

SUMMARY HYBRID Meeting: September 16, 7:00 p.m.

Location: *City of Trail Committee Room #2 (Spokane St entrance) or online*

Committee Members in Attendance:

Thea Hanson, Alternate Chair, City of Trail
Dr. Karin Goodison, Interior Health MHO
Tara Bullanoff, Interior Health alternate
Trevor Allegretto, USW Local 480 Rep
Glenda Fratton, Teck Trail Operations

Carolyn Amantea, Village of Warfield
Steve Hilts, Community Member (History)
Sara Ridge, Community Member (Families)
Ron Joseph, Community Member (Resident)
Clare North, Teck Trail Operations

Others in Attendance:

Christina Yamada, Interior Health
Nelson Ames, Former MHO
Cecilee Pitman, Interior Health
Jayne Garry, Teck Trail Operations
Dave Bell, Teck Trail Operations
Keith Klimchuk, Teck Trail Operations
Frances Boreland, Broken Hill Australia

Julie Orban, BC Ministry of Environment
Alan Gibson, BC Ministry of Environment
Meghan Morris, Interior Health
Matt Parrilla, Teck Trail Operations
Tim Moore, Teck Trail Operations
Morgan Sternberg, Community Program Office
Razia Zariff, South Australia Health

WELCOME and INTRODUCTIONS

- Councillor Thea Hanson, THEC Alternate Chair, welcomed everyone to the meeting, shared a land acknowledgement and shared regrets from Mayor Jones.

MEETING MINUTES

- The minutes from THEC meeting, June 19th, 2025 were approved and will be posted online.

PRESENTATIONS, REPORTS, DISCUSSIONS & RECOMMENDATIONS

Air Quality Presentation (Lead and Sulphur Dioxide Emissions Reduction Programs)

Presenters: Keith Klimchuck and Tim Moore, Teck Trail Operations

- See attached presentation and a [higher resolution presentation is posted online](#).

Blood Lead Level Reduction Working Group (BLLRWG) update (Clare North, Teck)

- The working group Terms of Reference were reviewed (PDF attached).
- The group is currently focused on reviewing opportunities for expansion of monitoring of Pb in community air, including additional TSP and dustfall monitoring locations in the community.
- The group's work plan and activities thereafter is to be developed.

Program Reports & Updates

Air, Health, and Community Program Office reports are provided in the agenda package for your review prior to the meeting. Please bring your questions and comments for discussion.

- Highlights were shared from the children's blood lead clinics taking place currently, particularly the successful attendance in the evening clinic times.
- The Community Program Office answered questions related to soil replacement uptake; lead in paint and requirements for daycares if lead in paint (or lead based paint) is found.

Community & Round Table Check-In - All

- People asked about the WARP status which was submitted to ENV in June 2025. ENV representatives were not present to speak however the process will include a review and recommendations by ENV to their Statutory Decision Maker as well as a consultation with Indigenous Peoples.
- Alan Gibson from Ministry of Environment invited community feedback on the comprehensive review of Teck's Effluent Permit and the related proposed revisions to permitted discharge limits. Contact Alan by email: alan.gibson@bc.gov.ca or phone 778-698-4850. Comments are welcome until the end of September (or shortly thereafter). ENV hopes to have a draft permit for mid to late October.
 - Teck clarified ENV's stated purpose for the review was to examine the potential effects of discharged constituents on the receiving environment of the Columbia River in the context of current guidance, and to assess the need for revised effluent discharge limits. There is no proposed change to the nature of the discharges to the Columbia river.
 - Julie Orban affirmed that Teck has been part of the process to review the permit.
 - Community member, Ron Joseph, volunteered to provide feedback as he is an active user of the river.

Program Planning Update - Michelle Laurie, THEC Lead Facilitator (10 min)

- THEP sponsored the Trail Chamber's Business after Business event on Sept 11th, 2025.
 - Opportunity to meet with people in the community and provide a reminder of programs for all residents, including Lead Safe Renovation and soil testing.
- There was media coverage around blood lead clinics, including the [Trail Times August 20th](#), CBC (Cranbrook reporter) did an interview with PHN (interview was not posted online), a Vancouver reporter also posted an [article](#).
 - Several people shared comments on the Sept 9th article and particularly that it lacked the Trail context and actions being taken by the Program.
 - There was interest in THEP reviewing its current media approach and media release prior the annual media release on Children's Blood Lead Clinic results.
- The Community of Practice for practitioners working in communities with operating lead smelters met in August with a focus on stakeholder engagement. One further meeting is planned this year. All the information will be collated early 2026 to share more broadly.
- Michelle shared draft onboarding materials for new THEP team staff, Partner organization staff, THEC members, Knowledge Sharing & Learning Trail Group members are in development. She is interested in feedback. Contact Michelle (michelle@thep.ca) to volunteer as a reviewer.
 - Suggestions were made to include flow charts, diagrams, Venn diagrams to help explain how the program, committee and other groups work together.
 - Carolyn Amantea, Glenda Fratton, Dave Bell and Steve Hilts offered to review the draft document.
 - Ron Joseph volunteered to provide in person content / walks.

- The question of the need and value for a more 'shareable' annual report was raised. Feedback can be sent to Michelle (michelle@thep.ca).
 - The idea of a video synopsis was suggested by Councillor Hanson.

Partner Meeting Report – Thea Hanson, Counsellor/Alternate Chair

- The KS&L Trail Group Meeting was held June 25 online to update everyone on the public consultation held in January, and the Blood Lead Level Reduction Working Group. There are plans for a meeting this fall to share on air quality emission reduction programs.
- Thea invited the Committee to seek out community representation for THEC as there is one vacancy.

2025/2026 THEC MEETING DATES

- December 4th, 2025 and February 11th, 2026.
- THEC meetings are held from 7:00-9:00pm in person and online.

AGENDA HYBRID Meeting: September 16, 7:00 p.m.

Location: *City of Trail Committee Room #2 (Spokane St entrance) or online*
<https://us02web.zoom.us/j/89034531158>

Committee Members:

Colleen Jones, Chair, City of Trail
Thea Hanson, Alternate Chair, City of Trail
Dr. Karin Goodison, Interior Health MHO
Jane Power, Interior Health
Trevor Allegretto, USW Local 480 Rep
Ron Joseph, Community Member (Resident)
Glenda Fratton, Teck Trail Operations
Clare North, Teck Trail Operations
Carol Leroose, Community Member (Parent)

Linda Worley, RDKB Area B
Carolyn Amantea, Village of Warfield
Ali Grieve, RDKB Area A
Huan Liu, BC Ministry of Environment
Jasen Nelson, BC Ministry of Environment
Erika Krest, Community Member (Chamber)
Steve Hilts, Community Member (History)
Sara Ridge, Community Member (Families)
Vacant, Community Member

WELCOME and INTRODUCTIONS

- Opening remarks from Mayor Colleen Jones, THEC Chair.

MEETING MINUTES

- Review and approve minutes from THEC meeting, June 19th, 2025 (as attached).

PRESENTATIONS, REPORTS, DISCUSSIONS & RECOMMENDATIONS

Air Quality Presentation (Lead and Sulphur Dioxide Emissions Reduction Programs (50 mins)

Presenters: Keith Klimchuck and Tim Moore, Teck Trail Operations

- Presentation, discussion and Q&A to follow.

Blood Lead Level Reduction Working Group (BLLRWG) update (Clare North, Teck) (5 mins)

- Terms of Reference
- Updates

Program Reports & Updates

Air, Health, and Community Program Office reports are provided in the agenda package for your review prior to the meeting. Please bring your questions and comments for discussion.

Q&A and Comments on Reports All (10 mins)

- Q&A on all reports (Air, Health, Community Program Office)
 - Highlights from the program areas and open questions (**All**)

Community & Round Table Check-In - All (15 mins)

- Round table contributions & questions.

Program Planning Update - Michelle Laurie, THEC Lead Facilitator (10 min)

- Events and media
 - Trail & District Chamber of Commerce [Business after Business \(September 11\)](#)
 - [CBC article \(September 9th\)](#)

- [Trail Times Article \(August 20th\)](#)
- Community of Practice meeting in August with focus on stakeholder engagement.
- In Development
 - Onboarding materials /guide for new THEP team staff, Partner organization staff, THEC members, Knowledge Sharing & Learning Trail Group members.
 - Improved annual reporting

Partner Meeting Report – Colleen Jones, Chair

- June 25 & September 9

2025 & 2026 THEC MEETING DATES

- December 4th, 2025; February 11th, 2026.
- THEC meetings are held from 7:00-9:00pm in person and online.

The background of the slide is a scenic photograph of a river flowing through a valley. A wooden truss bridge spans the river in the foreground. In the middle ground, a small town with various houses and buildings is nestled at the foot of a large, forested mountain. The sky is bright blue with scattered white clouds. The text is overlaid on a dark blue geometric shape on the left side of the image.

Teck

AIR QUALITY IMPROVEMENT PROGRAMS

2025 UPDATE TO THEC

16 September 2025

Tim Moore
Keith Klimchuk

SO₂ REDUCTION PROGRAM UPDATE

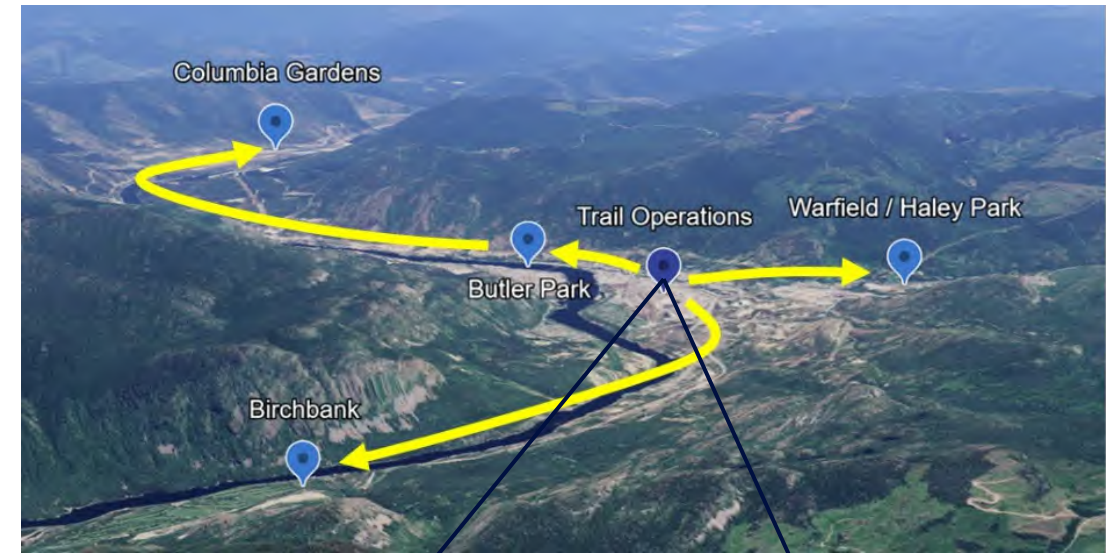
OUTLINE

- **Trail and SO₂ – Situation Overview**
- **SO₂ Emissions Reductions**
- **SO₂ Ambient Performance**
- **SO₂ Ambient Performance Initiatives**
- **Understanding the Lead Stack Plume**

TRAIL AND SO₂

Situation Overview

- Trail Operations captures > 99% sulphur; meets requirements for a new plant
- Location, weather and topography constrain dispersion of emissions
- Permit limits for ambient SO₂ levels were lowered in January 2021, and further lowered in May 2024
- SO₂ Reduction Program has been underway since 2018 to implement measures to lower emissions and achieve the new permit limits
 - Emissions reductions plans achieved
 - Ambient reductions generally achieved except Warfield Haley Park peaks are higher than expected; work is ongoing to address



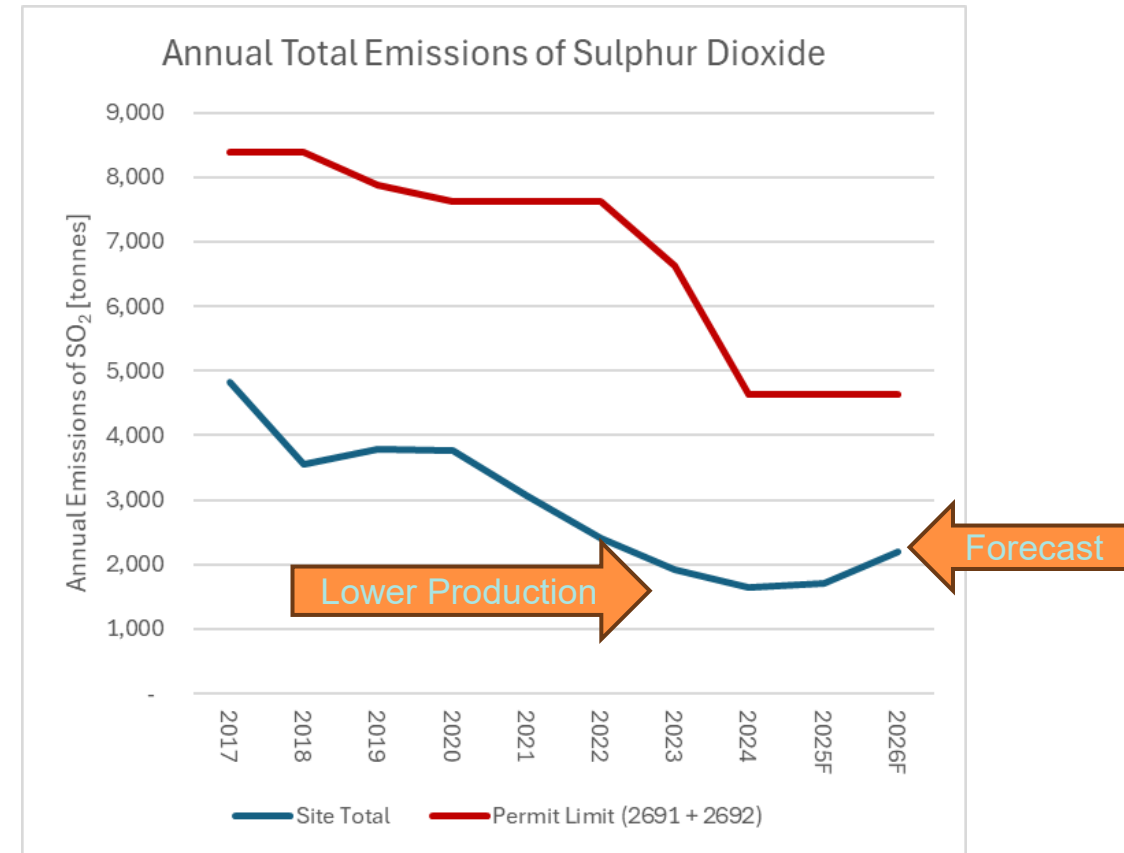
SO₂ EMISSIONS REDUCTION

2025 Update

Emissions have been reduced by over 50% since 2010:

- New Acid Plants 2014 and 2018
- Expanded use of Dry Scrubbing 2018 and 2021
- Advanced Process Controls to reduce emissions variability.
- KIVCET Feed Dryer 2024

2022 - 2024 had low production and low emissions
Some disruptions continued in 2025
Forecast emissions for planned production for
2026 onward is ~2200 tonnes per year SO₂



SO₂ EMISSIONS REDUCTION

KIVCET Dryer Project Update - One year in operation

- Feed drying temperature influences how much SO₂ is formed
- Addition of a second dryer allows feed to be dried at lower temperatures which reduces SO₂ formation
- In full operation since June 2024
- Average emissions rates from the Dryers (Lead Stack):

2020	262 kg/h SO ₂
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2025*	110 kg/h SO ₂
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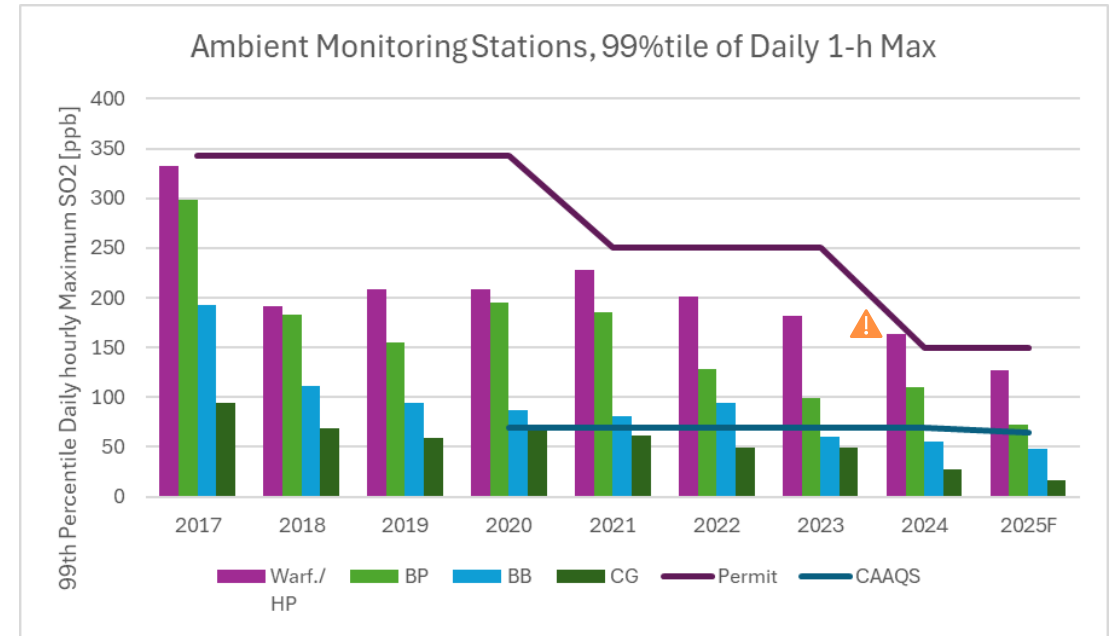
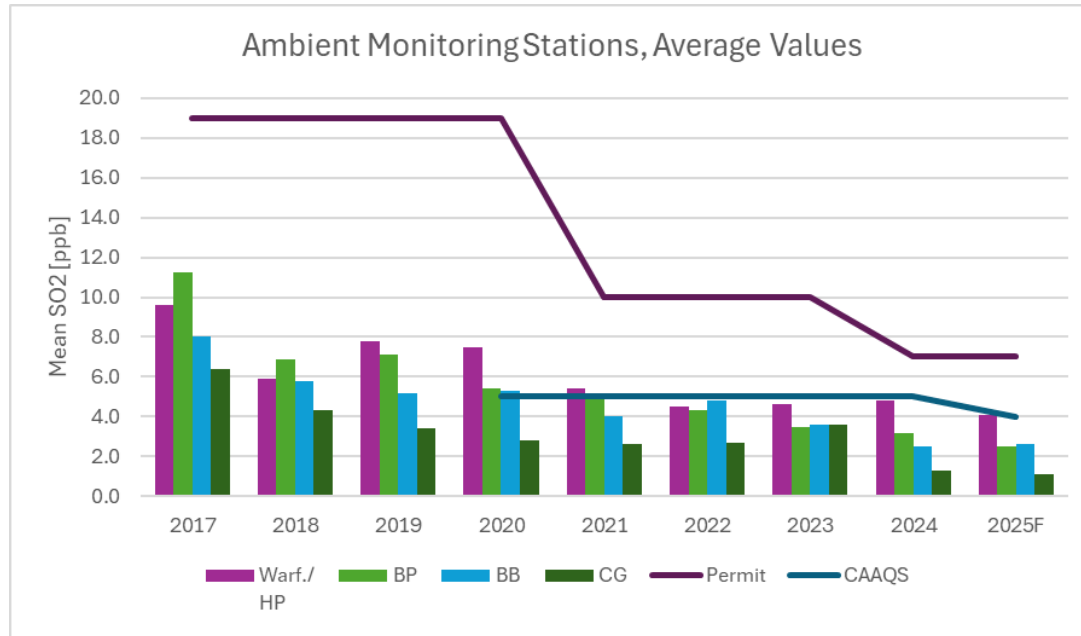
*YTD, excluding down time in June and July

- **Project has achieved the expected emissions reduction**



SO₂ AMBIENT PERFORMANCE

2025 Update



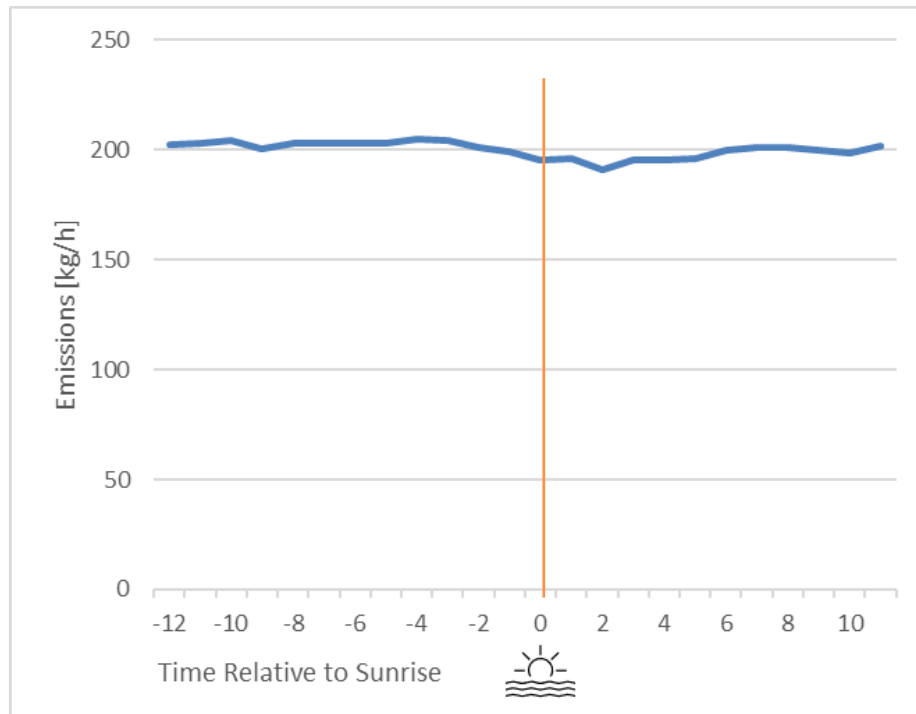
Ambient SO₂ levels at the community monitoring stations have fallen with emissions reductions

- The reduction at Haley Park from emissions reductions was less than predicted
- Control strategy appears effective, but still uncertain to meet the 99thtile 1-hour permit limit at Haley Park

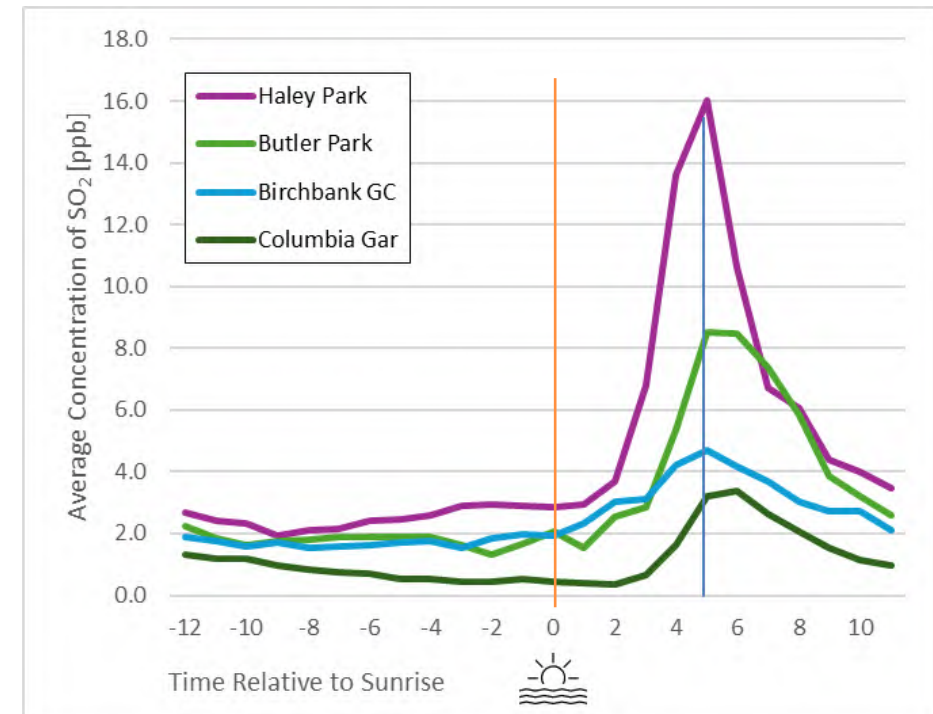
SO₂ AMBIENT PERFORMANCE - IMPACT OF DAILY WEATHER CYCLE

Variation in mid-morning peaks are driven by weather, not emissions rates

Average Total SO₂ Emissions



Average Ambient Levels



SO₂ AMBIENT PERFORMANCE IMPROVEMENT TRIAL

Working with the daily weather cycle and modulating SO₂ emissions rates

Hypothesis:

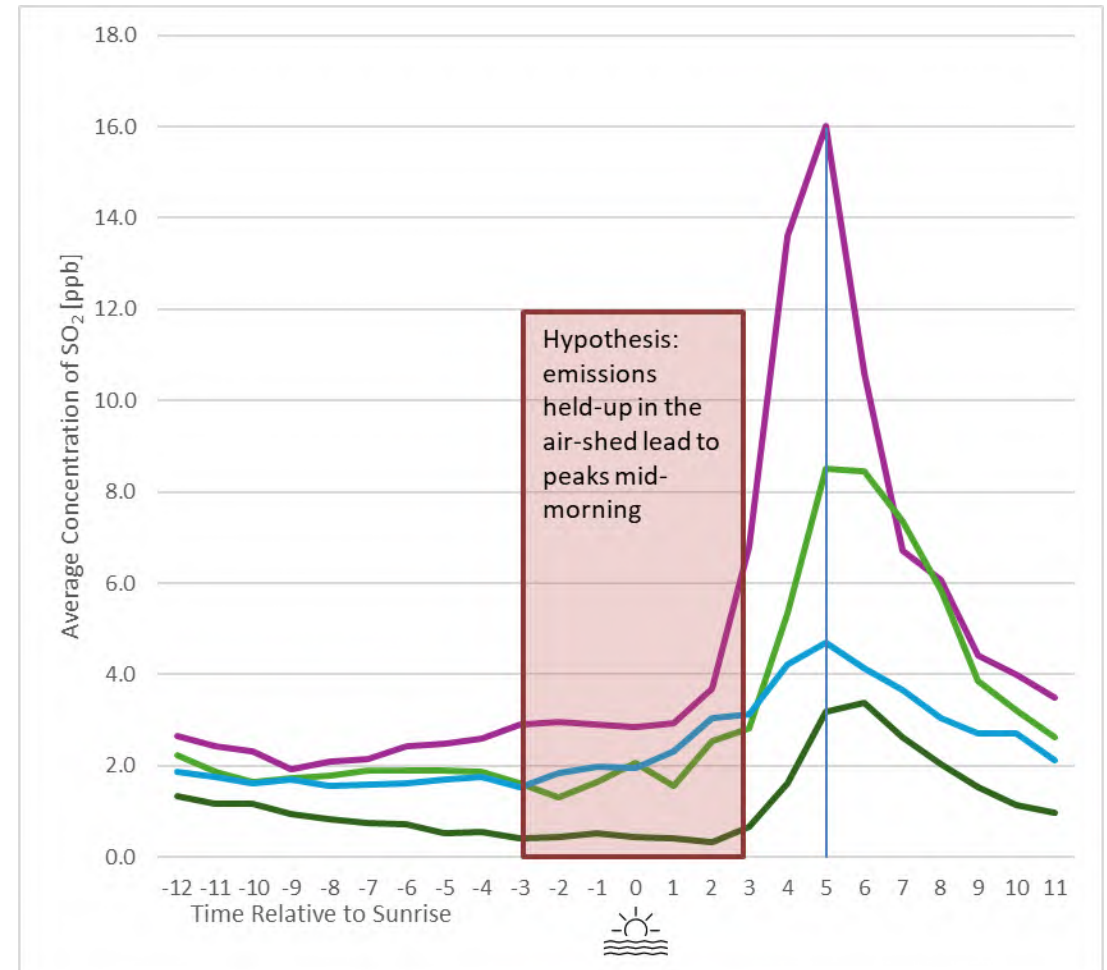
Quiescent pre-dawn air traps emissions, which are released when post-sunrise thermal energy breaks up the air mass. This explains most mid-morning peaks, though other mechanisms may also contribute.

Control Strategy:

Since October 2024, a real-time box model—using wind speed and emissions rate—has been used to predict and modulate emissions ahead of mid-morning peaks. Control variables were refined through April 2025.

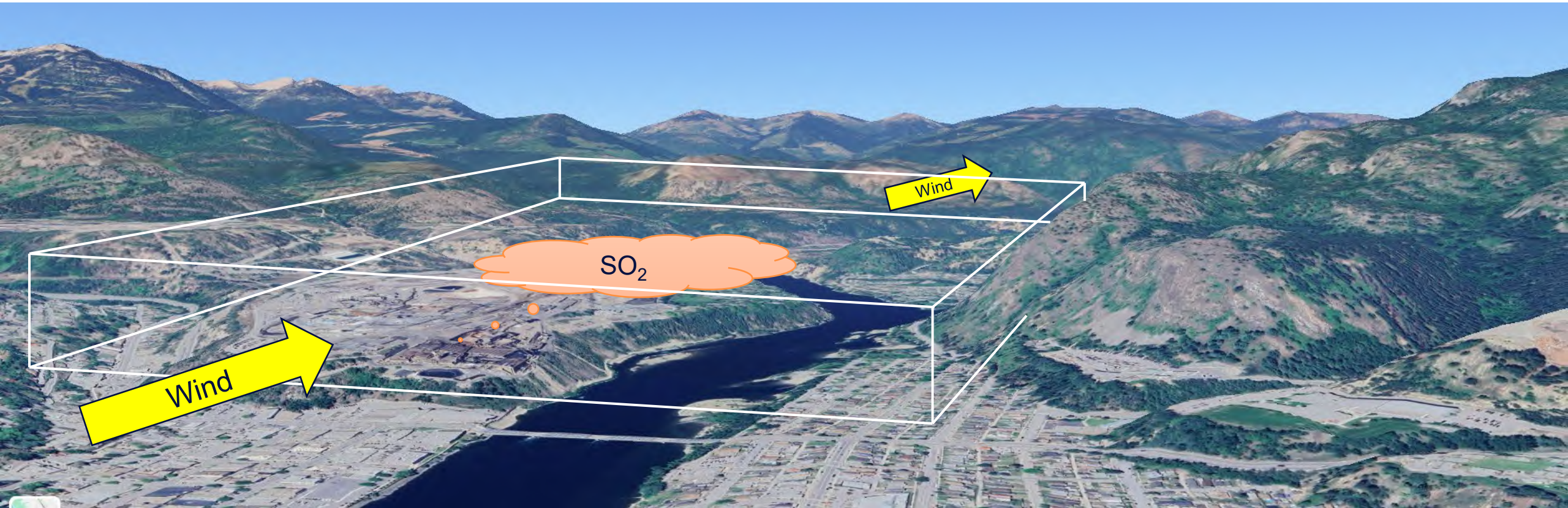
Performance:

Monitoring shows good results, with improved alignment between emissions and atmospheric conditions.



FORECASTING SO₂ PEAKS USING A BOX MODEL

Real-time estimation based on emissions rate, wind speed, and valley volume
Supports proactive emissions modulation to reduce peak concentrations



UNDERSTANDING THE LEAD STACK PLUME

How feed drying conditions influence plume visibility

Drying removes water but also vapourizes sulphur in feeds.



Sulphur vapour can oxidize to SO₂ if oxygen and sufficient heat are present.



Lower drying temperatures reduce SO₂ generation but may increase the visibility of the plume due to condensed sulphur vapour

- SO₂ is invisible and not condensable
- Sulphur vapour condenses to a solid in the cooler air



Optimizing the heat input to balance plume visibility is in progress



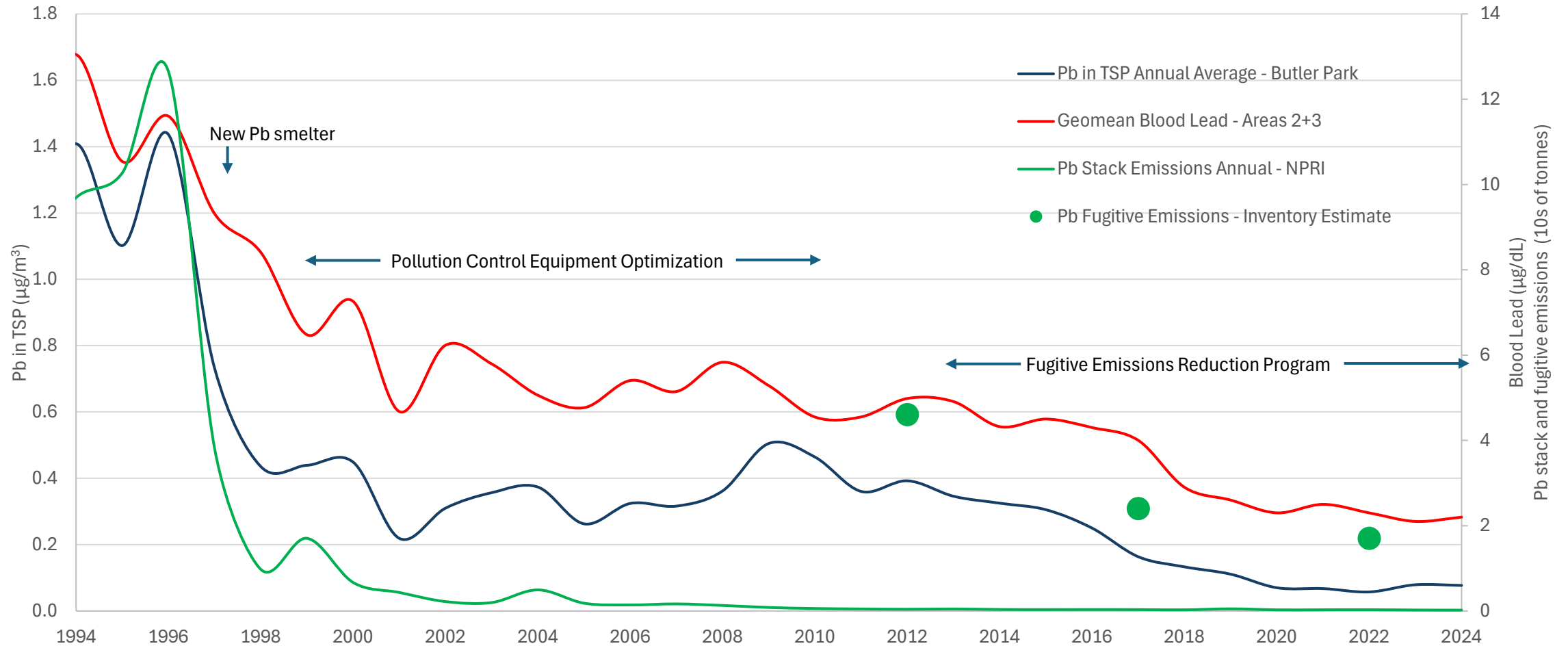
FUGITIVE DUST REDUCTION PROGRAM UPDATE

OUTLINE

- **Fugitive Dust Overview**
- **Lead in Air and Children's Blood Lead Overtime**
- **Fugitive Dust Reduction – Current Initiatives**

LEAD IN AIR AND CHILDREN'S BLOOD LEAD OVER TIME

Significant reductions in stack and fugitive emissions realized through emissions studies, monitoring, and implementation of controls to drive continuous improvement



WHAT IS FUGITIVE DUST AND WHY ARE WE TALKING ABOUT IT?

Fugitive dust is dust that escapes from stockpiles, open handling of materials, buildings and vehicle traffic on and offsite

Fugitive dust is a source of lead in airborne dust



Analysis conducted in Trail identified that there is a stronger relationship between children's blood lead and lead in airborne dust than there is between children's blood lead and lead in soil



FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Road dust reduction – new smelter wheel wash operational since Q1 2025



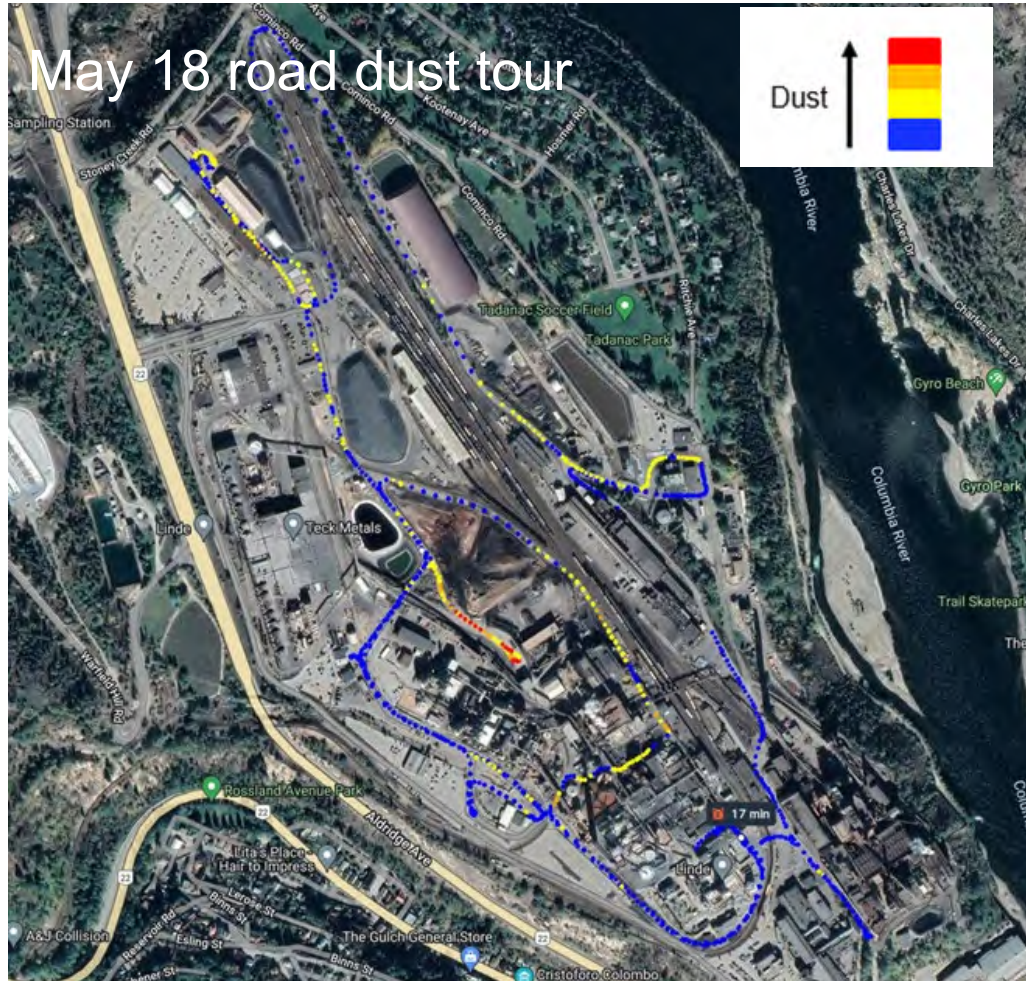
FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Road dust reduction – lower vehicle speed limits and expansion of site sprinkler locations



FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Zinc concentrate unloading: installation of a new material screen



New screen with larger openings with sloping
Installation September 2025



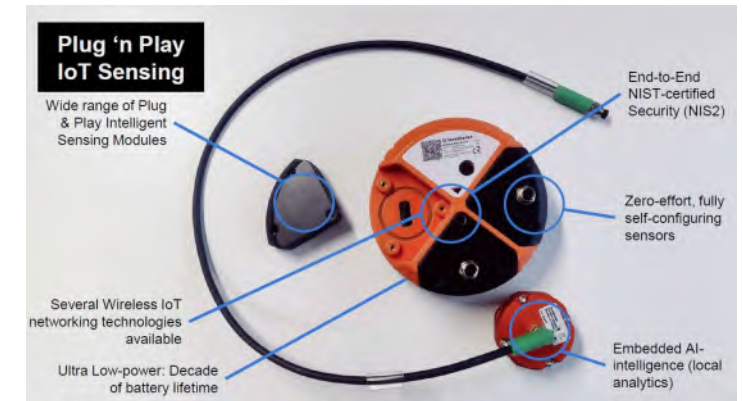
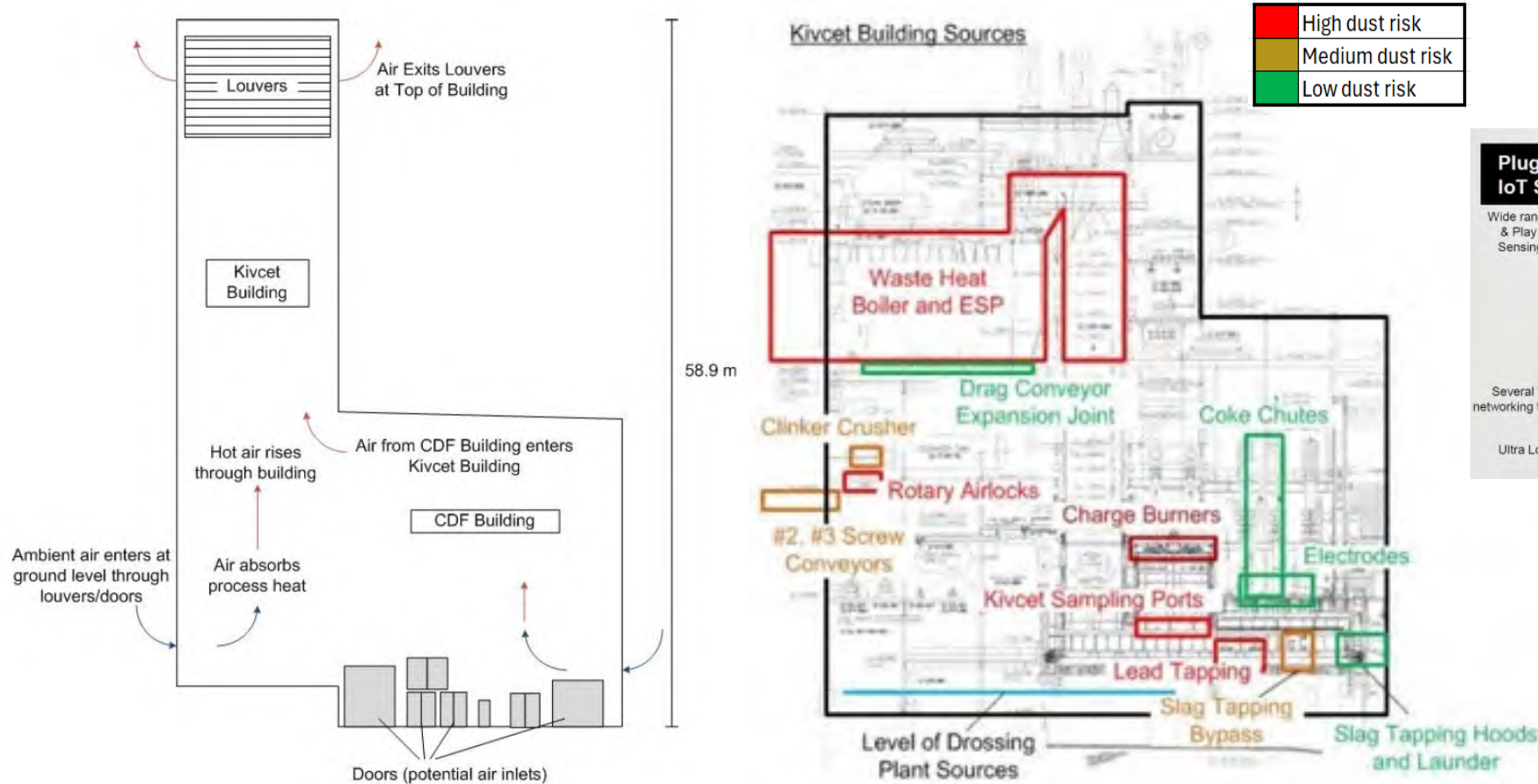
FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Expansion of wind fencing at roaster feed pad to reduce wind-initiated dust



FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Building emissions reductions: real time monitoring to support timely response to dust events and for source apportionment in order to rank and prioritize controls



FUGITIVE DUST REDUCTION – CURRENT INITIATIVES

Employee awareness and communication

Site wide crew talks and bulletins to help all employees understand importance of reducing fugitive dust and that everyone has a part to play

JUNE 2025

CORE FOCUS UPDATE

Ambient Air Performance

A message from our managers of Environment, Production and Metallurgy & Technology



Clare North
Superintendent
Environmental
Remediation



Glenda Fritton
Manager
Environment



Denny Rioux
Manager
Production



Kara Dick
Manager
Metallurgy & Technology

This month's CORE Focus Update takes a close look at the influence of fugitive dust emissions on our community ambient air performance.

Trail Operations is situated in the heart of the community. Since 2012, our activities can directly impact the community. To reduce fugitive dust emissions from our site to reduce community exposure to particulate matter, particularly lead, the Fugitive Dust Reduction Program has been successful at reducing lead in the community and we are committed to continuous improvement. However, in recent months, increasing fugitive dust emissions from site are impacting community ambient air performance. We need to work together to return to CORE ambient air performance. What we do is important. How we do it is **MOST IMPORTANT!**

Pictured right: Fugitive dust emissions reductions have improved community ambient air performance, but recently our performance has deteriorated.

What Are Fugitive Dust Emissions?

Fugitive dust emissions are all particulate air emissions from that are not released from stacks. This includes dust from m stockpiles, mixing and handling materials, vehicle traffic, an buildings. Fugitive dust emissions contain metals. Once air it can easily be transported offsite by wind.

Why Is It Important To Reduce Fugitive Dust?

Fugitive dust is a source of lead exposure in the community, which is evaluated through annual children's blood lead testing. A 2014 Interior Health study confirmed that elevated concentrations of lead in airborne dust were associated with an increased likelihood of community. Ingestion of dust is the most common route for lead exposure in children, as they often put their hands and objects in their mouths.

Continuous improvement in reducing fugitive dust emissions is a key component of our role as a partner in the Trail Area Health & Environment Program and has a direct impact on achieving the Medical Health Officer recommended target for children's blood lead, which aims to reduce the gap between blood lead levels of children in Trail and those of age-matched Canadian children.

Reducing lead in airborne dust that leaves our site is critical to reducing children's lead exposure and achieving this target.

What Are The Current Factors Impacting Our Ambient Air Performance?

Road and area dusting

Mixing, handling and transportation of materials without applying the appropriate controls generates dust which is readily blown offsite.

Process ventilation

Inadequate or inefficient process ventilation, or improperly sealed processes allow airborne contaminants to escape the process rather than being properly captured and treated.

Pressurization events

Often resulting from system upsets or maintenance activities, particularly at the KIVCET furnace.

Process equipment reliability

Equipment failures or malfunctions have resulted in unplanned emissions.

How Do We Return To CORE On Ambient Air Performance?

To reduce baseline* fugitive dust generation, we must employ checks on our processes, verifying our controls and timely application of temporary control measures where needed, and adhering to wind warnings and following our established procedures during high wind events.









Coming soon – the Fugitive Dust Daily Index – a tool for forecasting dust activities and events enabling better planning and timely mitigation actions.

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Coming soon – the Fugitive Dust Daily Index – a tool for forecasting dust activities and events enabling better planning and timely mitigation actions.

Fugitive dust daily index to communicate risk probability for planned work and prompt key controls

Fugitive Dust Index Tracker

Fugitive Dust Index Entry

Reporting

Admin

Logged On as: TECCOM\NCO\klimchu

Daily Summary Report

Fugitive Dust Indexes

09/08/2025

Low

Medium

High

Low1

Low2

Medium1

Medium2

High1

High2

Date	Business Area	Category	SubCategory1	SubCategory2	Prompt
2025-09-08	Env	Weather	Wind Gusts >= 25 km/h	Daily Precipitation - Light or None	Wind speeds > 14.5 km/h can begin to lift loosely held particulate from the ground. Light precipitation is greater than a trace and < 2.5 mm in an hour. After light precipitation, the active surface layer of roads or storage piles can dry in < 2 hours.
2025-09-08	Lead North	Refinery No2 Pot	Changing materials that require furnace doors open		Is draft for the No2 pot maximized to mitigate dusting? - ensure impingers and cyclone are cleaned, all ventilation damper positions optimized and Scrubber inlet draft within the target range (see CD 1984 Refinery Scrubber Operation, Section 6.2)
2025-09-08	Lead South	KIVCET Electric Furnace	Tapping slag to bypass granulation		Is there sufficient draft at the tapping hood to mitigate dust especially when Lead tapping is also being done? (see CD 3607 SBA Electric Furnace)
2025-09-08	Property Services	Dust controls, resourcing and availability	All wheel washes ON		It is important to restrict material track out by using the wheel washes as ambient temperatures support (see CD 3918 Section 4.3 Control of dust from work areas)

© 2025 - Fugitive Dust Index Tracker

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THANK YOU
QUESTIONS?

Blood Lead Level Reduction Working Group (BLLRWG)

Terms of Reference – July 2025

Background:

In 2022, a working group, comprised of representatives from Ministry of Environment and Parks, Ministry of Health, Interior Health and Teck, along with invited subject matter experts, was convened to study the recent environmental influences on children's blood lead levels in the Trail area to inform risk-based standards for protection of human health related to lead included in the draft Wide Area Remediation Plan (WARP) and the associated Medical Health Officer (MHO) recommendations. The MHO recommendation¹ includes a specific recommendation for this group to continue as the WARP is implemented.

The BLLRWG is not a regulatory body and does not replace the regulatory functions required between some of its members.

Purpose:

To provide diverse perspectives, expertise, and collaboratively-driven recommendations regarding the evaluation of monitoring data, emerging research, and studies from other jurisdictions, to:

- review and refine the understanding of factors that contribute to elevated blood lead levels in children 6-36 months of age residing in the communities of Trail, Casino, Rivervale, Oasis, Waneta and Warfield;
- evaluate the effectiveness of remediation and risk management actions on blood lead levels in the Trail area; and
- inform enhancements to interventions which reduce children's exposure to lead from environmental sources in the Trail area, and the WARP adaptive management framework.

Objectives:

1. Contribute to, and review and refine Interior Health's blood lead analysis to continue evolving the understanding of the association between blood lead and environmental sources of lead by providing key monitoring data and subject matter expertise.
2. Identify critical data gaps in the evaluation of the association between blood lead and environmental sources of lead and provide recommendations for the refinement of the community monitoring approach, as required.
3. Review risk management interventions, identify opportunities to quantify their effectiveness, and provide recommendations for consideration in the refinement of interventions.
4. Support the design and completion of a 5-year review of the blood lead analyses and state of the science to inform the review and refinement of the MHO recommendation and risk management interventions.

Composition:

The BLLRWG will include representatives from:

- Interior Health (IH) and ad hoc expertise as indicated
- Ministry of Health (HLTH)
- BC Ministry of Environment and Parks, Site Remediation Program (ENV SRP)
- BC Ministry of Environment and Parks, Industrial Waste Authorizations (ENV IWA)
- BC Ministry of Environment and Parks, Environmental Monitoring & Analysis Branch (ENV EMAB)
- Teck Metals Ltd. (Teck)

Other participants with expertise relevant to the Purpose may be invited to participate.

¹ Goodison, K. 2024. Medical Health Officer Recommendation Under Contaminated Site Regulation Sections 18 and 18.1 – Risk-based standards for lead (Pb) for the environmental management area surrounding Teck Trail Operations. December 2024.

Roles and Responsibilities of BLLRWG Members:

Every member of the BLLRWG has the following roles and responsibilities:

- Gather perspectives from their organization on BLLRWG activities and communicate their organization's priorities and viewpoints.
- Provide technical knowledge and identify subject matter experts, as needed.
- Collaborate with the other BLLRWG members and strive for consensus.
- Communicate within their respective organization to keep their colleagues informed.
- Be accountable to their organization, as well as to other BLLRWG members through transparent communication and consultation.
- Be respectful and open to the input and perspectives of other members.
- Ensure that recommendations developed do not contravene regulatory authority.

Decision-making:

Consistent with the BLLRWG purpose, decisions made by the group will be related to recommendations which refine the understanding of influences on children's blood lead level and associated risk management interventions. The recommendations will be taken to the party(ies) responsible for the ongoing initiatives, and the BLLRWG will work with them to determine a course of action (e.g., scope and timing of implementation, rationale for modification of a recommendation or not implementing a recommendation).

In development of recommendations, the BLLRWG will strive for consensus and will document different views when consensus on recommendations cannot be reached.

Meetings:

The BLLRWG will initially meet a minimum of four times per year, typically via video-conference. Additional meetings may be scheduled as needed in response to emerging issues or critical developments. Meeting frequency will be evaluated periodically based on identified activities and timelines.

Minutes:

Minutes will record main topics of conversation and action items to allow for open discussion on issues. Where agreement is not reached, the minutes will record the degree of consensus and divergent views.

Final meeting minutes will be distributed to the member organizations after review and approval by the BLLRWG.

Reporting and Deliverables:

The BLLRWG will provide regular updates to, and seek feedback from, the Trail Area Health & Environment Committee and the Trail Area Health & Environment Program team.

The BLLRWG activities, recommendations, and decisions related to the implementation of recommendations, will be documented and summarized in an annual report distributed to the member organizations and the Trail Area Health & Environment Committee.

Program Reports to follow:

- Air Quality
- Health
- Community Program Office
- Verbal reports: Program Planning and Partners

Air Quality Report – September 2025

The THEC Air Quality Report provides an update on levels of Pb and SO₂ in community air based on THEP's current priorities related to ambient air.

1. Lead in Air:

The chart in Figure 1 shows the 3-month rolling average for lead in airborne dust at Butler Park (blue line), in comparison to the US EPA standard (green dashed line). Federal and BC Provincial governments do not have ambient air quality objectives or standards for lead; however, it is reasonable to rely on standards from other jurisdictions when this is the case.

Lead in airborne dust levels measured at Butler Park and Birchbank meet the US EPA standard of 0.15 µg/m³ on a 3-month average. The variability in the data reflects the influence of emissions and weather including dominant wind direction and precipitation. Read THEP's Lead (Pb) [Fact Sheet](#) to learn more.

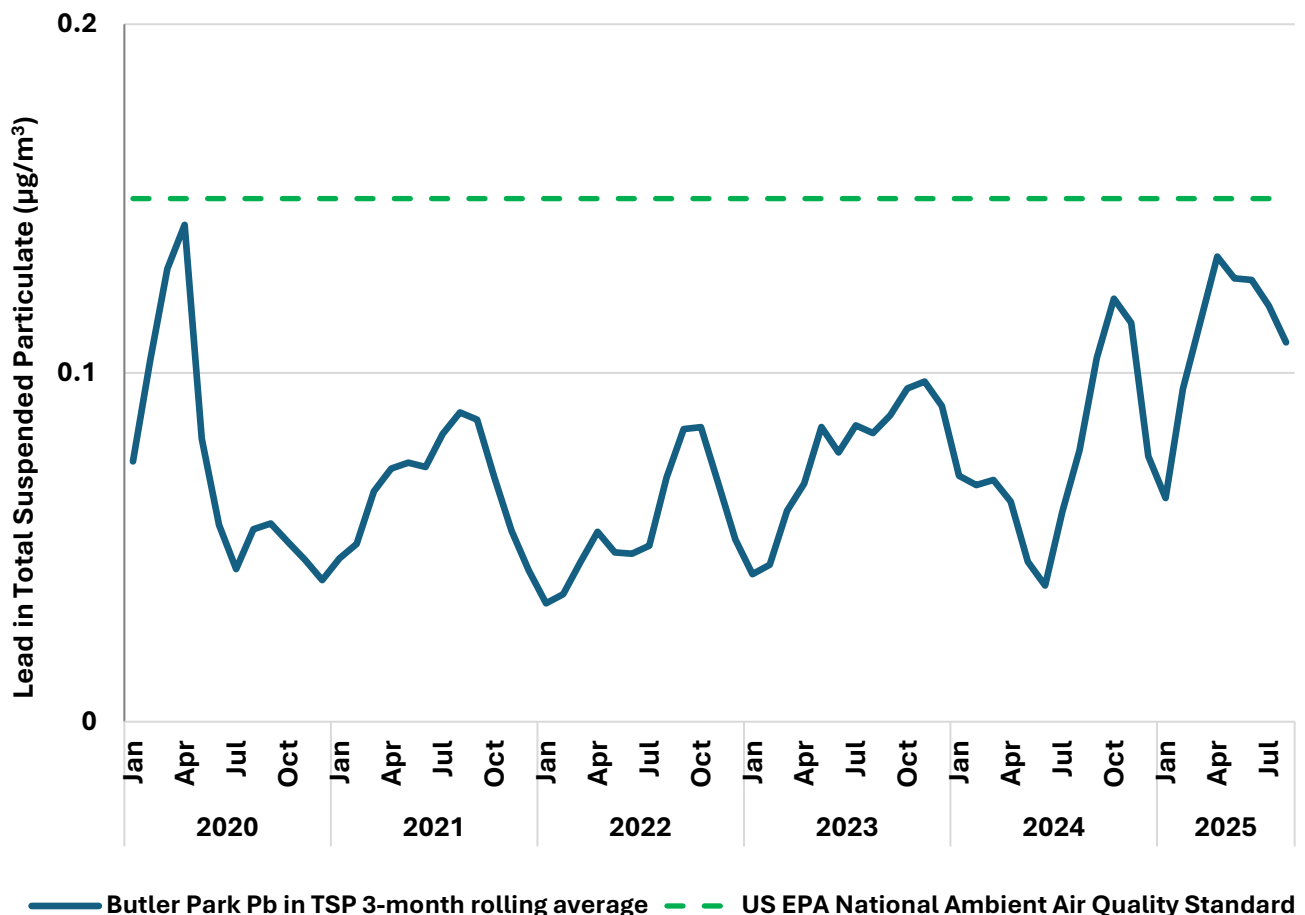


Figure 1: 3-month rolling average lead in total suspended particulate at Butler Park station (measured bi-daily)

2. Sulphur Dioxide (SO₂):

SO₂ is emitted by Teck Trail Operations as a by-product of processing mine concentrates, which contain sulphur, into metal and chemical products. Teck Trail Operations currently captures more than 99% of the sulphur and converts it to by-products, such as fertilizer and sulphuric acid. About 1% leaves the operation through emissions to air. With environmental improvements, SO₂ emissions continue to decline. However, the dispersion of air emissions from the smelter is constrained due to the location of the smelter, weather and the surrounding topography.

SO₂ is monitored by Teck at four locations in the Trail area – Birchbank, Butler Park, Columbia Gardens and Haley Park. The Haley Park monitoring station replaced the nearby Warfield monitoring station in 2023. These stations operate continuously, with near real-time data publicly available at <https://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map-SO2.html>. SO₂ levels fluctuate throughout the day, month and year.

THEP's SO₂ [Fact Sheet](#) provides guidance for actions to take when SO₂ levels are elevated. The charts below provide SO₂ hourly data from Butler Park, Birchbank and Warfield/Haley Park stations for 2015 – 2025 year-to-date, categorized by the health guidance levels. As Teck Trail Operations continues to implement emissions reductions measures, the percentage of hours within the yellow (35-185 ppb) and red (>185 ppb) categories is decreasing.

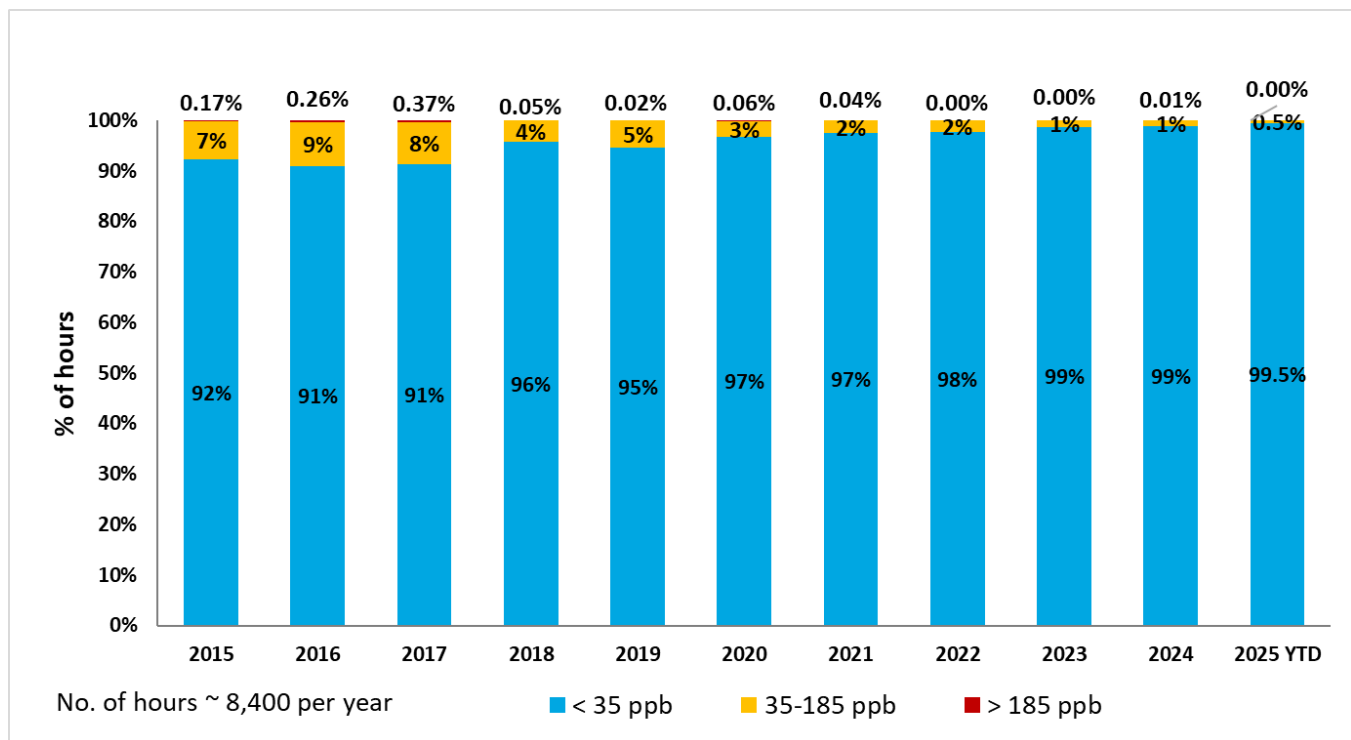


Figure 2: Distribution of Hourly SO₂ Levels at Butler Park

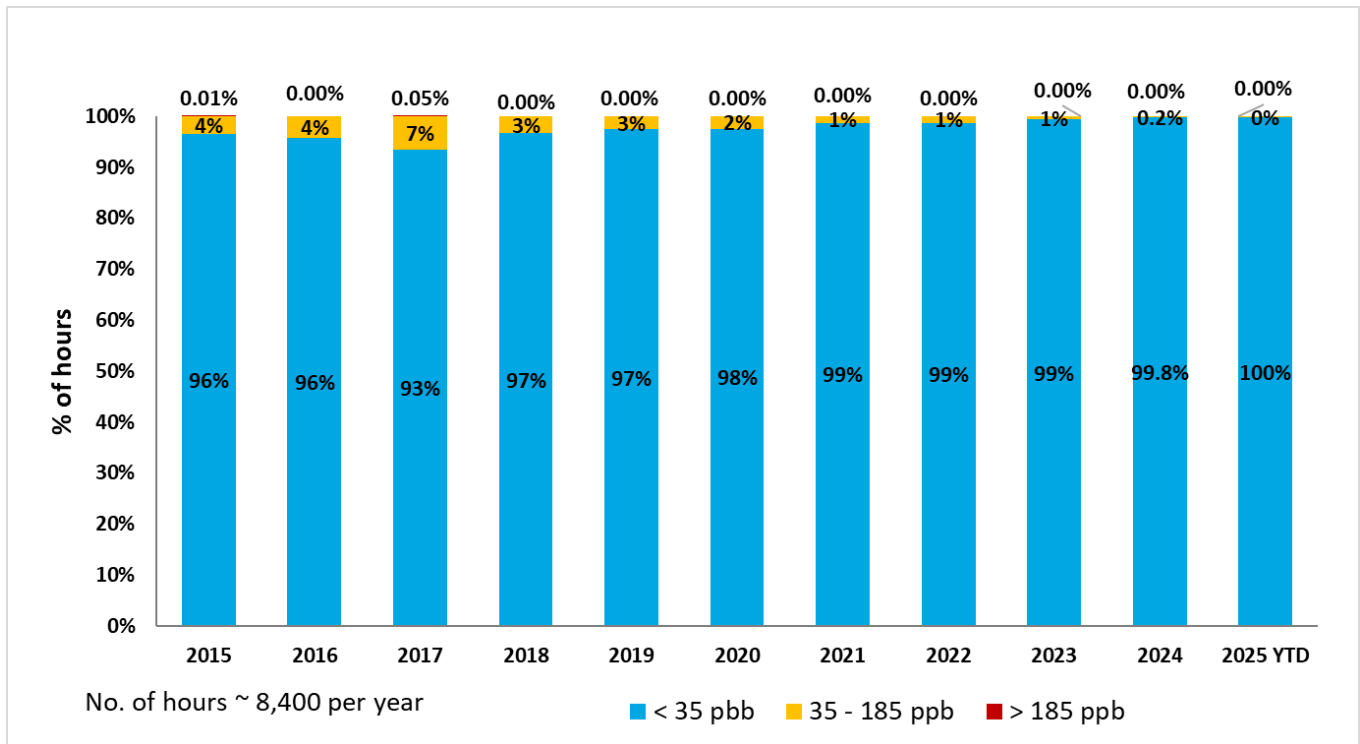


Figure 3: Distribution of Hourly SO₂ Levels at Birchbank

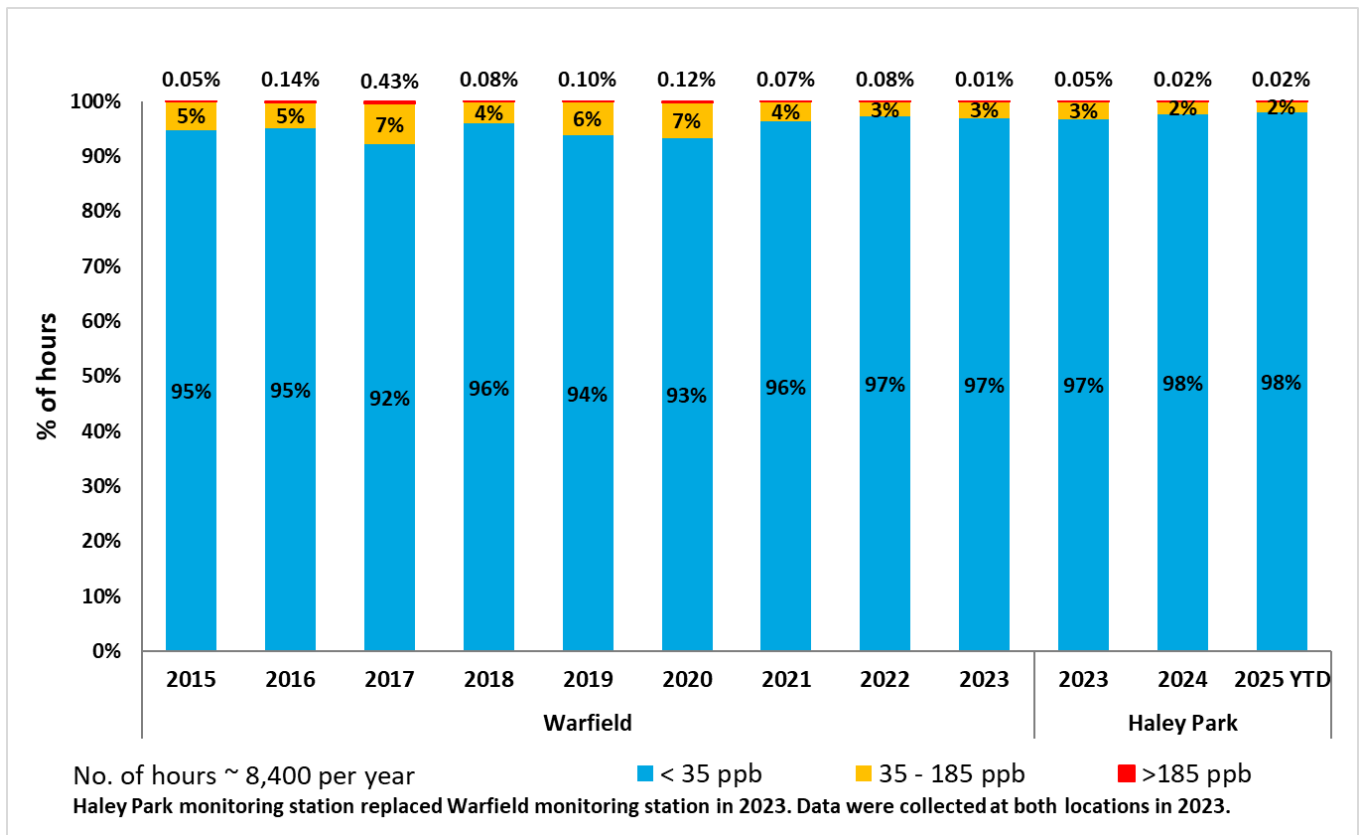


Figure 4: Distribution of Hourly SO₂ Levels at Warfield/Haley Park



Figure 5: Teck Community Air Monitoring Stations

Residents who have concerns about air quality are encouraged to call the Teck Community and Environment Feedback line at (250) 364-4817, a phone line answered 24 hours a day.

FAMILY HEALTH REPORT

Sept 16, 2025

RECENT HIGHLIGHTS

1. Healthy Family Visits
2. Community Outreach
3. Fall Blood Lead Clinic

-----ADDITIONAL DETAILS

1. Healthy Family Visits
 - 61 Healthy Family Visits completed so far in 2025
2. Community Outreach
 - Cecilee attended THEP Business After Business Event September 11th
 - Fall Community Programming is starting up and we will reengage as guests at local programs
3. Fall Blood Lead Clinic are in progress
 - 6 clinics dates this Fall Sept 3-23
 - Enhanced Support will be provided to all children with results >3.5ug/dL this Fall.



COMMUNITY PROGRAM OFFICE REPORT

September 16, 2025

Another productive summer for the Community Program Office is complete! Highlights included providing innovative approaches for soil management at numerous tough access properties, meeting with families at home visits and the IH Children's Lead Testing Clinic, and connecting with the community at various outreach events. We're looking forward to a full Fall providing support for the Trail area community.

1. Soil Management Program:

- Yard Improvements:
 - Yard Improvements: 9 properties provided DIY deliveries or removal of ground cover materials completed to date
 - Lawn Care: 54 post-soil management properties and 4 Healthy Homes (HH) properties received summer fertilizer; Fall fertilizer begins in mid-September
- Soil Assessment:
 - Soil testing: 143 properties have received soil testing; 63 properties remain
 - Ground Cover Evaluations: 59 properties completed; 7 properties remain
- Soil Replacement:
 - A total of 98 properties have been offered soil management to date
 - Full soil replacement has been completed at 46 properties to date
 - Partial soil replacement has been completed at 13 properties to date
 - Vegetable gardens have been completed at 3 properties to date
- Standardized Paint Testing¹:
 - Exterior paint testing has been conducted at 181 properties that received soil management or soil assessments.
 - Exterior paint testing has been completed at 59 child-occupied properties that received previous soil assessments.

¹ Paint testing is a term used in lieu of paint screening for public communications purposes. Paint testing requires sending paint chips to a laboratory and results are more precise. For the purpose of THEP, paint testing means THEP screened viable paint in a home using XRF technology on-site. The XRF provides an immediate reading for lead levels in a painted surface.

2. Healthy Homes:

- Healthy Homes (HH):
 - 46 HH visits completed to date
 - Three HH families expressed interest in receiving interior paint screening: 2 are completed, and 1 is on hold.
- Enhanced Support (ES):
 - No Residential Lead Inspections (RLI) have been conducted for Enhanced Support families so far in 2025.
 - Three licensed daycares have been offered a lead inspection: 1 was completed in April, 1 declined for now and the 3rd is pending consent.

3. Lead (Pb) Safe Renovation:

- 42 residents have accessed free supplies to date in 2025.

4. Outreach and Engagement:

- CPO participated in the Knowledge Sharing & Learning Trail Tour with partners to onboard new staff on June 18-19.
- CPO and Program Team members met with Casino Rifle Range representatives onsite to learn about activities and share THEP messaging on July 15.
- CPO met with Communities in Bloom national judges to present on the Soil Management Program and THEP on July 31.
- THEP Fall newsletter was sent to Trail area residents.
- IH and CPO supported the Children's Lead Testing Clinic on September 3, 9, 10, 15, and 16. An additional clinic will take place on September 23.
- CPO participated in a THEP-sponsored Trail Chamber of Commerce Business After Business event to share Program information on September 11.