John Henry No. 1 Mine
OSMRE, Environmental Assessment
Comments by Craig Goodwin, October 8, 2017

Attn: OSMRE, John Henry EA, OSMR WR
C/O Gretchen Pinkham
1999 Broadway, Suite 3320
Denver, CO 80222-3050

Following are my comments related to the OSMRE EA for the John Henry Mine. I would like to address two fundamental questions:

1. What happens if PCC is granted a permit for mining and reclamation at John Henry No. 1 Mine but PCC fails to do final reclamation in a material and timely manner?

- Mining activity at the John Henry Mine ceased in 1999. During the intervening 18 years, PCC has failed to complete mine reclamation, in violation of statutory reclamation requirements.

- In February, 2010, OSM notified PCC of the following requirement: "no later than March 2, 2010, PCC submit permit revision application materials to OSM that will revise the permit as specified in items 3 and 4 of PR04. The revision must indicate that backfilling will begin January 4, 2010. In addition, I am requiring the revised timetable required in item 4 to specify that reclamation will be completed during 2012. I am also requiring in item 4 to specify that revision specify annual volumes of material to be backfilled year by year" (copy of OSM letter attached). Despite such requirement, to this date, NO material mine reclamation has taken place since the mine ceased operations in 1999!

- In July 2010, PCC sought to mine 3.5 additional acres to obtain 26,000 tons of coal, "purportedly for "test burns" and sale on the spot market". OSM initially denied this request and I quote: "After eleven years with no mining activity or reclamation, the company must be held to a reasonable standard, which is why OSM has denied Pacific Coast's permit." OSM eventually relented, granting PCC a new permit for mining and reclamation with no fixed date for completing reclamation. And once again, PCC failed to comply. No mining. No reclamation.

- As a result, PCC has been able to defer their obligation to reclaim the site for a very long time. The cost of maintaining a reclamation bond is but a fraction of the cost for actually doing reclamation – apparently providing an incentive to defer reclamation for as long as possible.

- Our community has every reason to be skeptical of PCC plans. PCC has not lived to past promises and pronouncements and once again are seeking a permit to mine and reclaim

at the John Henry Mine – pushing out completion of reclamation to an undefined date. Even though there is an end date to the proposed permit of 2024, there is no provision, at least that I can find, that requires PCC to complete reclamation of the site by any date certain. PCC could easily do as they have done in the past, which is to move around some equipment, move some token dirt and then do nothing for the term of the permit. No actual mining is required. No reclamation is required. PCC can just sit idle and defer reclamation well past 2024.

- With the glut of coal on world and west coast markets and with mines in British Columbia continuing to close, it's hard to see a compelling national or northwest need for coal from the John Henry Mine. EIS documents make reference to an existing sales contract between PCC and their expected largest customer Lehigh Northwest Cement of Delta B.C. This is the same prospective customer identified by PCC back in 2010. Sales to Lehigh never did materialize. A copy of the "current" Lehigh contract has not been made available for public review, but one must be highly skeptical that Lehigh is in any way obligated to purchase coal from PCC.

- With all of the development challenges now faced by our community of Black Diamond, being able to plan and manage for increased traffic volumes, noise levels and Lake Sawyer water quality impacts with some degree of certainty is critical. The impacts of the John Henry Mine are among the most significant adverse water quality impacts we face. Should OSM issue PCC a mining and reclamation permit, then there must be very clear and defined timelines for completing reclamation.

- Therefore, in the interests of our community, I respectfully request that any prospective permit issued to PCC include a provision similar to that proposed by OSM in 2010 that requires PCC to begin and end total site reclamation by a date certain, whether or not mining occurs at the site and to complete site restoration no later than 5 years following the effective date of new permit issuance.

2. Why should PCC be allowed to degrade the water quality of Lake Sawyer when the Master Planned Developer (MPD) in Black Diamond is not permitted by contract with the City of Black Diamond to do so? They must meet far stricter anti-degradation limits.

- PCC's current mining and reclamation permit includes the following surface water discharge limitations (EIS page 24):

Table 3. NPDES Permit Effluent Limitations

Parameter	Effluent Limitations
Phosphorus (6 Month Rolling Average)	41 µg/L (microgram per liter)
Phosphorus (Maximum Daily)	82 µg/L
pH	6.5-8.5
Turbidity	25 NTU
Dissolved Oxygen	Minimum 9.5 mg/L
Oil Sheen	No visible oil sheen
Hexavalent Chromium	15.3 µg/L
Copper	14.5 µg/L

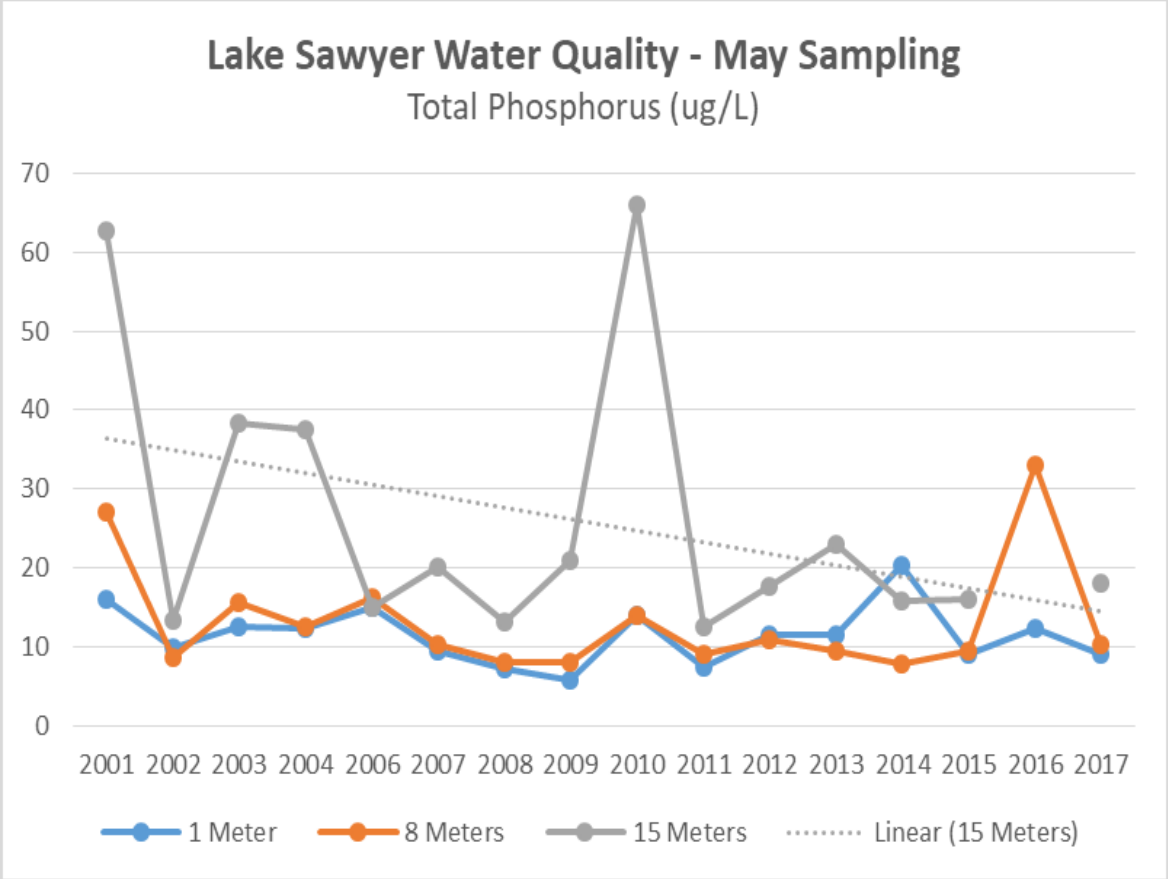
Source: WDOE 2008

Phosphorus discharge limits on a 6 month rolling average represent over 2 ½ times the 16 ug/L target established by King County in their June 2009 report titled Lake Sawyer Total Phosphorus Total Maximum Daily Load (copy attached). Daily discharge levels from the mine can exceed 5 times Lake Sawyer target levels. How can this be allowed?

- The draft EIS includes a chart on page 140 Figure 16 purporting to model Lake Sawyer phosphorus loading with and without the John Henry Mine. Nowhere stated are the assumptions used for surface water discharge from the mine. What flows are assumed and what phosphorus concentrations are assumed? The model apparently uses only one data point per year measured just 1 meter below the surface. This is grossly inadequate since phosphorus levels vary significantly throughout the year and at the depth each sample is taken. Using sample data provided by King County for the years 2001 thru 2017, following are several charts showing the variability of test results from year to year, by the time of year the sample was taken and by the depth at which the sample was taken (no sample results are available from King County for the year 2005 or for May 2016 at a depth of 15 meters).

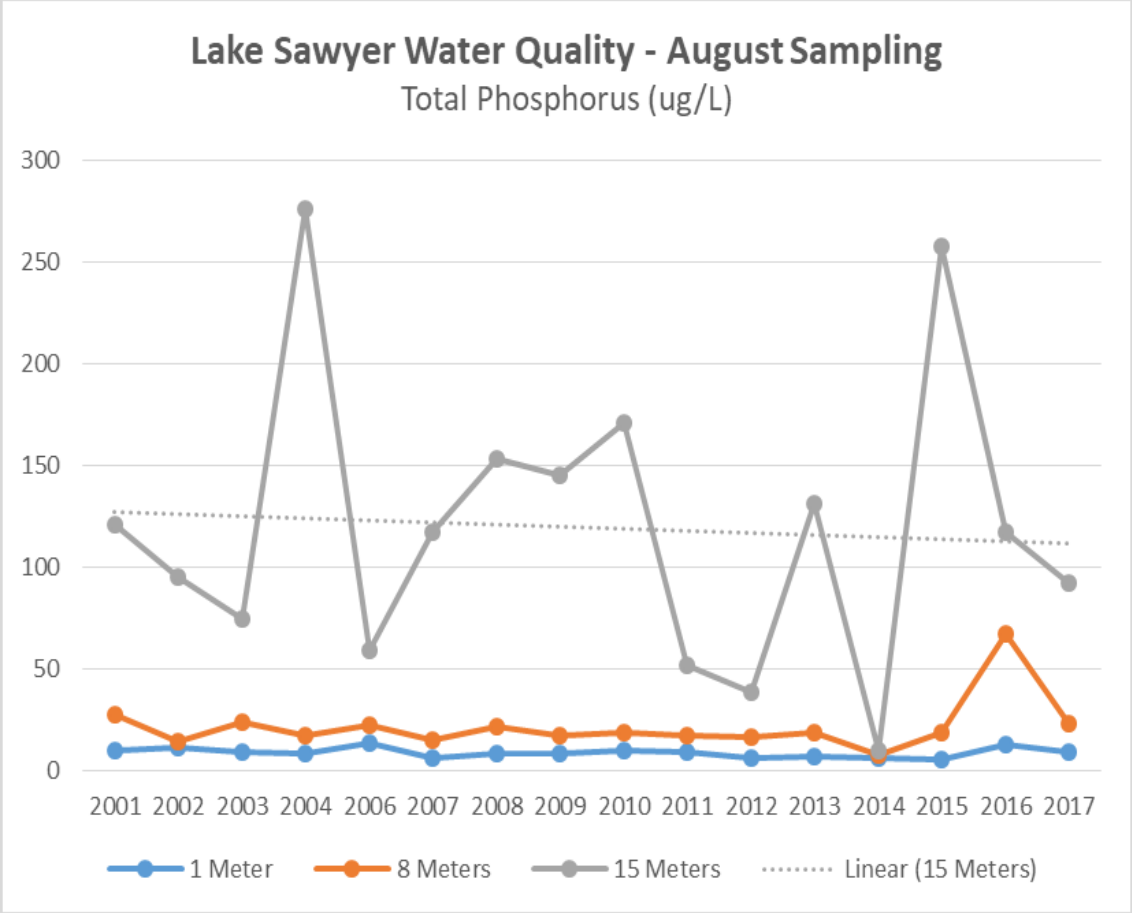
- Phosphorus sample test results for May 2001 – 2017 are shown in Figure 1 at three sampling depths – 1 meter, 8 meters and 15 meters.

Figure 1



Measurements taken in August are consistently and significantly higher than May as shown in Figure 2.

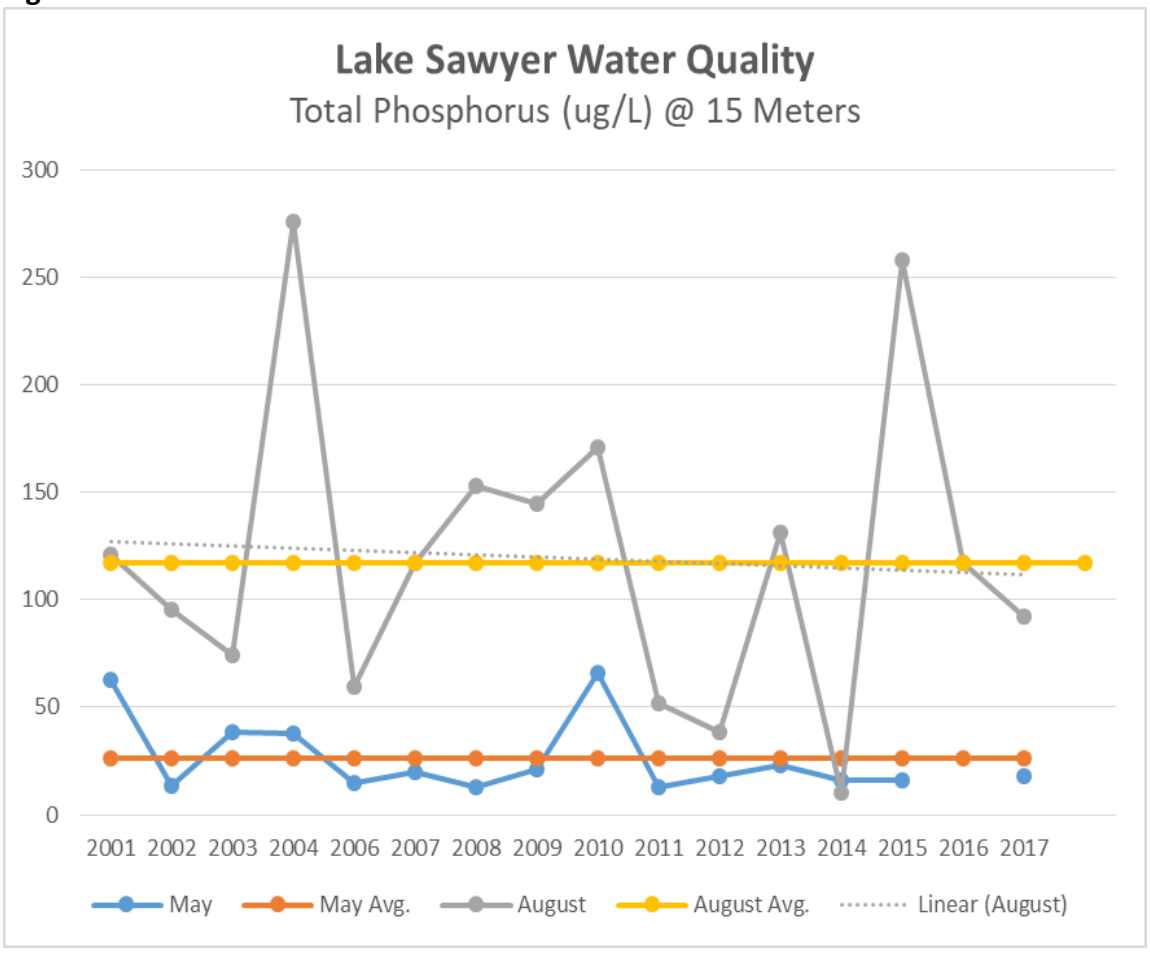
Figure 2



Average August phosphorus concentrations in the lake measured at 15 meters exceed 100 ug/L, far above the 16 ug/L King County established target and far above the levels portrayed by the draft EIS model. The same can be said for measurements taken in August at a depth of 8 meters – also well above the 16 ug/L target though not as high as sample results taken at a depth of 15 meters.

Figure 3 shows phosphorus concentrations from samples taken in both May and August at a sample depth of 15 meters.

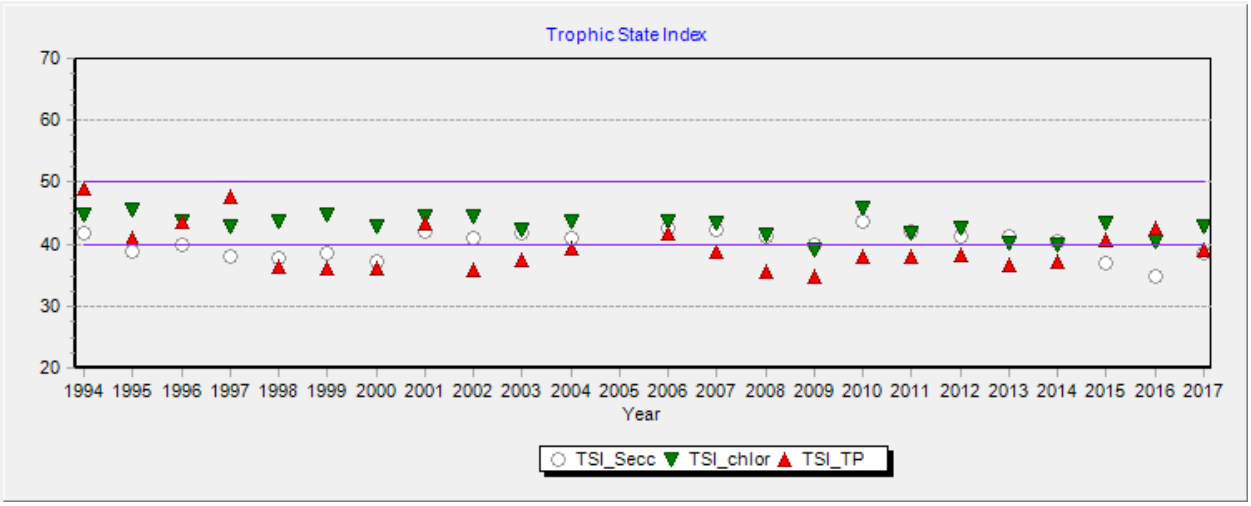
Figure 3



Clearly, the model being utilized in the draft EIS to assess prospective water quality impacts on Lake Sawyer is both inadequate and highly misleading.

To summarize lake water quality trends overall, King County utilizes what is called a Trophic State Index that combines measures of phosphorus, chlorophyll-a and Secchi (a measure of water clarity). These measures are highly interrelated. The overall Trophic State target for Lake Sawyer is to stay at or below 40 on the Trophic scale index. As you can see from the graph in Figure 4 provided by King County, water quality at Lake Sawyer has improved in recent years but we have very little margin for error.

Figure 4



Current and historical Lake Sawyer phosphorus concentrations and water quality trends can be found at http://green2.kingcounty.gov/smalllakes/WQData.aspx.

- A condition of approval as provided in the MPD Development Agreement requires that MPD development have zero net new phosphorus impact on Lake Sawyer. These requirements are stated, not as discharge concentrations (e.g., ug/L or mg/L) but in terms of total annual mass loading expressed as kg/yr. Annual mass load is a much higher standard to meet and establishes clear anti-degradation limits. If we are to maintain water quality at current levels in Lake Sawyer, we need anti-degradation limits either requiring these discharge limits be met at point of discharge or that funding for capital improvements be made available for the city to provide for necessary phosphorus treatment and removal.

- By contrast, proposed limits for the John Henry Mine exceed current lake phosphorus targets, exceed anti-degradation limits imposed on the MPDs and will most certainly result in significant lake water quality degradation. Because mine operation generates additional stormwater and coal cleaning wastewater flows, the mine would still add net new phosphorus loading to the lake even at the 16 ug/L target level. As acknowledged in the draft EIS, Lake Sawyer water quality will be degraded. The only debate is by how much and for how long.

- Draft EIS Page 29 Table 4 titled Baseline Surface Water Quality Data for the John Henry Mine identifies average baseline flows from the mine into Ginder Creek as 1.48 cfs. By contrast, in another study submitted by PCC dated December 5, 2000 related to Biological Assessment and impacts on salmon habitat, surface water flows from the mine into Ginder Creek were identified at much higher levels. Which one is right?

Perhaps I don't understand the numbers, but the studies submitted do seem quite contradictory and merit review.

- Statement is made in the EIS to the effect that data is not now available regarding Ginder Creek and Rock Creek water flows and phosphorus loading. This is not correct. A study of baseline flows and phosphorus loading in Ginder Creek and Rock Creek was recently completed by Tetra Tech in report dated March 17, 2015 (copy attached). This report very clearly identifies where and how much phosphorus currently comes from which major areas in the watershed and represents the baseline from which MPD phosphorus ant-degradation limits will be measured.

- The argument is made that since adverse phosphorus loading impacts from the mine will be short-term in nature, no long term degradation of Rock Creek and Lake Sawyer water quality will remain. This may be true to a point. However, prior studies of Lake Sawyer water quality also point out that between ¼ and 1/3 of phosphorus in the lake is contained in sediment that builds up over time and is now residual to the lake. As we saw when the failed Black Diamond sewage treatment plant that once drained into Rock Creek was shut down, the lake did eventually recover, but it took some years before continual stream and lake flushing reduced accumulated phosphorus build up. Some residual phosphorus buildup from the treatment plant likely remains to this day – over 25 years later.

- Comment is made in the draft EIS about improvements being made by PCC to on site stormwater facilities that are intended to reduce phosphorus discharge from the mine. As historical documentation demonstrates, phosphorus levels discharged into Ginder Creek from Ginder Lake and from Mud Lake Creek into Ginder Creek from the mine have historically exceeded the maximum 41 ug/L concentration level required by current permits.

Figure B-4. Total Phosphorus Concentrations at Monitoring Point 001

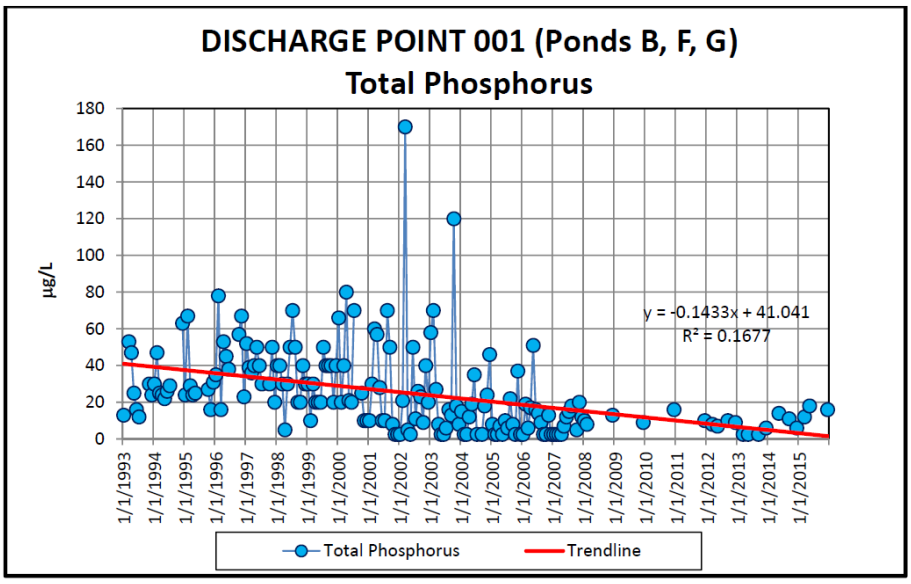
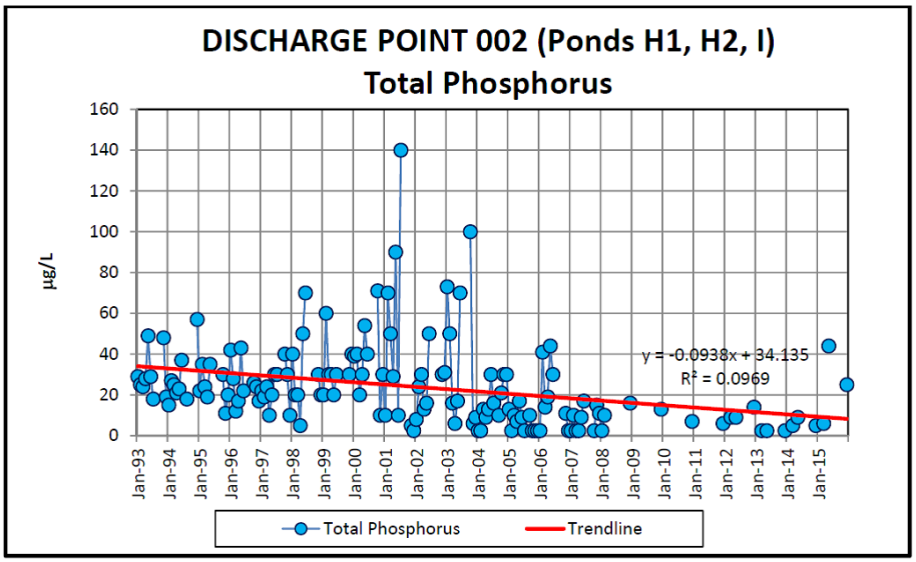


Figure B-5. Total Phosphorus Concentrations at Monitoring Point 002



The positive trend lines shown result simply from the discontinuance of mining and the shutdown of operations.

- It is not clear from the documentation provided exactly what monitoring requirements there will be and where/when/by whom and how measurements will be taken for each of the surface water quality parameters. What new standards are being proposed? For example, EIS Table 4 Baseline Surface Water Quality Data for the John Henry Mine excludes both phosphorus and turbidity.

- In past John Henry Mine water quality monitoring protocols for phosphorus, sampling was required only once per month or even just twice per year according to my reading of current permits. Given the historic variability as demonstrated by the graphs shown on the previous page, such limited sampling is grossly inadequate. Sampling for phosphorus once per month is wholly inadequate. Requiring daily sampling and reporting for turbidity is one way to somewhat mitigate overly burdensome sampling requirements for phosphorus. Turbidity and phosphorus levels are often highly correlated. Sampling for turbidity is inexpensive and can reliably be done using field equipment, while sampling for phosphorus requires processing by a lab. I would still strongly recommend at least weekly phosphorus sampling and monitoring until such time as PCC is able to demonstrate consistent sample results below whatever final permit discharge limits are established.

- What happens if sample results show the mine to be out of compliance with permit requirements? What action will be taken and by whom? Who is reviewing sample data and what data will be made available to the public and when. What fines will be imposed for exceeding defined water quality discharge limits? What higher frequency of sampling will be required should sample results exceed defined limits? None of these questions are addressed in the documents provided. The draft EIS cannot be deemed to be adequate until such time as these questions have been answered.

- To appropriately protect Lake Sawyer water quality, I believe an anti-degradation standard should be established for PCC similar to that imposed on MPD developers. However, in the event that OSM does issue a mining permit to PCC, then I strongly urge that permit limits be established at the much safer and lower maximum monthly level of 16 ug/L total phosphorus - definitely <u>not</u> the 41 ug/L six month moving average or 82 ug/L maximum daily level seen in current permits. We should not be issuing permits that purposefully and knowingly degrade lake water quality even for a relatively short term period. In addition, given PCC's past track record of not living to commitments made to the community including reclamation, it is essential that monitoring requirements be the strictest and safest possible for our protection.

- I would also like to propose that the City of Black Diamond be given access to the John Henry Mine at key water quality monitoring and sampling locations for purposes of validating monitoring test results.

Thank you for the opportunity to provide input.

Respectfully

Craig L. Goodwin
29044 222nd Pl SE
Black Diamond, WA 98010

craig.goodwin99@gmail.com
253-405-6564

References:

(a) OSM letter dated February 12, 2010 RE: Follow up to Permit Revisions Order 4, Contemporaneous Reclamation (WA-0007-D-H_03), John Henry No. 1 Mine
(b) OSM News Release dated September 2, 2010 titled “Office of Surface Mining Reclamation and Enforcement Denies Mining Permit to Coal Company in State of Washington
(c) The Villages and Lawson Hills Master Planned Developments, 2011 – 2014 Stormwater, Baseline and Groundwater Monitoring, Tetra Tech, March 17, 2015
(d) Informal Section 7 Consultation – Biological Assessment for Pacific Coast Coal Company’s Revised Final Cut Lake Proposal, December 5, 2000
(e) Lake Sawyer Total Phosphorus Total Maximum Daily Load, Water Quality Implementation Plan, June 2009