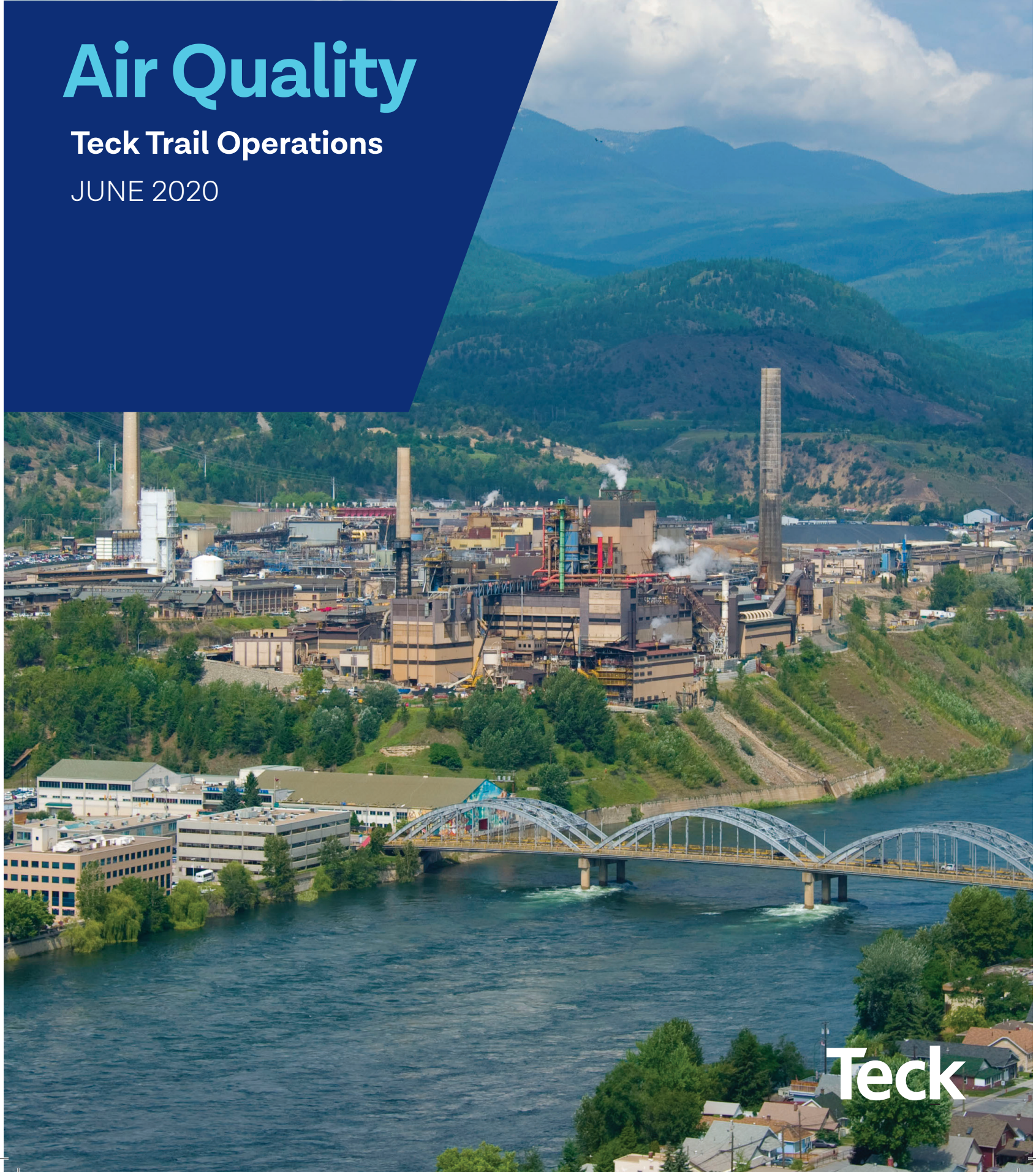


Air Quality

Teck Trail Operations

JUNE 2020



Teck

At Teck Trail Operations we strive to minimize the impact on air quality from our facility and activities. Our focus on air quality is rooted in ensuring the health and safety of our employees, our communities, and the environment.

Air quality is a key focus area for Teck Trail Operations. Over the past 30 years there have been significant improvements in community air quality. Since the installation of the KIVCET Smelter in 1997 and subsequent operations improvements, there has been a 99.5% reduction in stack lead emissions and a 75% reduction in stack SO₂ emissions. Ambient Lead levels have improved at the same time with 2019's result being the lowest ever-recorded annual average.

Trail Operations maintains an air quality monitoring network throughout the Greater Trail area, measuring dustfall, metals and SO₂. Real time air quality data is transmitted back to Trail Operations allowing Teck to respond quickly to abnormal conditions or emissions. Teck operates under air quality permits issued by the BC Ministry of Environment and Climate Change (ENV), and we provide real-time data and regular reports to the province. Summary information is provided at the bi-monthly Trail Area Health and Environment Committee (THEC) meetings and we participate in the THEC Air Quality Working Group to share more detailed information on air quality management at Teck. We are currently targeting our efforts in two main areas: fugitive dust (Lead) and sulphur dioxide (SO₂).

Fugitive Dust: With low stack emissions, fugitive dust emissions from onsite materials handling and vehicle traffic is now the major focus for reducing ambient metal levels. Fugitive dust reduction efforts include:

- construction of the Smelter Recycle Building in 2016 to enclose mixing and storage of process feed materials;
- a 10-metre high wind fence reducing dusting where we mix feeds;
- wheel washes and truck washes installed onsite help reduce tracking of materials onto roads;
- onsite street sweepers providing a year-round program of roadway sweeping and flushing; and,
- identification and reduction of fugitive dust sources from work activities in our operating plants.

Sulphur dioxide: Trail Operations currently captures more than 99% of the sulphur contained in feed and converts it to useful products such as fertilizers and sulphuric acid. While we currently meet the highest standard for sulphur capture for base metal smelters across Canada, geography and weather can also affect air quality in our community. Trail Operations operates under permits established by the BC Ministry of Environment and Climate Change (ENV). With the recent addition of SO₂ to the Canadian Ambient Air Quality Standards, these permitted levels will drop to align with the new standards. Trail Operations has already begun driving improvements to lower SO₂ emissions with several initiatives:

- Zinc Operations SO₂ emissions have been reduced by half with the installation of two state of the art Acid Plants installed in 2014 and 2018;
- Lead Operations SO₂ emissions have been reduced significantly with operating changes at one of our three main furnaces; and,
- Weather-related challenges are addressed through the best available weather modelling, and sophisticated analysis of data, to predict issues in advance and make short-term production adjustments.

Teck will be making significant investments to further improve air quality in the coming years with several projects in the planning process to collectively reduce SO₂ emissions by 50% within 3 years.



Alistair Berglund and Jesse Tessier at the Butler Park Air Monitoring Station