal and State agency implementation of the Clean Water Act and, when necessary, directly initiates enforcement actions on behalf of itself and the public.

The Lands Council is a not-for-profit conservation group dedicated to protecting the quality of life and the environment in the Inland Northwest. The Lands Council is concerned about the environment' s effect on people' s health and works to protect thousands of acres of public land in order to maintain a clean and healthy environment. These lands include forests, water, and wildlife, including but not limited to the Spokane River Watershed. The Lands Council collaborates with a broad range of interested parties including communities, businesses, recreational groups, government agencies, and elected officials to seek smart and mutually respectful solutions to environmental issues. When necessary, The Lands Council uses litigation to protect forests and waters on behalf of its members and the public. The Lands Council seeks to enforce environmental rules necessary to ensure a clean and

| COMMENTS TO NPDES WA-0000825, INLAND EMPIRE PAPER | RESPONSES |
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| <br><br>healthy environment.<br><br>**GENERAL COMMENTS**<br><br>Thank you for the opportunity to provide comments on the amendment of IEP's NPDES Permit. We believe that IEP should have a permit that is similar to the other Spokane area permittees with regards to PCBs.<br><br>**RK-1** The current proposal of Best Management Practices ("BMPs") and a source identification plan in Section S6. of the draft NPDES Permit are acceptable, but the permit must also contain requirements that IEP actually reduce PCBs in their effluent in the next permit cycle. The parties all know the main source of the PCBs in IEP's effluent – recycled paper – and the environmental community is willing to work with Ecology and IEP to find solutions to this problem. What we are not willing to do is allow the status quo to continue ad infinitum.<br><br>Therefore, IEP's draft NPDES Permit must contain a mechanism similar to the other permittees to reduce PCBs from their effluent. The proposal for City of Spokane, Spokane County, and Liberty Lake, is BMPs, source identification, stringent sampling requirements, enabling language assuring the public that subsequent permits will contain performance-based effluent limitations, and participation in a regional PCB task force. IEP's NPDES Permit must contain similar language.<br><br>**SPECIFIC COMMENTS**<br><br>**A. The amended NPDES Permit must require significant effluent sampling with the goal of adopting a performance-based effluent limit in the next permit cycle**<br><br>**RK-2** IEP's NPDES Permit must contain similar language as the other individual wastewater dischargers in the Spokane region. Specifically, IEP must be required to conduct sampling in accordance with EPA method 1668 with a reporting limit of 10 pg/L per congener. Further, IEP's permit should mirror the other dischargers and state the purpose of the sampling as:<br><br>**RK-3** "The effluent monitoring results for PCBs will be compiled and analyzed by Ecology for the purpose of establishing a performance based PCB effluent limitation for the following permit cycle."<br><br>The environmental groups will not support a permit that does not demonstrate a commitment to reduce PCBs in subsequent permits. Absent these requirements, the environmental groups will require strict adherence to water quality standards and a water quality based effluent limitation in this and subsequent permits.<br><br>**B. IEP should be required to participate in the PCB Regional Task Force**<br><br>**RK-4** The environmental groups understand that IEP has unique issues that other Spokane area permittees may not have regarding the source of PCBs. Therefore, IEP should either be required to participate in the Regional Task Force set up by Ecology or it should convene a smaller task force focused solely on the recycled paper/import of ink issue facing IEP. While the preference from the environmental groups perspective would be that the permit contain the task force language below, it is willing to discuss alternatives with Ecology and IEP as long as the environmental groups have representation in any proposed alternatives. | RK-1. Comment noted. The final permit requires a goal of the PCB BMP Plan to 'lower' effluent concentrations of PCBs in the final effluent. The final permit also contains the requirement that the Permittee participate in the Regional Toxics Task Force.<br><br>RK-2. The final permit does include language regarding PCBs similar to the other Spokane River dischargers. The permit language regarding PCB testing is identical to the Kaiser permit, "Total PCBs…shall be tested using a method that achieves a 50 pg/L target method detection limit, or lower, for all PCB congeners".<br><br>RK-3. Ecology has included this language in the final permit, based on comment received during the initial public comment period (Appendix D-1).<br><br>RK-4. As noted response to comment RK-1, Ecology has included the requirement that the Permittee participate in the Regional Toxics Task Force. The final permit language includes a contingency if the Permittees cannot reach an agreement on the organizational structure of the Task Force. |

**RK-4 con'd**

If IEP is going to participate in the Regional Task Force, the NPDES Permit language should mirror the other permittees language as follows:

**"Regional Toxics Task Force**

The permittee shall participate in a cooperative effort to create a Regional Toxics Task Force and participate in the functions of the Task Force. The Task Force membership should include the NPDES permittees in the Spokane River basin, conservation and environmental interests, the Spokane Tribe, Spokane Regional Health District, Ecology, and other appropriate interests. The goal of the Task Force will be to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal it is anticipated that the Task Force functions will include:

(1) Identify data gaps and collect necessary data on PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
(2) Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCBs and other toxics on the 2008 year 303(d) list for the Spokane River;
(3) Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River;
(4) Review proposed Toxic Management Plans, Source Management Plans, and BMPs;
(5) Monitor and assess the effectiveness of toxic reduction measures;
(6) Identify a mutually agreeable entity to serve as the clearinghouse for data, reports, minutes, and other information gathered or developed by the Task Force and its members. This information shall be made publicly available by means of a website and other appropriate means;

To discharge these functions the Task Force may:
Provide for an independent community technical advisor(s) funded by the permittees, who shall assist in review of data, studies, and control measures, as well as assist in providing technical education information to the public;

By **November 30, 2011**, the Task Force shall provide Ecology with the details of the organizational structure, specific goals, funding and the governing documents of the Regional Toxics Task Force."

If Ecology determines the Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

Once again, we appreciate Ecology's efforts on the development of this permit and urge that the final permit incorporates the comments presented above.

Sincerely,

/s/ Michael J. Chappell

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Michael J. Chappell
Director of the Gonzaga Environmental Law Clinic
On behalf of Spokane Riverkeeper and
The Lands Council

| COMMENTS TO NPDES WA-0000825, INLAND EMPIRE PAPER | RESPONSES |
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June 30, 2011

*Via E-mail(*stra461@ecy.wa.gov)

Permit Coordinator
Water Quality Program
Department of Ecology
4601 N. Monroe Street
Spokane, WA 99205



Re: **INLAND EMPIRE PAPER COMPANY**
NPDES Permit No. WA-000082-5 – Amended Draft Permit

Dear Permit Coordinator:

Please accept this comment letter on behalf of Inland Empire Paper Company (IEP) regarding the amended draft permit referenced above.

**TM-1** IEP requests clarification that compliance with the final effluent limitations in Special Condition S5 will be determined by the mass of total phosphorus, ammonia and CBOD in the effluent from IEP's wastewater treatment system exclusive of non-contact cooling water. IEP has only learned recently that Ecology deems compliance with the final limits to include non-contact cooling water. This interpretation of the permit will impose a substantial hardship on IEP that is inconsistent with the basis for the wasteload allocation (WLA) assigned to IEP under the Spokane River Dissolved Oxygen Total Maximum Daily Load for Dissolved Oxygen (TMDL) and is otherwise fundamentally unreasonable and unlawful.

As set forth in a May 27, 2011 letter from IEP to Mr. Pat Hallinan (Attachment A) IEP recently installed a new Thermo-Mechanical Pulping system that provides significant environmental benefits in reduced air emissions and energy consumption. The system does, however, require a substantial increase in the volume of non-contact cooling water. The increased flow of groundwater combined with background concentrations of phosphorus and other nutrients in the groundwater will consume most of IEP's final effluent limitations in the amended draft permit without considering the effluent from IEP's waste water treatment system.

**TM-2** Application of the final effluent limitations to non-contact cooling water is inconsistent with the assumptions and requirements of the Spokane River dissolved oxygen TMDL. It was clearly established during the development of the TMDL that the WLA to IEP would not be based on non-contact cooling water. In 2005 the Flow and Loading Work Group within the Spokane River Collaboration set the flows for IEP based solely on effluent from its waste water treatment plant. In 2006 Ecology misstated the IEP flows for the purposes of water quality modeling in a draft Managed Implementation Plan. This led to a meeting with Mr. Dave Peeler and Senior Assistant Attorney General Ron Lavigne on February 23, 2006. It was explained and understood at that meeting that the flows attributed to IEP for developing a WLA would not include non-contact cooling water. This was confirmed in a letter to Mr. Peeler dated March 3, 2006 (Attachment B).

TM-1. The final permit includes a consideration for background concentrations of nutrient in the facility's once through, non-contact cooling water (NCCW), to the extent nutrient concentrations in the groundwater supply for NCCW are equal to nutrient concentrations in the Spokane River upstream of the site.

The facility withdraws process and NCCW supply water from an onsite well located within 400 feet of the river. Additionally, the facility lies along a losing reach of the Spokane River, where river water recharges the aquifer. Therefore, the NCCW supply water may contain nutrients originating from the Spokane River recharge.

Ecology believes that the nutrient concentrations in the NCCW supply well, to the extent they are equal to nutrient concentrations in the Spokane River upstream of the site, should not be counted toward compliance with the final water quality based limits. Ecology based this belief on the fact that an unaltered river water withdrawal , discharged back into the river at the same location and same nutrient concentrations, would result in no change to dissolved oxygen levels in Lake Spokane.

After verifying the relationship between the NCCW supply well and upstream river water nutrient concentrations with a season's worth of sampling results, Ecology will include this allowance at the next permit renewal.

TM-2. See response to comment TM-1.

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| <br><br>**TM-2 con'd** This was further confirmed in a meeting with Ecology staff on June 14, 2006, and in an email to Len Bramble on June 23, 2006 (Attachment C). The draft Managed Implementation Plan and Foundational Concepts document dated June 30, 2006 (Attachment D), reflects the understanding from these conversations by setting the flow attributed to IEP at 4.1 MGD – a flow that does not include non-contact cooling water. This projected flow value was carried forward in the 2007 draft TMDL and in the 2010 TMDL. At no time did Ecology indicate that it was intending to include non-contact cooling water in the determination of the IEP WLA.<br><br>**TM-3** Application of the final effluent limitations to non-contact cooling water is also inconsistent with the assumptions in the TMDL regarding the limits of treatment technology. The TMDL assumed that IEP could achieve a seasonal average of 36 µg/L for total phosphorus to derive the IEP WLA. This concentration value was back-calculated on an assumption that IEP could achieve a maximum monthly average of 50 µg/L total phosphorus in its treated effluent. This value was based in substantial part on a memorandum prepared by EPA Region 10 included in the TMDL as Appendix J. There is no mention of non-contact cooling water in Appendix J and non-contact cooling water was never a factor in determining the seasonal averages for nutrients that determined the WLA for IEP. Ecology's TMDL Dispute Resolution Panel found it was inappropriate to assume that IEP could achieve the same level of treatment as municipal waste water treatment plants described in Appendix J. Over the past year IEP has worked with Ecology to revise the technology basis for nutrient limits to reflect what is reasonably achievable at its facility. This was the basis for the May 18, 2011, alternative water quality modeling done by LimnoTech and validated by Portland State University, EPA and Ecology. At no point was IEP advised that the alternative modeling should include additional nutrient loading from groundwater/non-contact cooling water.<br><br>**TM-4** The TMDL did, however, extensively consider the relative nutrient loading from groundwater. It is well documented that the Spokane River above and below IEP is a gaining reach of the river. The aquifer and river are effectively the same body of water, and IEP non-contact cooling water discharges are merely a small part of a voluminous inflow from the Spokane Valley-Rathdrum Prairie Aquifer into the Spokane River. The DO TMDL assumes between 1165 and 1946 cfs flow from groundwater into the river. DO TMDL at 39, Table 6a. This inflow includes between 48 and 87 lbs/day of phosphorus from groundwater. *Id.*<br><br>**TM-5** IEP's groundwater discharges occur in an area of the river where groundwater provides a net gain to the river. "From the Harvard Rd. gauge to the city of Spokane at Monroe St., there is a net gain in river flow from groundwater inflow." Ecology, Spokane River and Lake Spokane (Long Lake) Pollutant Loading Assessment for Protecting Dissolved Oxygen (Feb. 2004), at 9. The USGS concluded that "[o]verall, from the most upstream site near Coeur d'Alene Lake to the most downstream site below Nine Mile Dam, the Spokane River gained a net amount of 142 cfs from exchange with the aquifer based on the August 26-31, 2005 seepage run." U.S. Geological Survey, Scientific Investigations Report 2007-5004 (Interaction Between Aquifer and Spokane River).[1]<br><br>**TM-6** In light of these facts, it would be unlawful to apply the final effluent limits to groundwater/non-contact cooling water discharged by IEP. First, NPDES permit regulations require that effluent limitations be derived to achieve water quality standards. 40 CFR §122.4(d)(vii)(A). That should be accomplished through effluent limitations that are equivalent to<br><br>[1]Available at http://pubs.usgs.gov/sir/2007/5044/section3.html. | TM-3. See response to comment TM-1.<br><br>TM-4. See response to comment TM-1.<br><br>TM-5. As a note, the Permittee discharges to a losing stretch of the Spokane River. See response to comment TM-1.<br><br>TM-6. See response to comment TM-1. |

**TM-6 con'd** the IEP WLAs based on the capacity and volume of its treated waste water separate and apart from load allocations assigned to groundwater. If IEP achieves limits based on its WLAs, the TMDL assumes that Lake Spokane will meet the applicable criteria for dissolved oxygen. Ecology should accordingly exclude groundwater/non-contact cooling water from the determination of compliance with final effluent limitations or provide additional mass loading allowances in the effluent limitations that account for phosphorus and other nutrients present in its non-contact cooling water.

**TM-7** Second, the final effluent limitations must be consistent with the assumptions and requirements of any available WLA approved by EPA 40 CFR §122.4(d)(vii)(B). It is evident that subjecting groundwater/non-contact cooling water to the draft final effluent limits is not consistent with the assumptions in the TMDL. The WLA assigned to IEP is based exclusively on the volume of water from its waste water treatment system and the capacity of that system. It is fundamentally inconsistent with the TMDL to now include non-contact cooling water in the final effluent limitations.

**TM-8** Ecology should also afford IEP a credit for phosphorus and other nutrients naturally present in groundwater as is appropriate under 40 CFR §122.45(g). This provision of EPA regulations provides a credit to dischargers whose intake water contains regulated pollutants. *See* 40 CFR §122.45(g). Under this provision, technology-based effluent limitations or standards "shall be adjusted to reflect credit for pollutants in the discharger's intake water" where a discharger would meet the applicable limitations and standards in the absence of the pollutants in the intake waters, 40 CFR §122.45(g)(1)(ii), where the pollutants in the effluent "are substantially similar" to those in the intake, 40 CFR §122.45(g)(2), and the discharger draws its intake water from the same body of water into which the discharge is made, 40 CFR §122.45(g)(4). While this section relates to technology based effluent limits it is reasonable to apply here since the assumptions used in the TMDL are based on what is technologically achievable with advanced treatment. It is also reasonable to apply this section to IEP where there is a high degree of hydraulic continuity between surface water and groundwater.

**TM-9** It is unreasonable to include non-contact cooling water for compliance with the final effluent limitations in Special Condition S5. The facility has already designed and implemented treatment systems based on the assumptions used in the TMDL. It would be unlawful for Ecology to effectively change the assumptions in the TMDL and thereby reduce the WLA assigned to IEP. Absent clarification from Ecology in response to these comments, it is unlikely that IEP can continue to be a viable manufacturing facility on the Spokane River. IEP has already invested in advanced treatment technology and has made substantial effort to achieve the lowest concentrations of phosphorus, ammonia and CBOD in its treated effluent as possible. The inclusion of non-contact cooling water in the final effluent limits largely negates this effort and will result in limits that are not reasonably achievable at the facility.

IEP appreciates Ecology's consideration of these comments.

Sincerely,

TUPPER MACK JENSEN WELLS PLLC

JAMES A. TUPPER, JR.

4831-9935-1561, v. 1

TM-7. The final permit limit are consistent with the WLAs in the approved TMDL. See response to comment TM-1.

TM-8. Ecology based the allowance on the fact that an unaltered river water withdrawal , discharged back into the river at the same location and same nutrient concentrations, would result in no change to dissolved oxygen levels in Lake Spokane. See response to comment TM-1.

TM-9. See response to comment TM-1.

| COMMENTS TO NPDES WA-0000825, INLAND EMPIRE PAPER | RESPONSES |
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| INLAND EMPIRE PAPER COMPANY<br>*Papermakers since 1911.*<br><br>3320 N. ARGONNE<br>SPOKANE, WASHINGTON 99212-2099<br><br>PHONE 509/924-1911<br>FAX 509/927-8461<br><br>May 27, 2011<br><br>Mr. Pat Hallinan, Water Quality Permit Coordinator<br>Washington State Department of Ecology<br>Eastern Regional Office<br>4601 N. Monroe Street<br>Spokane, WA 99205-1295<br><br>Subject: Comments to Inland Empire Paper Company NPDES Permit No. WA 000082-5 Renewal<br><br>Dear Pat:<br><br>The following additional comments are submitted on behalf of Inland Empire Paper Company (IEP) in regard to Draft NPDES Permit Number WA 000082-5 (Draft Permit) due to recent DO TMDL developments and discussions with Ecology:<br><br>1. **S5. Schedule of Compliance for Total Phosphorus, CBOD, and Ammonia, Footnote (f) page 15 of 38:** states "*The waste load allocations for ammonia, total phosphorus, and CBOD are 24.29, 1.23, and 123.2 lbs/day seasonal average from March to October, respectively (0.71, 0.036, and 3.6 mg/L, respectively, at a discharge flow of 4.1 mgd).*"<br><br>**IE-1** The final NPDES permit for IEP should be clear that compliance with final effluent limitations does not include consideration of non-contact cooling water (NCCW) flows. The discharge flow assumption of 4.1 MGD used for determination of IEP's DO TMDL waste load allocations is treated wastewater discharge flow only and does not include NCCW. The flow projection for IEP used to establish wasteload allocations has been well documented throughout the historical development of the DO TMDL and has been acknowledged by Ecology in writing[1], through numerous discussions between IEP and Ecology, and through its incorporation into the final DO TMDL model.<br><br>**IE-2** This clarification is essential. IEP will not be able to comply with the final effluent limits if the mass loading calculations are based on the inclusion of NCCW flows. Including NCCW in calculating mass loadings for IEP would reduce the seasonal average allowance for ammonia, total phosphorus and CBOD to levels that are beyond treatment capacity and available delta elimination options. Inclusion of NCCW flows will also undermine IEP's water conservation, reclamation and re-use efforts. These efforts have been key elements and among the few methods available to IEP to comply with the DO TMDL WLAs.<br><br>[1] Letter from Douglas P. Krapas to David Peeler (March 3, 2006) | IE-1. See response to comment TM-1.<br><br>IE-2. See response to comment TM-1. |

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| Mr. Pat Hallinan<br>Page 2<br>May 26, 2011<br><br>IEP will also have to increase NCCW flows to achieve other environmental improvements at its facility. In December 2009, a new state-of-the-art Thermo-Mechanical Pulping (TMP) system was completed to replace pulping systems originally installed in the 1960's. The new state-of-the-art refiner equipment includes a heat recovery system that efficiently recovers waste heat generated by the refining process. The recovered energy from this new system significantly reduced IEP's dependence on natural gas by approximately 70% or 500 million cubic feet annually. This $50 million investment resulted in the following significant mill-wide emissions reductions due to the significant decrease in natural gas consumption and heat recovery from the refining process:<br><br>Volatile Organic Compound (VOC) Emissions Reduction: 88%<br>Carbon Monoxide (CO) Emissions Reduction: 60%<br>Total Particulate Matter (PM) Emissions Reduction: 64%<br>Nitrogen Oxide ($NO_X$) Emissions Reduction: 56%<br>Carbon Dioxide ($CO_2$) Emissions Reduction: 40%<br><br>One of this project's most significant benefits is the reduction in IEP's carbon footprint. The decrease in natural gas consumption with heat recovery results in a reduction in IEP's carbon dioxide emissions of nearly 30,000 tons/year.<br><br>This exceptionally beneficial environmental project results in a significant increase to IEP's NCCW flow due to the high pressures and temperatures of operation. Including NCCW flow in the calculation of IEP's mass-based waste load allocation would penalize IEP for these environmental improvements and would further render compliance with the stringent DO TMDL waste load allocations unattainable.<br><br>**IE-3** More important, it has been understood and accepted for over five years that the WLAs for IEP would not include NCCW flows. In commenting on the draft Managed Implementation Plan in 2006, IEP stated: "*The Draft TMDL indicates that IEP's effluent flow rate of 4.80 MGD includes cooling water, which is true. However, this cooling water flow averaged 0.70 MGD as reported to the WA DOE for purposes of calculating IEP's impact in the model. Therefore, the adjusted flow rate for calculating the waste load allocation should be 4.10 MGD…*"<br><br>**IE-4** Ecology accepted the value of 4.1 MGD for IEP's flow in the Foundational Concepts for the Spokane River TMDL Managed Implementation Plan (June 30, 2006) and the final Spokane River Dissolved Oxygen TMDL, Table 5 (March 2010). As such, there is no WLA or load allocation in the final TMDL for IEP's NCCW and it would be inappropriate to assign a final effluent limitation that includes NCCW flows.<br><br>**IE-5** EPA regulations are clear that NPDES permit effluent limitations must be "consistent with the assumptions and requirements of any available waste load allocation for the discharge." 40 CFR 122.44(d)(1)(vi)(A). It would be inconsistent with the assumptions in the TMDL to now include NCCW in the flows used to determine ultimate compliance with the TMDL WLA to IEP. Doing so sets a potentially impossible bar for compliance with the final effluent limitations for Total Phosphorus, Ammonia and CBOD.<br><br>**IE-6** IEP accordingly requests that Condition S5 state: "*Compliance with these limits will be determined by the mass of pollutant measured in the effluent from the wastewater treatment facility excluding non-contact cooling water combined with any credits from the Delta Elimination Plan following Ecology approval and public review and comment.*" | IE-3. See response to comment TM-1.<br><br>IE-4. See response to comment TM-1.<br><br>IE-5. See response to comment TM-1.<br><br>IE-6. See response to comment TM-1. |

| COMMENTS TO NPDES WA-0000825, INLAND EMPIRE PAPER | RESPONSES |
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| Mr. Pat Hallinan<br>Page 3<br>May 26, 2011<br><br>2. **S5. Schedule of Compliance for Total Phosphorus, CBOD, and Ammonia, Footnote (f) page 15 of 38:** Additional Bioavailable Phosphorus Study.<br><br>**IE-7** IEP agreed to accept the extended season of operation (February through October) as an option to accommodate Ecology's schedule for completing the NPDES permitting process for all dischargers in the Spokane River watershed. This agreement was contingent upon a provision to allow IEP to complete its primary permitting option of establishing a lower Ortho-Phosphate/Total Phosphorus ratio based on actual data from IEP's advanced treatment system. Insufficient time was available to complete this study prior to issuance of IEP's draft permit. IEP will complete this study and utilize the results to propose revised final effluent limitations during a shorter compliance season (March through October) as a future permit modification. Attached is a revised version of Condition S5 that includes language to accommodate this delta elimination opportunity.<br><br>3. **New Source Performance Standards**: IEP is not subject to New Source Performance Standards under EPA effluent guidelines for pulp mills.<br><br>**IE-8** During recent conversations with Ecology, IEP was informed that the November through February effluent limitations for BOD and TSS were being revised based on EPA New Source Performance Standards on the assumption that the installation of IEP's #5 TMP system constitutes a new source subject to EPA effluent guidelines for pulp mills. The installation of IEP's new #5 TMP system does not, however, meet the criteria as a "new source" within the meaning of EPA regulations 40 CFR §122.2 or the EPA effluent guidelines for pulp and paper point sources, 40 CFR Part 430.<br><br>Under 40 CFR §430.01(j) the TMP system was not constructed "at a site at which no other source is located," 40 CFR §430.01(j)(1)(i); it does not "totally replace the process or production of equipment that causes the discharge of pollutants at an existing source," 40 CFR §430.01(j)(1)(ii); and does not constitute a process that is "substantially independent of an existing source at the same site," 40 CFR §430.01(j)(1)(iii). As such the TMP does not meet the criteria for a new source and should not be subject to the effluent guidelines that would apply to new sources.<br><br>IEP appreciates the opportunity to provide these additional comments on the Draft NPDES Permit No. WA 000082-5 and requests that the final permit be consistent with the above comments and recommendations.<br><br>Sincerely,<br><br>Douglas P. Krapas<br>Environmental Manager<br><br>c: K. Rasler | IE-7. The final permit adds language in condition S5, referencing the ortho to total phosphorus ratio as new information that would warrant adjustment of the final water quality based effluent limitations.<br><br>IE-8. Though not a 'new source', Ecology believes new source performance standards (NSPS) should apply to the expanded TMP production, rather than the less stringent Best Conventional Technology (BCT) standards. See response to comments PH-33 and SR-28 in Appendix D1. |

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**Upper Columbia River Group**
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Spokane, Washington 99210
washington.sierraclub.org/uppercol/

June 30, 2011

Permit Coordinator
Water Quality Program
Department of Ecology
4601 N. Monroe St.
Spokane, WA 99205

Via e-mail to stra461@ecy.wa.gov

Re: Inland Empire Paper draft NPDES Permit Addendum
Permit No. WA-000082-5

Dear Permit Coordinator,

These comments are submitted on behalf of Sierra Club Upper Columbia River Group and the Center for Environmental Law & Policy. We are long-time advocates for protection and restoration of water quality in the Spokane River and have participated in public discussion and debate over the content and implementation of the Dissolved Oxygen TMDL since 2001.

**SC-1** Sierra Club and CELP have serious concerns with Ecology's decision to expand the critical season and increase phosphorus loading for the Inland Empire Paper (IEP) permit. We object to the continued manipulation of the CE-QUAL-W2 modeling of flows and phosphorus inputs as a scientifically unsupportable basis to award increased pollutant loading limits to Spokane River dischargers at the expense of water quality and the public interest. Our specific concerns are set forth below.

(1) Artificial averaging exercise.

**SC-2** February flows and nutrient loadings do not affect dissolved oxygen levels in Lake Spokane during the summer months, when oxygen depletion degrades fisheries habitat and causes toxic algae blooms. As demonstrated in the DO TMDL Technical Assessment (Cusimano 2004), temperature stratification and increased residence time of phosphorus and other nutrients in Lake Spokane commences during spring months. This raises the question of why the "critical season" is now being expanded to include February. The answer appears to be that this is an averaging exercise. By adding in an extra month of high flows and then averaging flows across the entire critical season, Ecology has modeled an artificial scenario that incorrectly assumes that flows are higher during summer months (which is the actual critical season for the Lake Spokane reservoir) and therefore capable of transporting higher phosphorus loadings. These modeled flows, which do not reflect reality, are then used to justify doubling IEP's phosphorus effluent limit. While this all looks good on paper, it fails to replicate actual conditions in the River and reservoir. Expansion of the critical season and doubling of P effluent limits will degrade water quality in the Spokane River and is impermissible.

**SC-3**

**SC-4**

SC-1. The revised model does show that using an extended season results in substantially equal, or improved, dissolved oxygen levels in Lake Spokane. Additionally, this scenario does not shift a significant dissolved oxygen burden to Avista. With an extended the critical season from February to October, the group of dischargers will remove an additional 2,637 pounds of phosphorus from the system (compared to the previous critical season running from March to October; see response to comment C-1 on page 2).

SC-2. See response to comment SC-1. The model shows removing phosphorus during February does affect dissolved oxygen levels in Lake Spokane during the summer low flow months.

SC-3. Ecology believes the model predictions are not the result of an averaging exercise. Compared to the TMDL March to October critical season, the extended season results in a reduction of total phosphorus loading to the Spokane River in February and March of 3,192 pounds with a slight increase over the remainder of the critical season of 556 pounds (see Table on page 2 of this appendix). The model predicts the reduction in February and March, with the slight increase over the remainder of the season , results in equal, or improved, dissolved oxygen levels in Lake Spokane.

SC-4. See response to comment SC-3.

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(2) Increased P loading from Idaho dischargers.

**SC-5** The IEP Fact Sheet indicates that the three Idaho Spokane River dischargers are likely to get the same deal as IEP (i.e., a doubling of phosphorus effluent limits), premised on the same artificial averaging exercise. However, increased P loading from the IEP plant, combined with increased phosphorus loading from Idaho dischargers will cumulatively cause depletion of dissolved oxygen in the Spokane River, in violation of Washington water quality standards. It is not clear whether increased phosphorus loading is an as-yet unannounced outcome of settlement negotiations in the Idaho dischargers' federal lawsuit challenging Washington's DO TMDL, but if so, such a settlement would be in violation of federal and state water quality laws.

(3) Uncertainty works both ways.

**SC-6** In discussing the new model run, the IEP Fact Sheet identifies that water quality standards will not be met in certain places in the river. The justification for these violations, including that the river has a "small tolerance for change" and that violations "fall within the precision of the model" are nothing more than non-conservative assumptions that favor adding more pollutants to the River. In science, uncertainty works both ways. Even with new artificial flows, the model indicates that water quality problems will occur, and is therefore insufficient to support a finding that increased phosphorus loading will not lead to violation of water quality standards.

(4) Effective amendment of the DO TMDL.

**SC-7** The expansion of the critical season combined with an increase in IEP's waste load allocation is an effective amendment of the Dissolved Oxygen TMDL and cannot be accomplished without formal revision of that document. Permit-by-permit changes to the DO TMDL are not legally permissible.

Thank you for the opportunity to provide comments on the IEP draft NPDES permit amendments. If you have any questions, please contact me at 509-209-2899 or rdpaschal@earthlink.net.

Sincerely,

Rachael Paschal Osborn
Sierra Club Upper Columbia River Group
Center for Environmental Law & Policy

SC-5. See response to comment SC-3.

SC-6. As described in the fact sheet, Ecology believes the results of the modeled scenario are equivalent to the TMDL's WLAs and meets the State's Water Quality Standards because:

- For the three cells where rounding upward occurred, Ecology considers the very small changes insignificant, especially considering the small tolerance for change within these cells.
- The exceptions to the 0.2 mg/L decrease below natural conditions predicted occur infrequently (3 of 448 total cells) and fall within the precision of the model.
- The TMDL modeling used conservative assumptions, making actual DO concentrations greater than those predicted by the model.

SC-7. Based on the model results showing that an extended season results in substantially equal, or improved, dissolved oxygen levels in Lake Spokane, Ecology does not believe an amendment to the TMDL is necessary.

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DEPARTMENT OF ECOLOGY
REGIONAL OFFICE

**Spokane Tribal Natural Resources**
P.O. Box 100 • Wellpinit, WA 99040 • (509) 258-9042 • fax 258-9600

MEMORANDUM

June 30, 2011

Permit Coordinator
Department of Ecology
4601 N. Monroe
Spokane, WA 99205

**RE: Comments on NPDES Permit WA-000082-5 Inland Empire Paper Company**

**SENT VIA EMAIL (stra461@ecy.wa.gov ) and First-Class Mail**

Dear Permit Coordinator:

Please accept these comments on Ecology's amendments to the Draft Inland Empire Paper Company ("IEP") NPDES permit. These comments are submitted on behalf of the Spokane Tribe of Indians ("Tribe") and Tribe's Department of Natural Resources ("DNR"). The Tribe previously submitted comments on this draft permit on November 17, 2010, and hereby incorporates by reference the entirety of those comments. The Tribe will limit its comments in this letter specifically to the changes made in the Draft IEP permit. However, the Tribe will note here that IEP's final permit must contain the Regional Toxics Task Force language contained in the recently released NPDES permits (Kaiser, City of Spokane, Liberty Lake), and the narrative PCB limit must require that applicable water quality standards are to be achieved.

**ST-1**

**Comments on Amendments**

EPA regulations require that all NPDES permits issued meet applicable water quality standards. 40 C.F.R. § 122.4(d). As was shown, through previous Tribe, EPA and WDOE modeling on the Lower Arm of the Spokane River, the current loading scenario #1 of the TMDL does not meet the Tribe's dissolved oxygen standards. The modeling determined that the primary limiting factor for the failure to meet the Tribe's water quality standards for dissolved oxygen was sediment oxygen demand ("SOD").

**ST-2**

As raised in the Tribe's November 17, 2010 comments on the drafts of the NPDES permits, the Tribe recommended that the dischargers be required to maintain low levels of oxygen demanding pollutants year round. This recommendation is based on the significant increase in pollutant concentrations in the Tribe's waters during the winter months that contribute to the SOD problem seen during the critical season. To address this issue in the amended draft IEP permit, the Tribe recommends the following changes and actions prior to the issuance of a final permit.

**ST-3**



ST-1. The final permit does include language, similar to the other Spokane River dischargers, regarding the requirement of the Regional Toxics Task Force.

ST-2. Ecology has previously addressed how the Spokane River DO TMDL modeling affects downstream Tribal water quality (see the TMDL's Response to Comments, pages C-84 to C-86). In summary, the DO TMDL focused on DO problems in Lake Spokane, upstream of Long Lake Dam. Nonetheless, the implementation of the TMDL will improve water quality in the Spokane Arm of the river.

The Tribal Water Quality Standards do not fully define how dissolved oxygen criteria applies to waters of the Spokane Arm (e.g. treatment as a lake or river, and how natural conditions apply to this stretch). Further, model runs indicate that at the no source scenario (no anthropogenic sources of pollution) dissolved oxygen concentrations will decrease to as low as 1 mg/L in the bottom (stratified) portions of the Spokane Arm. It remains unknown if the TMDL improvements will meet Tribal water quality criteria. See also response to comment ST-1, in Appendix D-1.

ST-3. Modeling has shown that extending the critical season into January makes little or no difference in dissolved oxygen levels in Lake Spokane during the summertime low flows.

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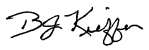
| **ST-4** (1) This amendment will increase IEP's TP discharge by almost 100%, yet it only increases their treatment requirement by 1 month. Additionally, this particular discharger does not experience increased flow due to seasonal changes akin to what the municipality dischargers experience, and should accordingly be required to treat year round for total phosphorous to protect the margin of safety in the DO TMDL, and to improve the SOD problems throughout the Spokane River, but most importantly the Lower Arm.<br><br>**ST-5** (2) As WDOE is aware there is an existing model available for the Lower Arm of the Spokane River, and this change in the loading scenarios should be run through the Lower Arm model prior to the issuance of the final permit to ensure that the marginal improvement in the Tribe's dissolved oxygen is maintained.<br><br>**Conclusion**<br><br>The Tribe has provided comments and input to WDOE throughout this process, and the Tribe wishes to thank WDOE in advance for your consideration of the Tribe's concerns.<br><br>**Sincerely,**<br><br>  <br>**B.J. Kieffer**<br>**Director**<br>**Spokane Tribal Natural Resources Department**<br><br>**Cc:** Gregory Abrahamson, Chairman, Spokane Tribe of Indians<br>Brian Crossley, Spokane Tribe, Water and Fish Program Manager<br>Laurie Mann, EPA<br>Brian Nickel, EPA<br>Mike Lidgard, EPA<br>Ted C. Knight, Attorney for the Spokane Tribe of Indians<br><br>Page **2** of **2** | ST-4. With an extended the critical season from February to October, the group of dischargers will remove an additional 2,703 pounds of phosphorus from the system (compared to the previous critical season running from March to October; see Table listed in response to comment C-1). Additionally, modeling has shown that extending the critical season into January makes little or no difference in dissolved oxygen levels in Lake Spokane during the summertime low flows.<br><br>ST-5. See response to comment ST-2. |