

From: [Lo, Reamick ENV:EX](#)
To: [Maitland, Julie LASS:EX](#)
Subject: RE: Proposed water regulation changes for the placer miners in Atlin
Date: January 15, 2019 11:29:00 AM

Hi Julie,

Here's our response:

- The Ministries of Energy, Mines and Petroleum Resources and Environment and Climate Change Strategy are currently assessing the feedback and comments received from the most recent consultation
- Proposed regulatory amendments are anticipated to be considered in Spring 2019
- We will provide your office with updates as the work progresses

Thanks.

Warmly,

Reamick Lo

Executive Assistant to the **Honourable George Heyman**

Minister of Environment and Climate Change Strategy

P: 250-812-8642

From: Lo, Reamick ENV:EX
To: Maitland, Julie LASS:EX
Subject: RE: Air Quality Monitoring
Date: January 21, 2019 2:48:00 PM

Hi Julie,

Here's our response:

- The Ministry of Environment and Climate Change Strategy (ENV) is the agency responsible for collecting air quality data in Smithers and the Bulkley Valley; our data are shared with Environment and Climate Change Canada (ECCC) and are available at <http://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map-PM25.html>. The data used by ECCC and to calculate the Air Quality Health Index come from these stations.
- The alerts regarding air quality that appear on the ECCC websites are actually issued by ENV staff in the communities where the advisories and bulletins are issued.
- Equipment used by ENV is calibrated regularly and subjected to 3rd party semiannual audits, the results of which are posted online to <http://a100.gov.bc.ca/pub/acat/public/viewReport.do?reportId=43330>. Data collected and published by ENV are accurate and reliable.
- The exact locations of ENV equipment are chosen carefully to best represent community exposure to air pollution. As Purple Air instruments are operated by community members who purchase and install the monitors on their homes, it is not always possible to ensure equivalent siting standards. For example, there have been instances of Purple Air monitors being set up inside a building, but the Purple Air website indicated that they were outside. Also, in at least one case, a Purple Air monitor was purchased and located by a resident to show that cigarette smoke from his neighbour was influencing air quality at his patio. Obviously, data from these sensors should not be used by the general public to make decisions or modify their behaviour due to degraded air quality.
- The Purple Air network of monitors is completely separate and the sensors are purchased and operated by members of the public and then the data are distributed on the Purple Air map site at <https://www.purpleair.com/map#8.08/54.681/-126.424>. The ENV network and the Purple Air network are very different and must be interpreted differently.
- Purple Air equipment is neither regularly calibrated nor subjected to 3rd party audits. The accuracy, precision and reliability of these sensors are uncertain. Rigorous evaluations of these instruments have shown that they overestimate particulate concentrations compared to monitors used in regulatory networks throughout the world. These sensors can be purchased for private use/interest but should not be considered more precise, accurate, or reliable than regulatory monitors. The sensors deteriorate with age and there are numerous occasions when data from sensors that have failed is presented on the Purple Air Site. If the data from Purple Air sensors are used, the comparison between the paired sensors in each Purple Air Monitor should be checked on the site.
- Of most concern to ENV is that the Purple Air website provides misleading health information to the public. When a user enters the Purple Air website they are presented with a version of the American Air Quality Index metric and its associated health messaging, as opposed to the hourly particulate matter concentration. This makes it difficult to directly compare information from the Purple Air website to the ENV website. Recently, the Purple Air site began supplying values of the Canadian Air Quality Health Index; unfortunately, this calculation is also incorrect and the values supplied should not be used to make decision relating to health and air quality. If you wish to use the data distributed on the Purple Air site be aware that the sensors tend to overestimate and choose the PM2.5 mass option from the menu on the Purple Air Network. Remember also that the values on the Purple Air site are averages over very short periods (a few minutes) and tend to fluctuate rapidly in many situations. ENV sites report 1-hour averages to remove part of this problem. The values from the paired sensors should also be checked as I described above.
- ENV and many other jurisdictions and institutions with expertise in air quality science and instrumentation continue to test this class of instrumentation (ENV currently operates a dozen of them). Many of the current technical issues with the Purple Air sensors can be solved and it is likely that this class of particulate instrument will be used in the future for citizen science and survey monitoring in B.C. In the meantime, ENV staff recommend that the public rely on data provided by government-run instruments when making any decisions regarding health and air quality.

Warmly,

Reamick Lo
Executive Assistant to the Honourable George Heyman
Minister of Environment and Climate Change Strategy
P: 250-812-8642

-----Original Message-----

From: Maitland, Julie <Julie.Maitland@leg.bc.ca>
Sent: January 14, 2019 3:23 PM
To: Lo, Reamick ENV:EX <Reamick.Lo@gov.bc.ca>
Subject: FW: Air Quality Monitoring

Hello Reamick

I was hoping you could help me answer s.22 questions about the air monitor stations? Although he say's environment Canada I am wondering if Ministry of Environment does any air quality in Smithers?
Thanks

-----Original Message-----

From: s.22
Sent: Sunday, December 9, 2018 3:12 PM
To: Donaldson.MLA, Doug <Doug.Donaldson.MLA@leg.bc.ca>
Subject: Air Quality Monitoring

Greetings Doug

Over the last year I have been watching both the ministries air quality reports for our region, more so due to the forest fire season we had, as higher levels definitely impact how well I breath.

I have noticed days where Environment Canada completely missed more than a week of really bad air quality, highly visible smoke you could hardly see Hudson Bay Mountain, then issue a one day heath warning that's lifted almost the next day.

Environment Canada based their reports on the monitor at St. Joes School.

There are two choices we can look at to see what the monitors are saying in almost every community from Prince George to Prince Rupert, however consistently the governments monitor reads less than half of what the readings of PurpleAir show or indicate.

My question is who is wrong here? When the air over Smithers is blue, but we get a clean air reading from the monitor at St.Joes in Smithers, however a reading of 110 from the PurpleAir monitor, what are we to believe?

I am aware that they now are planing a move for the one at St.Joes School and the one in Telkwa, does this mean it will be replaced with more accurate equipment?

I understand PurpleAir is a private company, but my concern is in regards to our health, so we need to know which one we can trust. They read far to different to ignore that there is a problem with one of the two.

Thanks in advance for a reply

s.22
Smithers

This email has been checked for viruses by AVG.
<https://www.avg.com>

From: [Lo, Reamick ENV:EX](#)
To: [Jones, Tristan FLNR:EX](#)
Subject: RE: Exchamsiks and Diana Lake parks
Date: January 23, 2019 12:00:00 PM

Hi Tristan,

Here's our response:

1. **Exchamsiks Park: Are there any plans to reopen it to camping?**

- Camping is available at the boat launch at Exchamsiks River Park. The previous campground was closed to protect the red listed plant communities present at the site. Consideration to
- upgrade the rustic sites at the boat launch have been investigated. Additional First Nations and stakeholder consultation would be required prior to upgrades at this site. Aside from a potential upgrade there is not a potential for a large scale campground at this location.

2. **Diana Lake Park: Are there any plans regarding beach improvements?**

- Approximately 5 years ago a raised beach was created at Diana Lake Park. This raised beach was created as the lake itself is part of a reservoir that supplied the Skeena Cellulose Pulp Mill in Prince Rupert. With the bankruptcy of Skeena Cellulose the responsibility for the safety of the dam including associated tree debris on the reservoir fell to the City of Prince Rupert due to ownership of Skeena Cellulose lands. The City completed a major cleanup of the flooded portion of the beach area in 2017. In 2018 the Park Operator had two cleanups of beach debris on the reservoir in front of the raised beach area. Despite these efforts tree debris continue to wash ashore impacting on recreation in the natural dam area. There will be some cleaning of log debris by the Park Operator as part of his Operating Plan but the problem will continue. Other works planned for Diana Lake in 2019 include assessing elevated structures including Diana Creek Trail and repairing/replacing as needed, replacement of fibreglass roofs on the pit toilets and filling potholes and grading the access road.
- BC Parks is exploring options for the involvement of the District of Port Edward in the management of Diana Lake Park. The District has suggested that they could find community partners to help improve the park if they are directly involved in the areas management. This exploration is occurring through discussions between the Parks and Protected Areas Section Head and the Administrator for the District of Port Edward.

Thanks.

Warmly,

Reamick Lo

Executive Assistant to the **Honourable George Heyman**

Minister of Environment and Climate Change Strategy

P: 250-812-8642

From: Jones, Tristan FLNR:EX

Sent: January 17, 2019 3:08 PM

To: Lo, Reamick ENV:EX

Subject: Exchamsiks and Diana Lake parks

Hi Reamick,

Hope all is well!

MDD had a meeting with the Northwest Fish and Wildlife Conservation Association and a couple things came up that fall under BC Parks purview.

1. Exchamsiks Park: Are there any plans to reopen it to camping?
2. Diana Lake Park: Are there any plans regarding beach improvements?

Thanks for any info you can provide.

Tristan