## **Teck Coal Limited** Sparwood Communities Office P.O. Box 1777 116 Centennial Square Sparwood, B.C. Canada V0B 2G0 +1 250 425 8096 Tel www.teck.com

**Date:** May 28, 2019

Responsibility

Nic Milligan, Manager Social

Cc:

Memorandum

To: District of Sparwood Mayor and Council,

Michel Creek Road, GN Road and Sparwood

residents

From: Don Sander, General Manager, Elkview

Operations

Subject: May 14 2019 Baldy Ridge Extension Annual Progress Update Meeting Minutes

Date & Time: May 14, 2019 at 7:00 PM

**Location:** Sparwood Rec Centre – Upstairs Community Hall

Present: (Teck Staff) Don Sander, Nic Milligan, Dan Myck, Jessica Tremblay, Casandra Knooihuizen,

Sharon Strom, Danielle Wiess, Chris Stroich, Kayleigh Montgomery

## Background:

Meeting invitations were sent to District of Sparwood (DOS) Mayor and Council and residents of Michel Creek Road and GN Road. A public advertisement for all Sparwood residents appeared in previous editions of the Free Press and communicated via radio ads on local stations. Approximately 70 members of the community attended the meeting.

Nic Milligan, Manager Social Responsibility and Don Sander, General Manager Elkview Operations welcomed participants and started the meeting with introductions of all Teck staff present. Questions or feedback were welcomed at the end of the evening's presentations.

Nic Milligan communicated to community members Teck can make available information at their request if they leave their emails on the evening's sign-in sheet and note their required follow-up. No one requested additional information prior to leaving the evening's meeting.

A slide presentation hosted by Teck ran for an hour and questions were asked/feedback was provided for the remaining hour of the meeting. The presentation covered the material presented in the Baldy Ridge Extension (BRE) Annual Progress Update 2018 (available at

https://www.teck.com/operations/canada/operations/elk-view/). During the Air Quality portion of the presentation, Jessica Tremblay committed to the community members air monitoring data results will be updated monthly online at www.teck.com/elkvalleydustmanagement/. The meeting concluded at 9:15 PM.

Teck requested feedback from attendants via a hardcopy survey distributed on their departure (deadline for completed surveys - June 14, 2019). The feedback form also noted the following related links and feedback contact details;

- Water Quality
  - o www.teck.com/elkvalley
- Air Quality & Dust Management

- www.teck.com/elkvalleydustmanagement
- Elkview Operations
  - o www.teck.com/operations/canada/operations/elk-view/
- Socio Community Economic Effects Advisory Committee & Sparwood Livability Study
  - o www.sparwood.ca/livable

Media was present at the meeting and a follow-up <u>article</u> was published (Free Press, May 23, 2019 – page A10).

## Questions/feedback received and answers/responses:

**Question (Q) from a Community Member (CM):** Can you share any details of the home cleaning plan or program and the details of that?

**Answer (A):** The plan is currently with senior management at Teck, we will advertise and reach out to everyone when it is finalized and ready for implementation. Our intent is to review with the Focus Group once drafted.

**Feedback (F) – CM:** I am concerned with train dusting. I have photos I can share with you of overloaded trains.

Q-CM: What, of the items on the slide titled 'Focus Group' will be provided by Teck?

**A:** Bullet number two is included in the recommendation before senior management, each of the sites have reviewed and/or budgeted for a car wash and clean vehicle improvements. Specifically, Elkview has invested in better under-vehicle sprays to help knock mud off of vehicles. Elkview car wash is open to employees at other sites as well as contractors. Teck has established ease of payment practices with all local Car Wash operators to enable employees to clean their vehicles before parking in the communities.

**Q – CM:** What's the difference between the Focus Group and the Socio-Community Economic Effects Advisory Committee (SCEEAC)?

**A:** The focus group was a gathering of concerned community members to discuss the impacts of dust on their personal property and to suggest mitigation ideas. The SCEEAC is a committee of DOS council focused on the Baldy Ridge Extension project at Elkview Operations, topics of discussion include reclamation, visual quality, noise, blasting & vibration, and air quality & dust.

**F – CM:** I understand from the presentation that the air quality station on Michel Creek Road displays higher readings of dust during commute hours. I would like to highlight that Elkview Operations has two gates and a lot of vehicles leave the plant gate and are not clean. I would like all vehicles to leave site from the main gate so they are forced to use the car wash upon their departure.

**Teck comment:** We will take this under advisement.

Q - CM: Is dust particulate not identifiable?

**A:** We are able to identify the metal and mineral mass content of our particulate, but not specifically differentiate the coal content; there is currently not a test that will explicitly report that a piece of material is coal dust (in ambient sampling). Generically, you can test for organic content and assume a coal % content of that material using visual and laboratory analysis.

**Q - CM:** Can you describe the trends in dust over the years beyond the chart you showed tonight? **A:** There is no increasing trend for PM2.5 and PM10. We are unable to determine trends in TSP due to a limited data set. The Regional Air Report includes a trend analysis and can be seen at:https://www.teck.com/media/Annual-Teck-Coal-Ltd-Regional-Air-Monitoring-Program-Report.pdf

**F – CM:** I know that every day I wipe my railing there will be dust on the rag. This isn't science but it's my experience. I see my property value decreasing as a result of mining coming closer and closer to town. I also don't know if Hosmer should be a baseline as there are a lot of wood burning stoves there to heat the homes.

**Teck comment**: We recognize that over the last two years the dust has been worse in the community and we are working hard to manage dust from the operation.

**Q - CM:** At last year's meeting, Elkview's General Manager stated that bottom up spoiling might happen. Has anything been done?

**A:** The problematic spoils in NP2 could not be changed, however since our meeting, we have closed portions of the NP2 spoils to reduce dust from this area. The spoils on the west side, closer to town are planned to be built from the bottom up which, will reduce dust and allow for progressive reclamation.

**F – CM:** We all know that hydro seeding won't reach all the way down to the bottom of the Natal spoil and the dust that comes off that spoil is a problem.

**Teck Comment:** Agreed, that is why we are also applying coarse rock to the spoil to reduce fines from becoming airborne. We are going to hydro seed the outsides and the top of the spoil where the fines are located. Further, we are heli-seeding lower portions of the spoil as well (planned for June 2019).

**F-CM:** Regarding property value, I know a couple who shared they are waiting to buy a home until property values decrease as a result of mining coming closer to town.

**F – CM:** Regarding house cleaning, no one wants to wait a month or more to get their house cleaned. **Teck Comment:** We understand, we are working through the review and approval process as fast as we can. This summer will require an adaptive management approach as we work through issues and learn as we go. The solution likely won't make everyone happy but we will do the best we can.

**F – CM:** Teck needs to stop talking and start investing some of their millions of dollars of profit into cleaning up Sparwood. Teck is ruining Sparwood, it's a mess. Nothing has changed since we met last September (Community meeting – September 18, 2018).

**Q – CM:** With the continued advancement of Baldy Ridge Extension what does it mean for employment? **A:** Employment will be sustained 25 more years until 2045 specific to Baldy Ridge Extension.

**Q – CM:** I provided material to Teck on behalf of other community members about different mitigations to address dust at site, did anyone review it?

**A:** Yes, we are trialing one of the dust suppressants at our operation. We are looking at the nozzle information provided and it is currently being reviewed for implementation by our working group.

**F – CM:** All dirty light vehicles and other service trucks should be washed on site property. There are only two carwashes in Sparwood and mine workers washing their trucks make the lines long and then when we get in there the floor is covered in mud and it gets tracked back into our vehicles.

**Teck Comment**: EVO is one of the only sites that has a light vehicle wash as you leave the property. Everyone is expected to use this and we have opened it up to other sites and contractors.

**Q – CM:** At the meeting in September you mentioned binding dust particles together using radio waves. Can you tell us more?

**A:** EVO is still keeping an eye on the radio wave towers, currently being trialed at Carmen de Andacollo (CDA). CDA has entered in to Phase II of the trial and have found the technology successful in smaller areas and are progressing to use this technology over a larger area, but continue to have issues with operational readiness (eg. sensitive/fragile equipment in severe weather). EVO continues to work closely with CDA on the technology's performance.

**Q – CM:** Everyone is talking about their vehicles and their houses but what is this dust doing to our health?

**A:** Elevated levels of Particulate Matter 10 microns in diameter and less (PM10), and more specifically 2.5 microns in diameter and less (PM2.5), have been associated with increased risks of adverse health effects, in studies conducted globally. Teck compares PM10 and PM2.5 monitoring data against the health-based BC Ambient Air Quality Objectives (BC AQO), established by the Ministry of Environment and Climate Change Strategy. Typically, monitoring results in the community remain below BC AAQO, with primary contributors to exceedances being forest fires. However, BC AAQO for airborne particulate matter do not identify target concentrations for specific constituents of concern (e.g silica) and the science and policy around guidelines for airborne particulate matter are evolving. Teck is therefore currently investigating how particulate matter concentrations and concentrations of other potential constituents of concern in the local airshed compare with standards or guidelines from other jurisdictions worldwide.

Q - CM: Does your data indicate how much silica is present in dust?

**A:** It currently does not, but Teck is investigating how particulate matter concentrations and concentrations of other potential constituents of concern in the local airshed compare with standards or guidelines from other jurisdictions worldwide by adding to our additional monitoring network.

Q - CM: On the spraying of the trains, what kind of chemical do they use?

**A:** Train cars at EVO are sprayed with a flocculant by PowerChemicals; EnviroBind DCT, similar to flocculent used on tailings. We don't know the depth the flocculent penetrated althoughh its intended to create a thick crust on the top layer. Trains are sprayed at site, Resprayed at Tappen, BC.

**Q – CM:** Are train cars weighed and then reweighed when they arrive in Vancouver? (Reference to coal dust lost on route)

**A:** The weight in the train car doesn't change. What does happen is the coal compacts during the trip to the port. The top crust can break down as the coal settles, so it is resprayed in Tappen. We reconcile all of our coal quarterly between the site and the port.

**F – CM:** I have a concern with the hump in the middle of the trains because that's where the dust is lost. **Teck Comment:** Elkview Operations are keeping the height of the coal at the sill to prevent dusting. Thank you for the pictures and the feedback, we will follow up with our Logistics team and escalate this feedback.

**F – CM**: I would appreciate my car being washed twice a week thanks to the dust present in town and on my vehicle. It would be best if Teck provided tokens to the existing local car washes for me to do this.

**Q – CM:** Is the new access road to the general office a coal based road?

**A:** The new access road will be constructed with rock, have a gravel top, and regularly will be sprayed with dust suppressant.

**Q – CM:** I've lived in Sparwood for a few years and this is the first year that we've had black snow? Can you explain?

**A:** We are working hard to manage dust from the operation and reduce dust in the community. We are trialing two micro-pulse LiDAR units to help us better understand the source of the dust onsite.

Q-CM: Are all 8 water trucks working 24/7 and on active dumps only?

**A:** No, all the water trucks do not run 24/7. On hot dry days, we will operate as many trucks as possible. When it rains, we do not operate water trucks. At night, the water does not evaporate as much, so we only run enough water trucks to keep the dust down. Over-watering can create a safety issue as the roads get slippery. We also take advantage of nighttime and rainy periods to service the water trucks.

**Q – CM:** Can't you test the dirt that is on my property that is black not brown?

**A:** We can take a sample to be analyzed visually in an attempt to distinguish coal content from other organic materials, but most tests are hindered by available quantity and interference from other materials (i.e. cleaning products, paper towel, pet dander, pollen).

**Q – CM:** Regarding PM 2.5 and PM10, what are the trends saying for the last 5-10years? Are you doing better or are you doing worse?

**A:** There is no increasing trend for PM2.5 and PM10. We are unable to determine trends in TSP due to a limited data set. The Regional Air Report includes a trend analysis and can be seen at: <a href="https://www.teck.com/media/Annual-Teck-Coal-Ltd-Regional-Air-Monitoring-Program-Report.pdf">https://www.teck.com/media/Annual-Teck-Coal-Ltd-Regional-Air-Monitoring-Program-Report.pdf</a>

**Q – CM:** Playgrounds and trampolines are dirty for kids, the dust has to be effecting the kids? **A:** Elevated levels of Particulate Matter 10 microns in diameter and less (PM10), and more specifically 2.5 microns in diameter and less (PM2.5), have been associated with increased risks of adverse health effects, in studies conducted globally. Teck compares PM10 and PM2.5 monitoring data against the health-based BC Ambient Air Quality Objectives (BC AQO), established by the Ministry of Environment and Climate Change Strategy. Typically, monitoring results in the community remain below BC AAQO, with primary contributors to exceedances being forest fires. However, BC AAQO for airborne particulate matter do not identify target concentrations for specific constituents of concern (e.g silica) and the science and policy around guidelines for airborne particulate matter are evolving. Teck is therefore currently investigating how particulate matter concentrations and concentrations of other potential constituents of concern in the local airshed compare with standards or guidelines from other jurisdictions worldwide.

**F – CM**: A Lethbridge doctor shared that they have observed more cases of cancer coming out of Sparwood.

**Q – CM:** Have you looked into health impacts?

**A:** Yes. We do a Social Baseline and Impact Assessment every few years (the last update in 2017) through a qualified third party - Golder Associates, and the health outcomes are comparable to the rest of the province of British Columbia.

**Q – CM:** What's the silica content in the dust?

**A:** We're building out our systems to understand the silica content so we don't have to make assumptions. Monitoring will begin this year, 2019. We also continue to evaluate methods to understand how much coal and mine material is in the samples. The mineral content versus where coal is and how we space those around the community.

**Q –CM:** Do you see a solution to the dust? There is no question that it's affecting our stuff. Is there feasibly going to be a solution to alleviate these problems?

**A:** We believe so, we are seeing an improvement, dust is always going to be generated from the operation. For current information on our management practices, visit <a href="https://www.teck.com/elkvalleydustmanagement">www.teck.com/elkvalleydustmanagement</a>

**Q – CM:** How much of your site has employed the new blasting technology (electronic detonators)? **A:** 60% of blasts are completed using the electronic detonators.

**F – CM:** Teck must have improved their blasting and vibration practices over the last year as we have not noticed as much or at all.

Further, we encourage community members to let us know if you have any questions or feedback about Teck's operations in the Elk Valley.

## You can submit feedback by:

- Send an email to <a href="mailto:feedbackteckcoal@teck.com">feedbackteckcoal@teck.com</a>
- Phone toll-free to 1.855.806.6854 and leaving a message
- Send a message through <u>www.teck.com/feedback</u>
- Visit Teck's Communities office in person at 116 Centennial Square, Sparwood BC