



Air Quality at Elview Operations

2017 Community Update

Teck is working to address community feedback regarding dust generated from our Elview Operations that is visible from the community.

Extended dry, hot weather conditions in 2017 have created challenging conditions and we want to assure community members that we take this issue very seriously and are taking all practical measures to reduce dust at our operation.

In addition to current practices, Elview is also working on innovative solutions to this issue including new strategies and new equipment to minimize dust generation on active waste rock dumping areas.

Teck has in place continuous monitoring equipment in and around Sparwood which monitors the level of dust particles that could potentially affect health. In 2016, and to-date in 2017, particulate matter concentrations in the community have not exceeded B.C. or World Health Organization air quality objectives.

We Want to Hear From You

We welcome feedback from the community to help us to understand whether our mitigation measures are working, and if there are new issues that we need to address.

Feedback can be left anonymously but if you leave your contact details we will always follow up with a response.

- ☎ Phone toll-free to **1.855.806.6854** and leave a message.
- ✉ Send an email to **feedbackteckcoal@teck.com**.
- 📄 Fill out a feedback form, available from Teck feedback box outside the **District of Sparwood Office**.

Dust Management at Elkview

Elkview Operations is committed to using best management practices to manage dust generated on the site.

In 2016 a Dust Management Committee was formed with Elkview's senior management, which in turn is part of a Regional Air Working Group encompassing all five mines in the Elk Valley. Under the working group, all the operations are working together to develop and share best management practices and robust monitoring systems. Teck is committed to open and transparent community engagement on this issue.

Elkview has developed an extensive dust management program which includes:

- Six water trucks that are used to keep active road and pit areas wetted to minimize dust generation. Water trucks receive maintenance priority if they are down for mechanical reasons. (fig. 1)
- Two hydroseeders to keep dust down on the lagoons, coarse coal refuse, clean coal stockpiles and various other locations around the mine site (fig. 5 and 8)
- Water sprinkler systems located at the processing plant and in-pit operations (fig. 3)
- Water cannon systems
- Wind fencing on the lagoons (fig. 2)
- Chemical dust suppression for road dust
- Train car treatment (fig. 4)
- Reclamation of former mining areas
- Cameras pointed at Elkview to help Elkview personnel understand what the site looks like from Sparwood's perspective to aid dust management planning





Continuous Improvement

In addition to the systems already in place, Elkview is working on innovative solutions including employing new strategies and new equipment to minimize dust generation on active dump faces.

New Strategies in 2017

In 2017, Elkview has:

- Purchased a new and improved water truck that uses mister systems for improved dust management on spoils. This truck has a water tank capacity of 40,000 gallons and two misters that can each spray up to 90 gallons per minute (fig. 6 and 7)
- Purchased a second hydroseeder unit to improve dust control at our processing plant (fig. 8)
- Purchased and constructed a portable mister system for in-pit use on spoils and stockpiles following successful trials of the 'Dust Boss' in 2016
- Prioritized water truck maintenance to ensure increased availability during dry and dusty conditions
- Installed a second camera at Sparwood Heights to help Elkview personnel understand what the site looks like from Sparwood's perspective to aid dust management planning

Future Plans on Dust Management

Elkview is evaluating over 30 projects to further improve dust management at site. Currently, projects underway include:

- Evaluating several chemical dust suppression products for use on heavy and light vehicle roads
- Evaluating monitoring equipment to develop triggers to alter activities at the mine site to reduce visible dusting



Air Quality Monitoring Program

Teck has in place continuous monitoring equipment in and around Sparwood which monitors the level of dust particles that could potentially affect health.

In 2016, and to-date in 2017, particulate matter concentrations in the community have not exceeded B.C. or World Health Organization air quality objectives for PM 2.5 and PM 10.

Continuous Air Quality Monitoring Station Locations

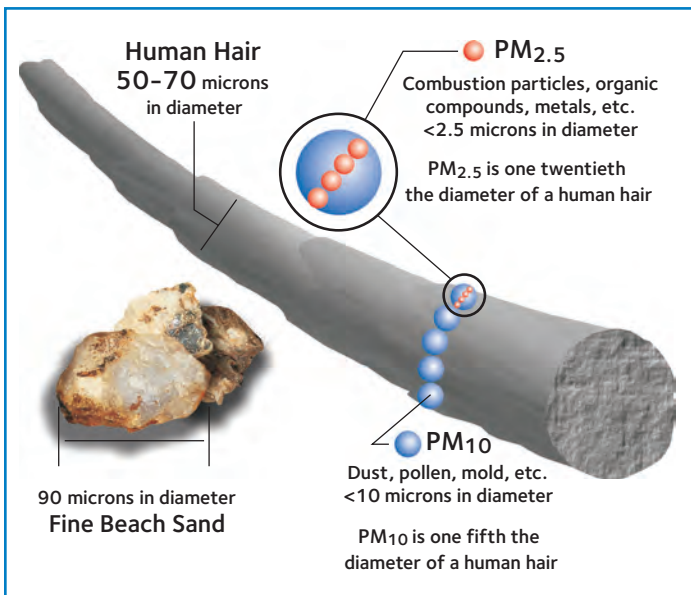


Teck has four continuous air quality monitoring stations in and around Sparwood that are maintained and verified by a qualified third party.

What is Being Monitored

Particles that make up dust come in many sizes; some are too small to see.

Air Quality regulations that aim to protect human health focus on the smallest particulate matter that is less than 2.5 microns or 10 microns in diameter (PM 2.5 or PM 10)



Continuous Air Quality Monitoring Station Locations

① Downtown:

PM 10, PM_{2.5} – data reported quarterly. Camera takes regular photos of Elkview from community's perspective.

② Michel Creek Road:

PM 10, PM 2.5 – data reported annually

③ Whispering Winds Trailer Park:

PM 10, PM 2.5 – data reported quarterly

④ Michel By-products Plant:

PM 10, PM 2.5 – data reported quarterly

In 2016, and to-date in 2017, particulate matter concentrations in the community have not exceeded B.C. or World Health Organization air quality objectives for PM 2.5 and PM 10.

Public Reporting of Data

Teck's air quality data, as well as other monitoring data, is reported to the B.C. Ministry of Environment under Elkview's air effluent permit and to the District of Sparwood.

The annual air quality report is provided to the community at www.teck.com/elkview-reports