

Trail Area Health & Environment Committee



MINUTES

Meeting: Tuesday, February 6, 2018 7:00 p.m.
City of Trail – Committee Room #2

Committee Members in Attendance:

Mike Martin, Chair, City of Trail
Gord DeRosa, Community Member
Marylynn Rakuson, Community Member
Mike Adams, Interior Health
Tiffany Armstrong, Community Member

Ron Joseph, Community Member
Dawn Tomlin, Interior Health
Cheryl Whittleton, Interior Health
Dan Bouillon, Teck Trail Operations

Others in Attendance:

Lynne Betts, Facilitator
Dr. Karin Goodison, Interior Health (via phone)
Julia Stockhausen, Family Action Network
Andrea McCormick, SNC-Lavalin Inc.
Catherine Adair, Teck Trail Ops
Steve Hilts, Teck Vancouver
Michelle Unger, Teck Kimberley

Clare North, Teck Trail Operations
Aaron Miller, Interior Health (via phone)
Cindy Hall, SNC-Lavalin Inc.
Bruce Enns, SNC-Lavalin Inc.
Liz Anderson, SNC-Lavalin Inc.
Jeff Rees, Teck Kimberley

Round of introductions

Mike opened the meeting and introduced Lynne Betts who was in attendance to facilitate the meeting. Lynne led a round of introductions.

Executive Committee Report – Mike Martin, THEC Chair

Mike presented a verbal Executive Committee report and shared Ruth Beck's letter to the committee informing us that she has resigned from her position as the program manager. Mike commented that it is sad news for the committee and program and that Ruth will be greatly missed. He added that this is an open-ended resignation as Ruth is willing to help with the transition. Ruth's extensive knowledge of the THEC may mean that she plays a role going forward, but we don't know what that will look like at this time.

For the interim, the THEC Executive has hired Ruth Hull for her technical expertise, and Lynne Betts for facilitation.

Mike continued his report and shared that he recently met with members of Interior Health (IH) and came to a realization that there are two distinct areas of responsibility for IH: statutory responsibility and population health. We are working on how the THEC fits into these changes as well as getting to know some new people at IH; Aaron Miller (Corporate Director, Population Health), Dr. Karin Goodison (Medical Health Officer), Dr. Kamran Golmohammadi (Medical Health Officer), Dr. Trevor Corneil (Chief Medical Health Officer, Vice President Population Health). In January, the THEC Executive met with members of IH and came to a better understanding; the MHO's role with the THEC is changing, but IH remains a committed partner with THEC.

Karin commented that the statutory requirements will sit with Dr. Golmohammadi and her focus will be on how we can make Trail the healthiest community. Karin added that she is looking forward to meeting the members of THEC in person soon.

Mike commended the clear, constructive commitment brought to the table on the part of IH; this parallels the relationship we have with the Ministry of Environment (ENV). Mike added that, longer term, we still have to work on the details of how all the elements will function together. This spring, we'll meet with IH for further clarity and then likely the THEC will form a small committee to discuss what we require for the program manager role. Mike explained he is only 'planting the seed' for the committee tonight, not seeking volunteers yet. When the time is right to form a committee (to outline the program manager description and search for a new person to fill the role), we hope to have a representative from IH, ENV, Teck, Community, and the City to participate on that committee. Mike added that he's available if people want to talk further.

MEETING MINUTES: Dated November 28, 2017

With no additions or omissions, the minutes from November 28, 2017 were approved as circulated.

PRESENTATIONS, REPORTS, DISCUSSIONS & RECOMMENDATIONS

Presentation:

2017 Children's Blood Lead Testing Results – Dawn Tomlin, Interior Health & Clare North, Teck
Dawn presented the slides from Interior Health.

Dan asked if we have much data on children up to 5 years old. Dawn replied that this is not the age range where we are focused, but we can find out if there is any data collected for the area. She added that there are some parents requesting testing for children who are older than 5 years old, but not many.

Discussion turned to the participation rate and Marylynn wondered if some families that have their children tested at one clinic don't return to subsequent ones because they are satisfied with their child's original result. Dawn pointed out that there are a wide variety of reasons given as each family is unique. Dawn shared that Jeannine works hard to stay in touch with families and invite them to the clinics, including texting families to contact them. We can re-assess the methods we use to advertise the clinics. Dawn added that there are a lot of relationship building activities and supports offered by the HFHH team.

Dawn reminded those in attendance that the 2018 Fall Blood Lead Clinic will include children from Area 1 (Upper and Lower Warfield, Oasis, Waneta, and Casino).

Dawn pointed out that after IH realized that capillary samples were less reliable measures of children's blood lead levels, the data from previous years was re-analyzed using venous sampling only, and that is the data presented in the graphs now.

Clare presented the slides from Teck.

Discussion turned to communication between primary lead smelters around the world and Clare explained that THEC is currently reestablishing a relationship with Pt. Pirie, Australia. Dan added that there is also the International Lead Association that Teck is a part of. Steve commented that the association has a strong health and safety component to it, including occupational health. He also noted that a lot of the primary smelters have closed down. Dan commented that the Mining Association of Canada also meets regularly.

Aaron Miller commented that while 63.8% of Trail children have venous blood lead levels less than 5 µg/dL, we want to have 100% of children there.

Clare continued the presentation and highlighted the downward trend for average lead in air for August of 2017. Marylynn reminded the group of her recommendation that we include a graph in the newsletter and suggested we use the graph that shows lead in air in August compared with children's blood leads. Clare commented that she is open to feedback with regard to the way information is presented during the Teck Air Quality Report.

Jeff asked for clarification as to why August is the highest month for lead exposure. Dawn commented that in August, the weather is hot and dry, and children are outside playing. Also, windows and doors are open, allowing more dust inside the home. Mike pointed out that the blood lead clinics are provided in September to measure that August exposure.

Aaron commented that the committee should consider if there is any other health data about the children of Trail that should be presented. Anything else to communicate that would be of interest to the population. Julia commented on the reports from UBC HELP (Human Early Learning Partnership) that look at the developmental health of children when they enter kindergarten. There is a pilot project for 18 month olds that provides developmental screening; the results are given directly to parents, and the need has been recognized for a platform to gather those data and then report back on the findings. Ron pointed out that the reason for the Trail Lead Task Force's being was the reduction of lead levels, and other metals came in later. THEC carries that mandate on, focusing on community health in relationship to our industry. Steve commented that THEC was also involved in catalyzing the Family Action Network (FAN) and mentioned Dr. Hertzman's (UBC HELP) work: shifting focus from the epidemiology of contaminants to all of the factors of early childhood development. We are working with others in the community for all of the benefits to children. HELP's EDI (Early Development Instrument) integrates all the aspects, and that information is valuable. Julia confirmed that the Ages and Stages Questionnaire (ASQ) is the developmental checklist she was referring to. The data from that screening tool are not being collected anywhere; the information goes to the parents. Apart from that, we do collect data at a baby's 6 months check up (though IH). This larger undertaking (compiling the ASQ data), is FAN's next big project and they hope to work with UBC HELP on it.

Discussion turned to how the program prioritizes yard remediations for families. Dawn pointed out that any child offered Case Management (CM) services receives visits from the Public Health Nurse (Jeannine) and the H&G team (with permission) to provide increased education and resources. Andrea commended that blood lead data is confidential; CM families do get prioritized, but we don't know individual children's results; so we prioritize properties where a CM family lives over properties with non-CM children, and we prioritize properties where children are over properties where no children live.

Gord asked if we follow up with children over 10 µg/dL for CM and if we should we be lowering that cut-off? Cindy clarified the CM criteria: if a child is older than 12 months old, they are CM if their blood lead is over 10 µg/dL. If the child is under 12 months old, they are CM if their blood lead is over 7 µg/dL. Also, any child that shows an increase of 3 µg/dL between clinics is also considered CM. Steve added that CM started in 1990, and the intervention level was for any child with a blood lead over 15 µg/dL and over time we dropped it to 10 µg/dL. When the reference level was lowered to 5 µg/dL, we added those criteria that Cindy spoke of. Andrea commented that Gord's point is well received and added that since 2013, THEC has shifted to prioritizing primary prevention activities: Healthy Home visits, Healthy Family visits, material supports (such as the garden kits, dust buster kits, and vacuums), and yard remediations. Cindy added that the Healthy Families Healthy Homes program was a response to the lowered reference level in 2012. Mike commented that we will keep Gord's comments in mind as well as Julia's comments on FAN's next undertaking. Cindy suggested they be added to the Blood Lead Levels Reduction Working Group (BLLRWG) agenda.

ACTION: Add to the BLLRWG discussion document: FAN's project to gather EDI/ASQ data for analysis.

ACTION: Add to the BLLRWG discussion document: are the Case Management threshold criteria up to date?

Mike presented the Blood Lead Clinic Results Concluding Messages.

Clare commented that the annual lead in air average is the lowest ever recorded (including shutdown years).

Mike presented the Draft BLL News Release. Ron commented that it is a positive statement.

Mike asked for a motion from the committee to endorse the blood lead results presentation.

Steve suggested that THEC consider that the lead in air result is a significant milestone for the committee to be proud of. In 2010, the public consultation showed that the community wanted Teck to seek the most stringent lead in air objective in Canada; this was not a regulatory requirement, but a community requirement. THEC set their goal for 2018 and reached it in 2017. Marylynn suggested it be added to the media release. Discussion continued and it was agreed to add a statement about the lead in air objective being reached to the media release. Karin commented that it's great that THEC is supporting Teck to push ahead of guidelines.

MOTION: Ron motioned to accept it the 2017 Children's Blood Lead Results and Marylynn seconded.

Gord clarified that our blood lead objective is 3.5 µg/dL *or lower*, and Clare and Steve confirmed that it is.

2017 Home & Garden Annual Report – SNC-Lavalin

Andrea and Cindy presented the 2017 Home & Garden Annual Report.

Dan raised discussion about blood lead levels and the age of the child, specifically if we see trends to blood lead levels at ages 1, 2 and 3 years. Steve spoke about a broader age group that was tested in the past; the results showed that the blood lead levels of Moms and their infants were close to background; children's blood lead levels rose starting at 6 months, peaked at 18-36 months, then curved downward. Other data from the 1970s showed that preschool kids from Trail had higher blood lead levels, but by 7-8 years old, there was no difference between Trail and Nelson kids. Some research indicates that the chances of having an elevated blood lead level after the age 3, if they haven't already had it, was near zero.

Andrea continued the Home & Garden presentation and it was suggested that we should do some Google analytics to see how many people are watching the lead safe renovation videos.

Jeff asked if remediated properties are tracked and Andrea share that we don't track their use, but we have performed long term soil testing vegetable gardens to see if they recontaminate (they do, but at a very slow rate). With regard to the care given to individual property owner's remediated yards, we have seen yard conditions deteriorate and others improve.

Marylynn offered a thank-you to the Home & Garden team for the good work.

Program Reports & Business Arising:

Community Check-In

Marylynn asked Mike for an update on the proposed curbside composting pick-up program. Mike shared that there is still a plan; they're still looking at sending organics to the established Grand Forks facility, the decision is up to the RDKB.

Air Quality – Teck Trail Operations

Clare presented the air quality report.

The 2017 annual lead level was 0.16 µg/m³ (better than the objective of 0.2 µg/m³ or lower). Dan commented that Teck saw a 35% drop in 1 year. Andrea recalled that Teck had predicted a percentage reduction of fugitive dust emissions when the Smelter Recycle Building went into operation; Teck had estimated it would be 22%.

Clare presented the arsenic in air graph and shared that 2017 was similar to 2016 and was below our objective for the 2nd year in a row.

Clare also asked the committee to think about the way this information is shared and what committee members would like to see during the air quality presentation.

Family Health – Interior Health

Dawn shared the update.

Home & Garden – SNC-Lavalin

Nothing to add from the annual report.

Program Planning & Operations – THEC Chair

Mike offered a thank-you to the group and commended the active participation during this meeting. The air quality statement will be added to the media release which will then be sent out from City Hall in the morning.

Mike shared that there will be another AQTWG meeting scheduled in the near future, and the BLLRWG meeting will happen this spring as well.

The THEC Executive would like to meet with IH soon to discuss the working relationship between IH and THEC, following that meeting, THEC will focus on filling the program manager role.

Ron commented that the AQTWG was steered by Mark and Ruth, and would like to meet again as soon as possible.

ACTION: Liz to send a Doodle Poll for early March to set the meeting.

ACTION: Clare to work with Ron on the agenda.

Gord commented that he liked the informal free talk of the AQTWG meetings of the past; the format offered the opportunity to freely discuss issues. Ron agreed with Gord.

Mike closed the meeting with a comment that chairing the committee is one of the most pleasant jobs of being the Mayor of Trail; THEC is a wonderful group doing great work.

NEXT MEETING: Tuesday, April 17, 2018

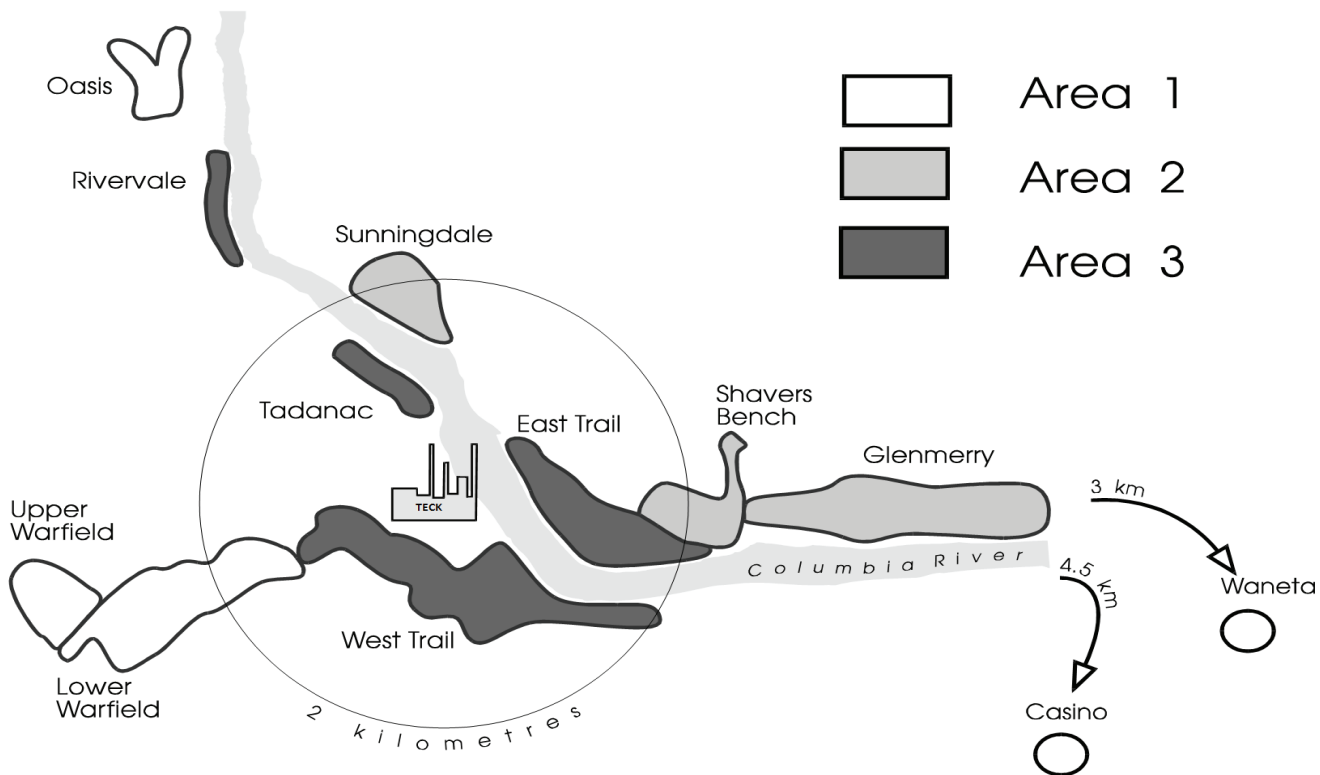
Fall 2017 Lead Clinic Results



Who Was Tested in 2017?

- Target group:
 - Children aged 6-36 months, living in City of Trail or Rivervale (Area 2/3)
- Also included are:
 - Children new to the area, up to age 5 years old
 - Previous case management clients for follow-up
 - Parents who requested testing for their child from any area

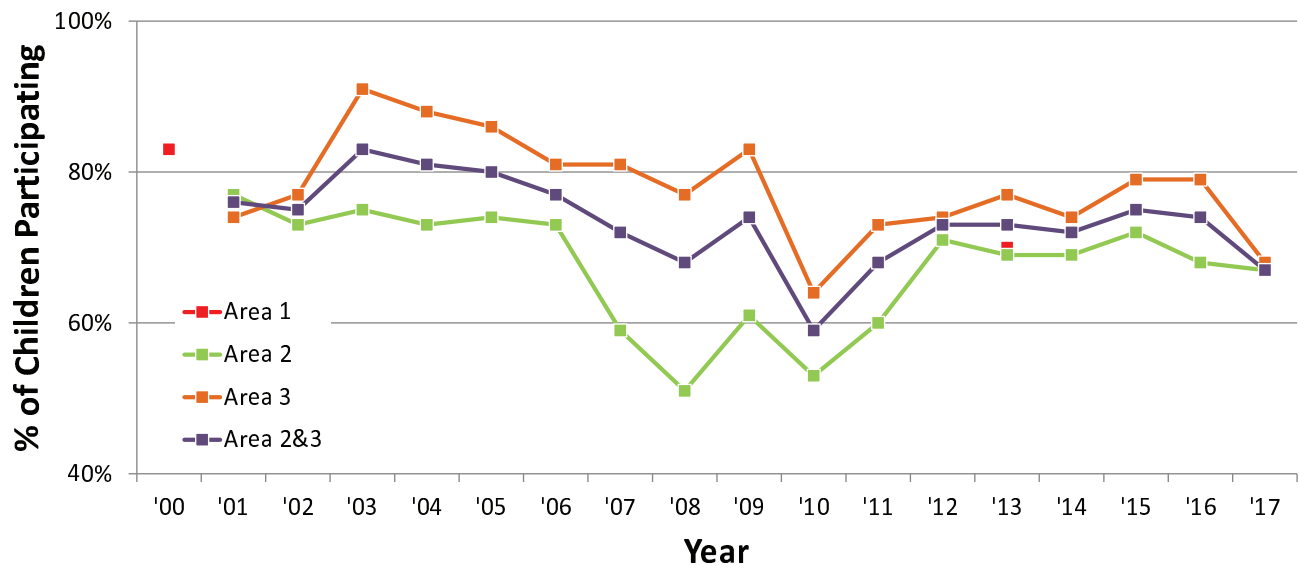
“Areas” & Neighbourhoods



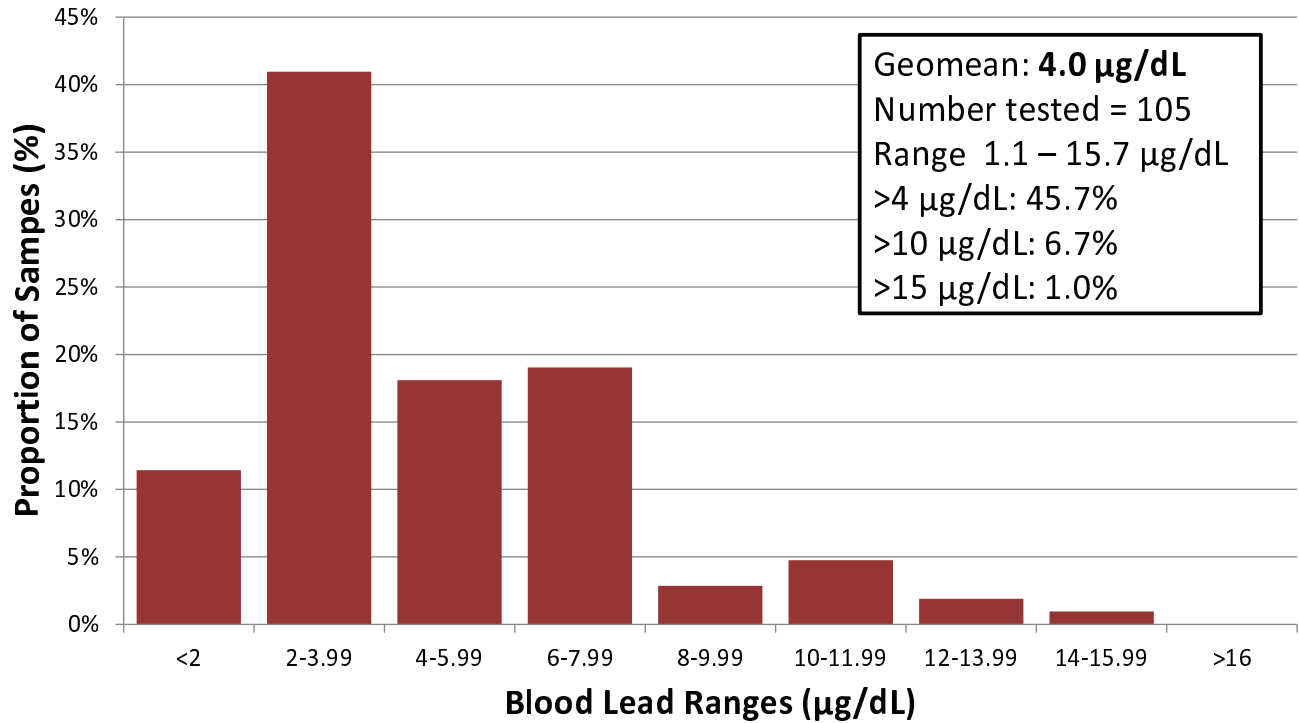
Fall 2017 Total Participation By Target Areas | 6-36 Months

Participation Breakdown By Areas				
	2017			2016
Area	# Children Contacted	# Children Participating	% Children Participating	# (%) Children Participating
Area 2	80	54	67%	54 (68%)
Area 3	75	51	68%	57 (79%)
Area 2 & 3	155	105	67%	111(74%)

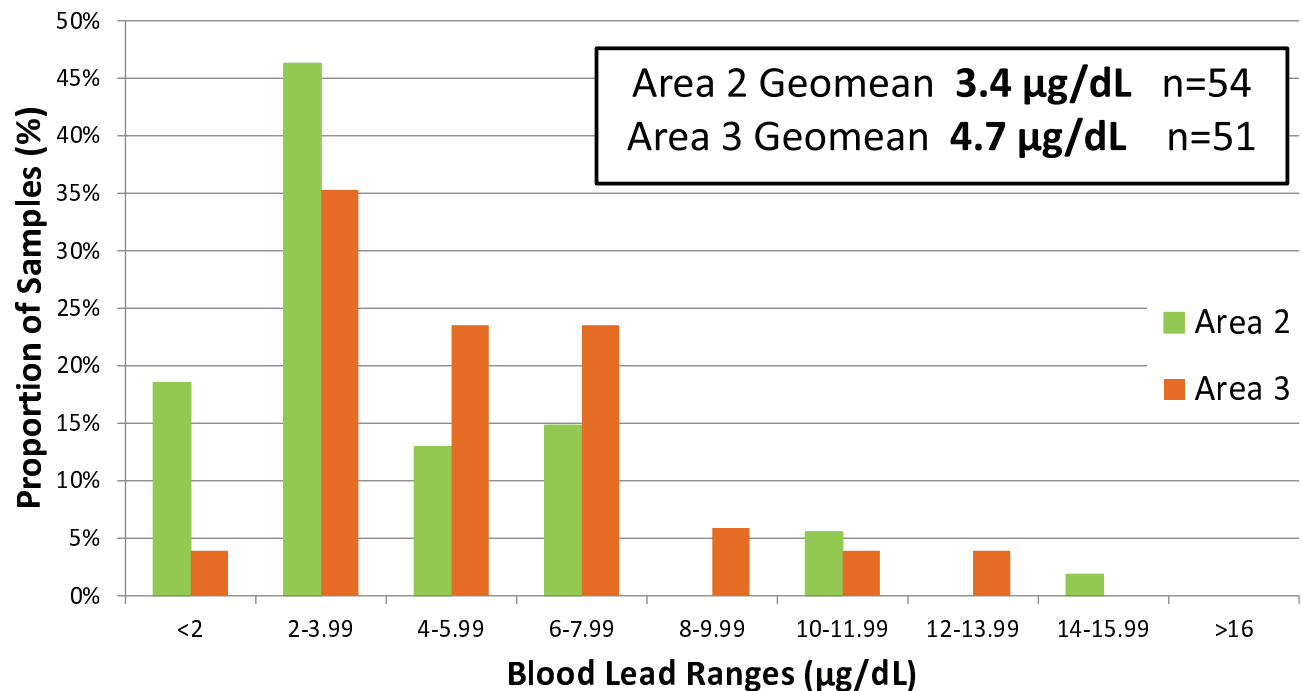
Percent Participation by Area (Year 2000 – 2017 | Age 6-36 Months)



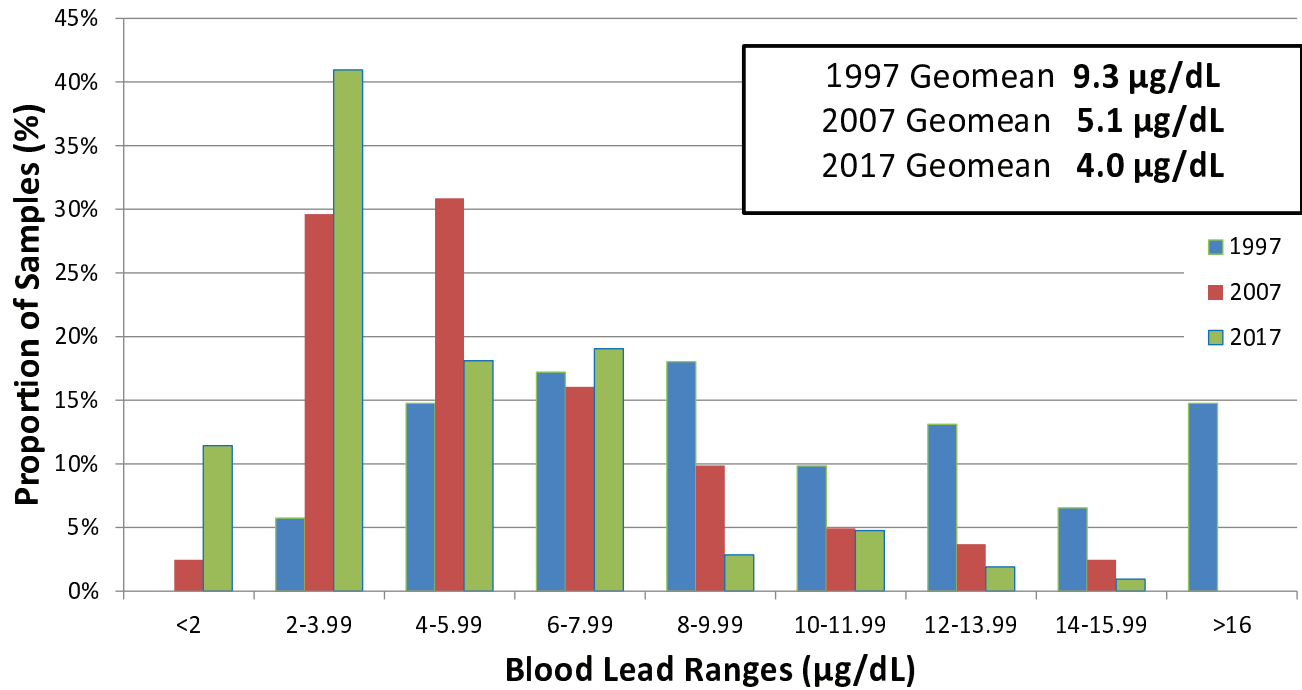
Venous Blood Lead Range (Year 2017 | Area 2/3 | Age 6-36 months)



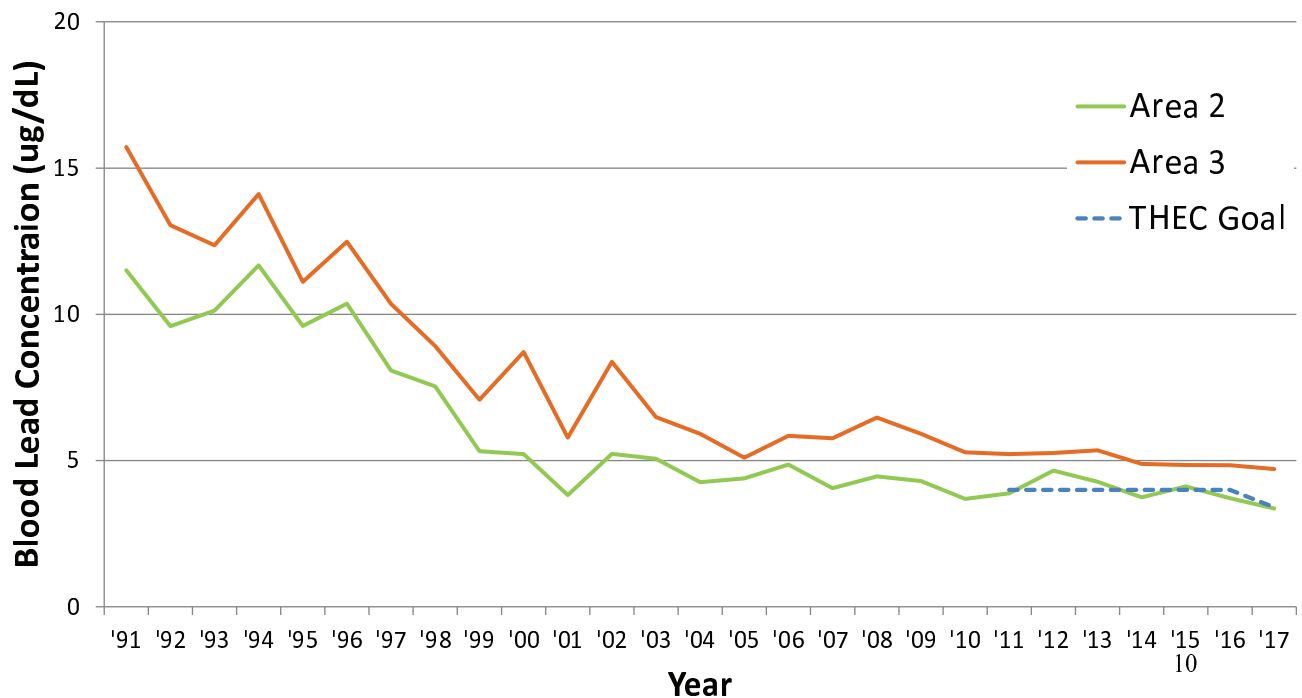
Venous Blood Lead Range by Area (Year 2017 | Age 6-36 Months)



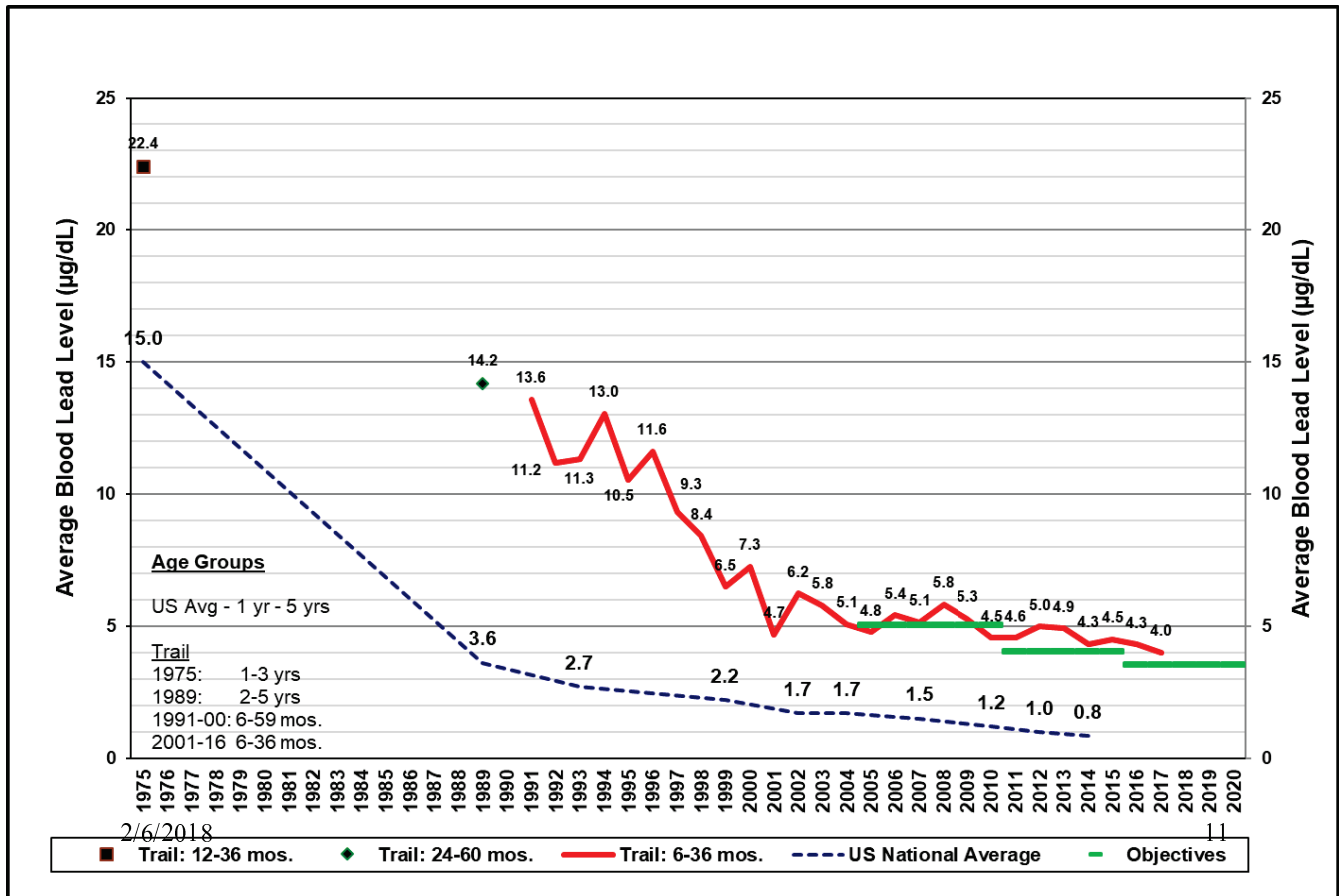
Venous Blood Lead Range (Year 1997, 2007, 2017 | Age 6-36 Months)



Venous Blood Lead Geomean by Area 1991 – 2017 (Age 6-36 Months)



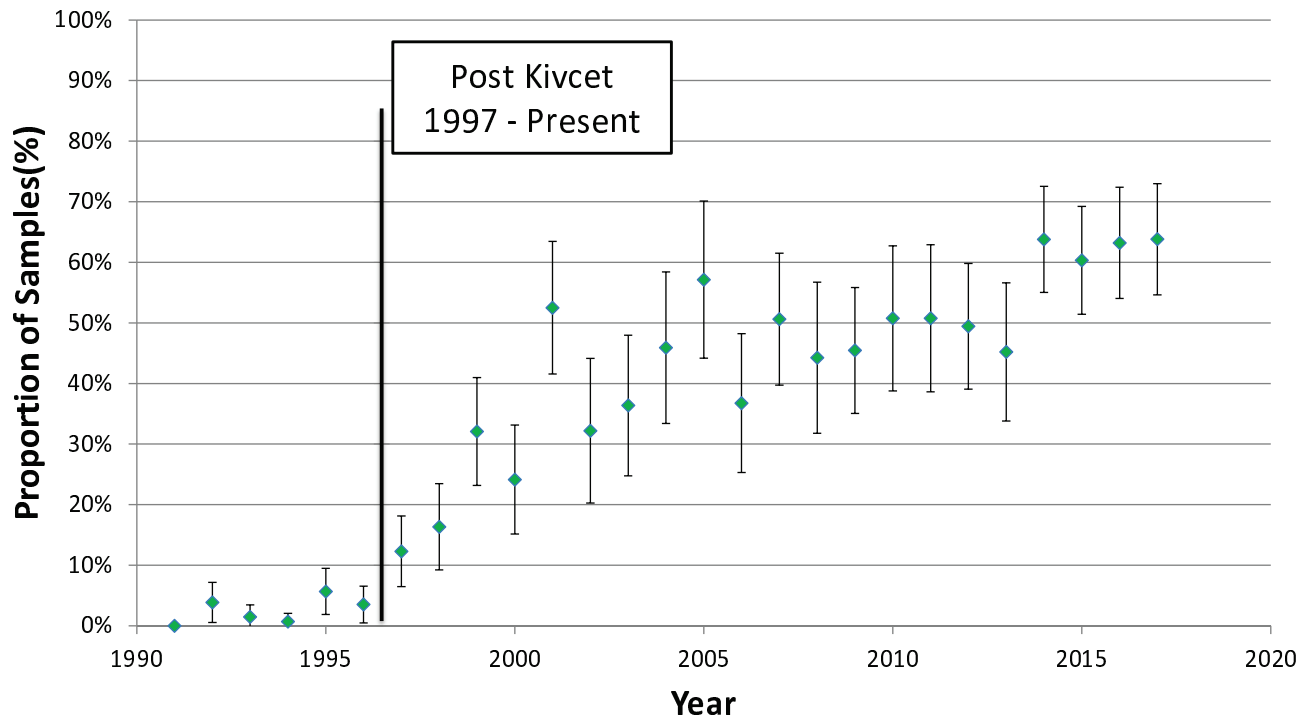
History of Children's Blood Lead Levels



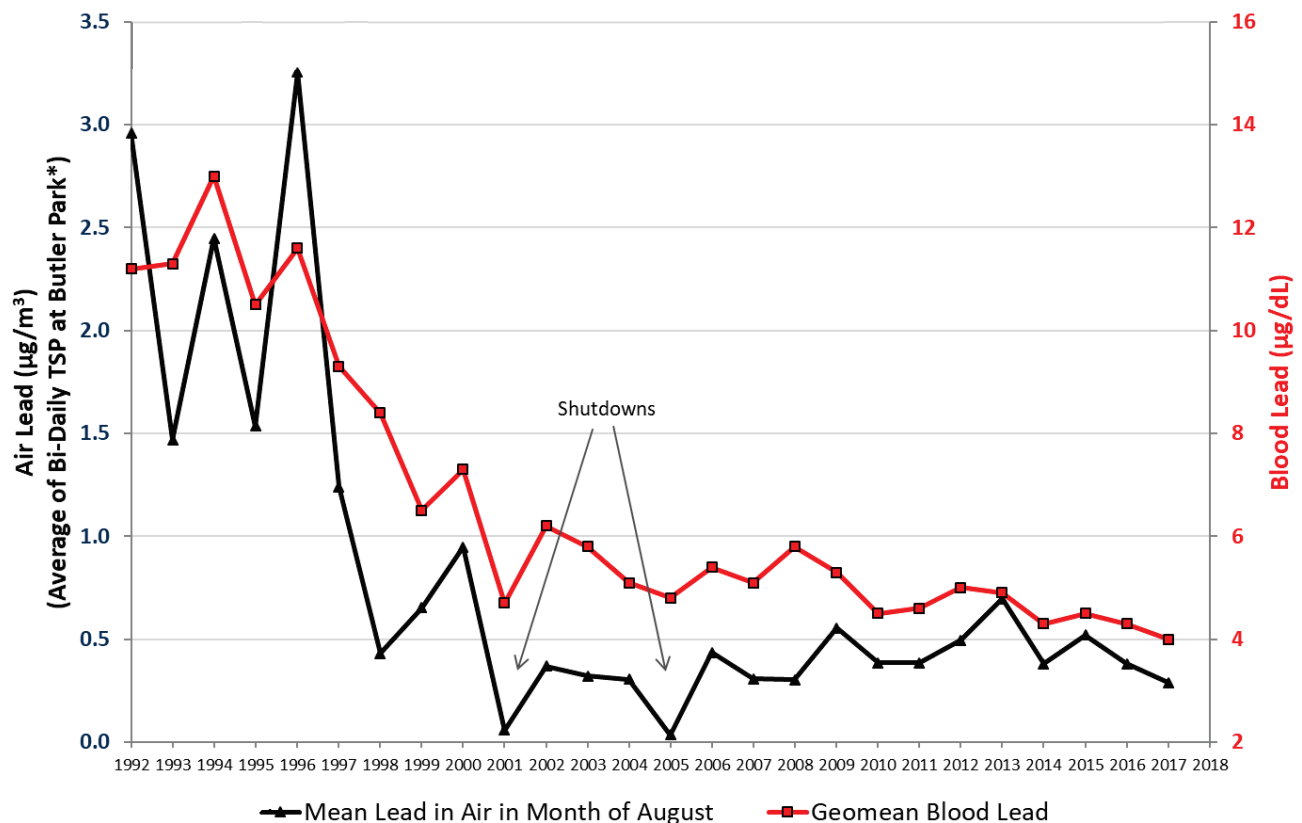
Blood Lead Levels Around the World

City/Region	Country	Nature of site	Age of kids tested	Year	Geomean Blood Lead Level (µg/dL)
La Oroya	Peru	Pb smelter closed	< 6 yrs	2011	~10
Hercalaneum	U.S.A.	Primary Pb smelter -closed	< 6 yrs	2003	8.0
Hoboken (Moretusburg)	Belgium	Secondary Pb smelter	4 - 5 yrs	2016	6.5
Broken Hill	Australia	Pb mining	1 - 4 yrs	2015	5.8
Rouyn-Noranda QC	Canada	Primary Cu smelter	6 mos to 5 yrs	1999	5.2
Port Pirie	Australia	Primary Pb smelter	<5 yrs	2017	4.6
Torreón	Mexico	Primary Pb smelter	<6 yrs	2016	4.2 median
Trail BC	Canada	Primary Pb smelter	0.5 to 3 yrs	2017	4.0
Belledune, NB	Canada	Pb smelter, industry	3 - 6 yrs	2005	3.5
Mount Isa	Australia	Primary Pb smelter/mine	1 - 5 yrs	2015	3.2
Hamilton, ON	Canada	Urban/city centre	< 6 yrs	2008	3.0
Flin Flon, MB	Canada	Closed Cu smelter	0.5 - 6 yrs	2011	1.4
St Johns, Nfld	Canada	Urban	1 - 5 yrs	2011	1.2
Nation-wide	U.S.A.	Urban/rural (NHANES)	1 - 5 yrs	2014	0.8
Nation-wide	Canada	Urban/rural (CHMS)	3 - 5 yrs	2015	0.7
Vancouver	Canada	Urban/city centre	2 - 3 yrs	1994	5.4
Fraser Health	Canada	Urban/city centre	0 - 5 yrs	2014	<2

Venous Blood Lead < 5 $\mu\text{g}/\text{dL}$ (Year 1991-2017 | Age 6-36 Months)



Geomean Lead Levels for Trail Children aged 6-36 Months and Air Lead Levels in Month of August



* Air data prior to 2003 were collected at West Trail; these data were multiplied by 1.7 to be equivalent to Butler Park

Concluding Messages

- The 2017 geomean for children's blood lead results is 4.0 micrograms per decilitre, the lowest level recorded to date
- While blood lead clinic participation declined slightly in 2017, there continues to be a high level of participation in this voluntary program



15

Concluding Messages

- There has been significant improvement in children's blood lead levels over the past 20 years
- Since 2001, the decline has slowed but blood lead levels in Trail have continued to decline
- There is no known level of lead exposure that is considered safe
- The lower the blood lead level, the better.



16

Concluding Messages

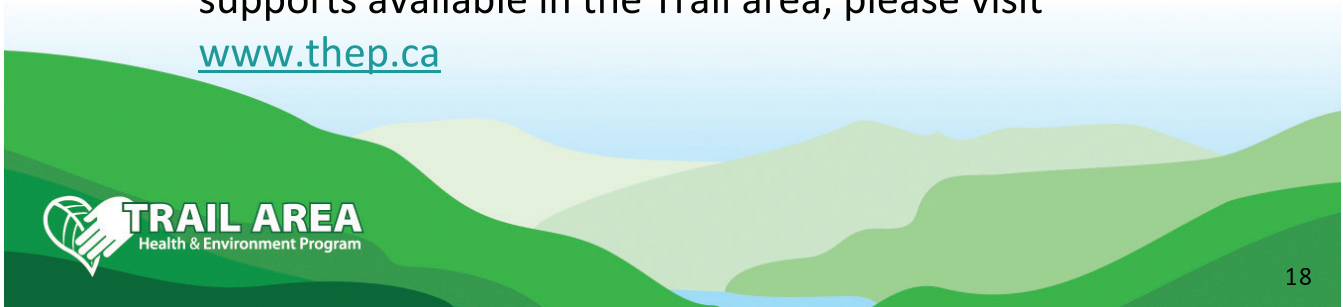
- The level of lead in community air continues to be correlated with blood lead levels
- In 2017, the level of lead in air was the lowest ever recorded (excluding shutdown years)
- Teck's Fugitive Dust Reduction Program is starting to show benefits; it offers the greatest opportunity for future emissions reductions



Concluding Messages

- The THEC offers a comprehensive integrated program of emissions reduction, soil remediation, lead safe renovation, and programs for families.
- With this program, the THEC aims to reduce blood lead levels to a geomean of 3.5 micrograms per decilitre by 2020 and lower levels in future.
- For more information on lead, its effects, and the supports available in the Trail area, please visit

www.thep.ca





TRAIL
A R E A
HEALTH &
ENVIRONMENT
COMMITTEE



NEWS RELEASE

2017 Children's Lead Levels are the Lowest to Date

February 7, 2018

Results from the Trail Area Health & Environment Committee (THEC) 2017 children's blood lead testing clinic show that the average blood lead level for children aged six to 36 months in Trail and Rivervale is 4.0 micrograms per decilitre with 92.5% of children testing below 10 micrograms per decilitre. This is the lowest result to date for the community-wide average. There continues to be a very high participation rate for this voluntary program.

The THEC is continuing its efforts to further reduce children's blood lead levels to achieve an average of 3.5 micrograms per decilitre or lower by 2020 for children aged six to 36 months in Trail and Rivervale.

In 2017, the annual average lead in community air was 0.16 micrograms per cubic metre. This achieves and exceeds our 2018 Air Quality goal of 0.2 micrograms per cubic metre, which was set by the committee through its public consultation in 2010, and was the most stringent in Canada at the time.

"Our 2017 results are a milestone for our community," says Mayor Mike Martin, Chair of the Trail Area Health & Environment Committee. "With the support of the community and through a comprehensive program, we're heading in the right direction toward meeting our 2020 goal for children's lead levels. This is the first year that Teck's new Smelter Recycle Building was in full operation and we were expecting a positive impact. Teck Trail Operations' continued investments in reducing fugitive dust emissions are viewed as the greatest opportunity to further reduce children's lead levels. This, in combination with our other programs such as soil testing and remediation, Healthy Families Healthy Homes, and lead safe renovation support, has us on course to achieve lower blood lead goals in future."

Dan Bouillon, Manager, Environment at Teck Trail Operations says: “Teck is focussed on improving community air quality. Our 2017 results show a significant reduction in our air emissions, and the lowest level ever for lead in community air. Our fugitive dust reduction program, including the investment in the Smelter Recycle Building, which was fully operational last year, is having a positive impact and moving forward we are continuing to invest in opportunities to further reduce emissions.”

About the Trail Area Health & Environment Program

The Trail Area Health & Environment Program is a community-led program with five main areas of activity: Family Health, Home & Garden, Air Quality, Parks and Wildlands, and Property Development. THEC promotes a healthy environment through a comprehensive integrated program that successfully improves air quality and children’s blood lead levels, and promotes the health of the community. The Air Quality Program reduces smelter emissions and makes the largest contribution to achieving health and environment goals. All our activities work together to get the best results – lower exposure, lower health risks, and a healthier environment.

The Trail Area Health & Environment Committee (THEC) oversees the program. THEC is a partnership between the local community, Teck, the Ministry of Environment, and Interior Health. Over the past two decades of successful collaboration, children’s blood lead levels in Trail have reduced significantly and air quality has greatly improved. THEC’s community-led partnership has been recognized internationally as an effective collaborative model for safeguarding health and the environment. In 2011 the program received a Premier’s Innovation and Excellence Award for Partnership. For more information please visit www.thep.ca

For more information, contact:

Mayor Mike Martin, Trail, Chair of the THEC (250) 364-0809

Catherine Adair, Community Relations Leader, Teck Trail Operations (250) 364-4878



HOME & GARDEN 2018 Annual Summary

Summary to the THEC
February 6, 2018

Outline

- Home & Garden Staff
- Healthy Homes
- Outreach Activities
- Community Program Office
- Soils Program
- Home & Garden Program for 2018

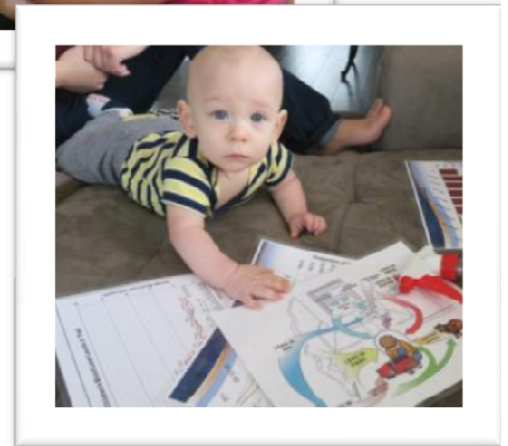


Home & Garden Team



Healthy Homes

- **77 Healthy Homes Visits completed in 2017**
 - 54 'new' families identified in 2017
 - 93% participation rate
- **9 families ready for a visit in 2018**
- **465 HH visits since 2012**



Healthy Homes Visits Service Wait Days *	2012	2013	2014	2015	2016	2017
	312	114	42	35	17	17

* Initial contact to HH visit, not including weekends

Healthy Homes

- 69 HH specific interactions
- Material supports

HFHH Support Provided to Families	
Dust Buster Kits	63
Yard and Garden Kits	56
Household Vacuums	57
Disposal Bin Rental	6
Sandboxes	19
Lawn Care	31 properties
Paint Screening	7 properties
Extra entrance mats	18





Housecleaning Services

One-year Trial of Housecleaning for Case Management (CM) Families

- **7 CM families participated**
- **Range of services provided depending on need**
- **Results**
 - First year indicates housecleaning may have helped reduce blood lead levels
- **Next steps**
 - Offer to all CM families for 2018
 - Continue to evaluate the effectiveness of this program

Community Outreach

ENGAGEMENT ACTIVITIES

- **THEP and Community Events**

 - Mark Cullen @ Home Hardware
 - Trail Market Family Zone

- **Presentations**

 - Family and Individual Resource Society (FAIR) Staff Meeting

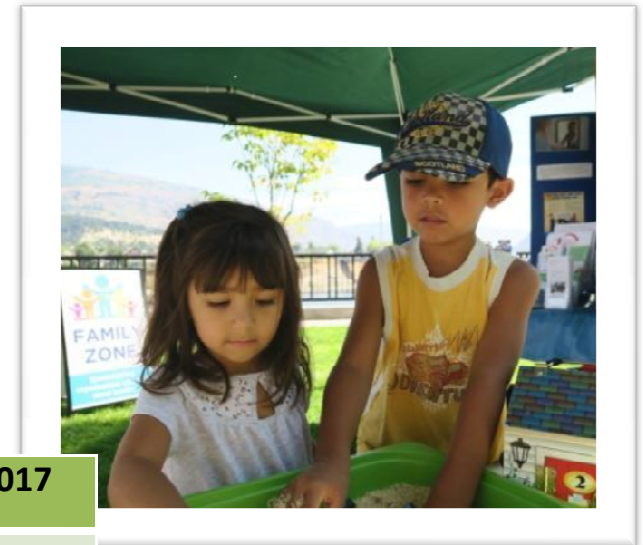
- **Community Collaboration**

 - Surviving to Thriving - Poverty Reduction Summit



Community Outreach

How do families find us?

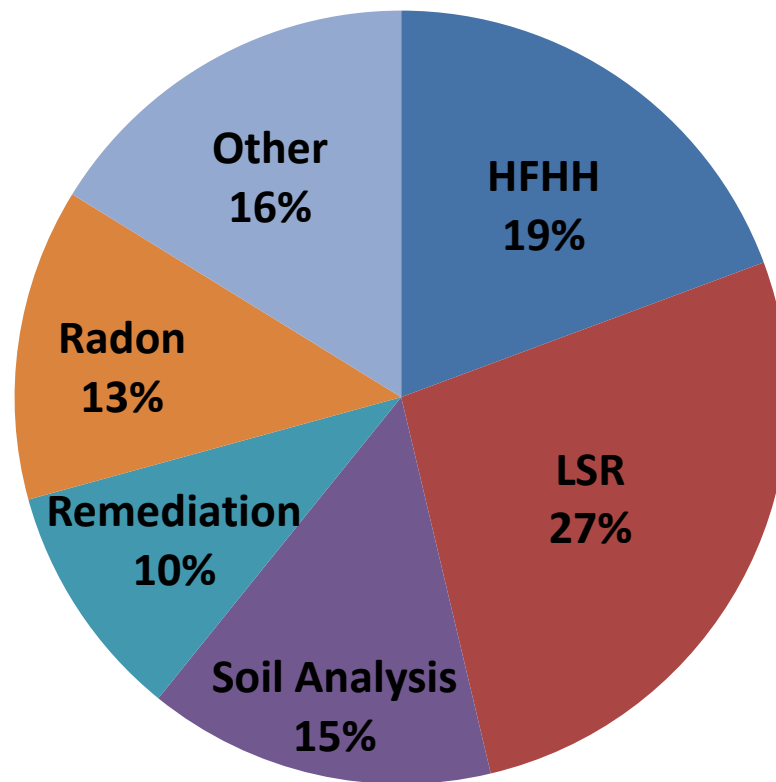


Event Name	2012	2013	2014	2015	2016	2017
Building Beautiful Babies		2%	3%	5%	10%	5%
IH Blood Lead Clinic	97%	62%	14%	8%	5%	
IH Baby Clinic			6%	18%	10%	13%
IH Public Health		5%	20%	35%	47%	43%
Newsletter			1%	4%	1%	
Other – landlord, WKFOR			1%	6%	4%	6%
Pre-natal Class			4%	1%	1%	1%
Outreach Events	2%	8%	10%	1%	3%	2%
Word-of-mouth	1%	21%	38%	22%	19%	18%
Walk in						12 %



Community Program Office

We logged 957 interactions with the public in 2017!
(over 25% increase from 2016)



Radon Kits

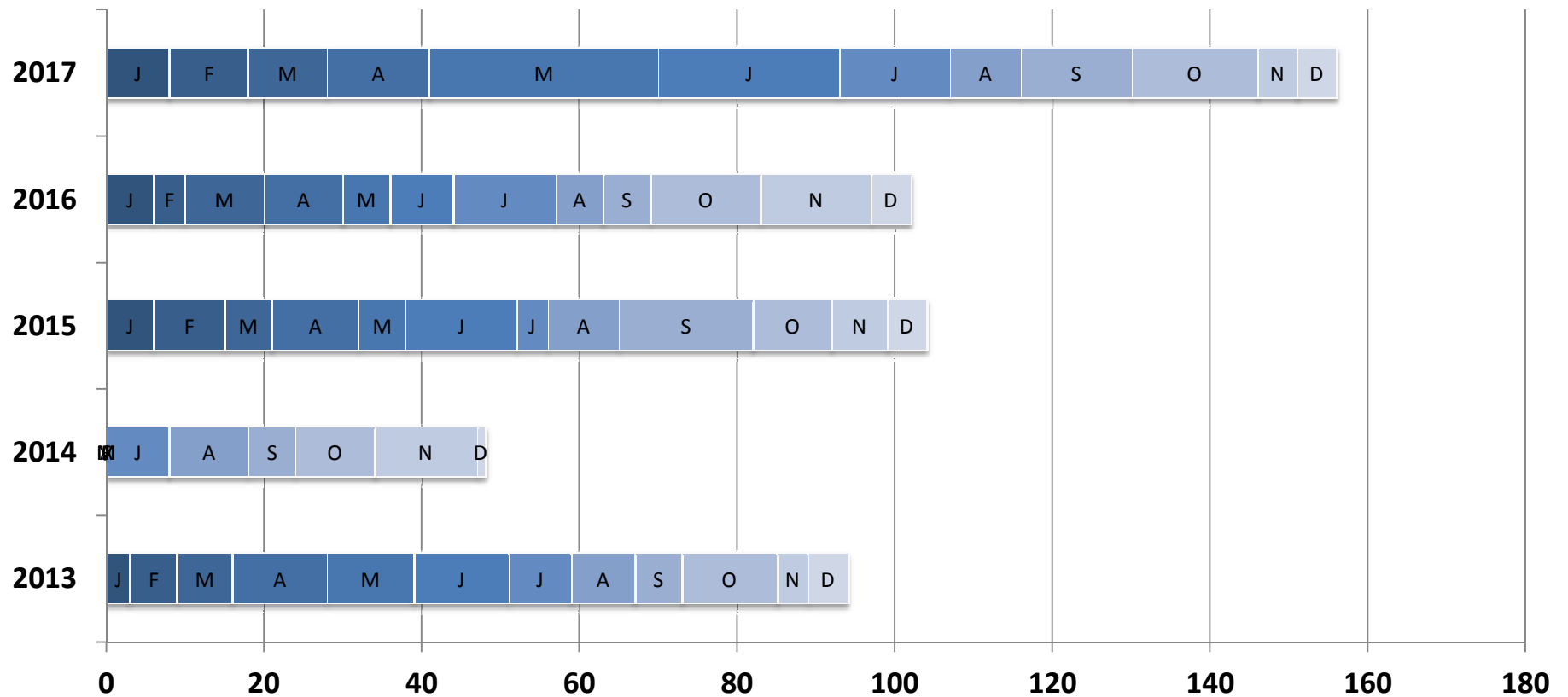
86 Radon detection kits handed out in 2017

Year	Number of Kits
2014	32
2015	122
2016	92
2017	86
Total (last 4 years)	337



Lead Safe Renovation

Lead Safe Renovation Requests by Month and Year



Neighbourhoods with most LSR requests:

- West Trail 20%
- Rossland 16%
- East Trail 14%



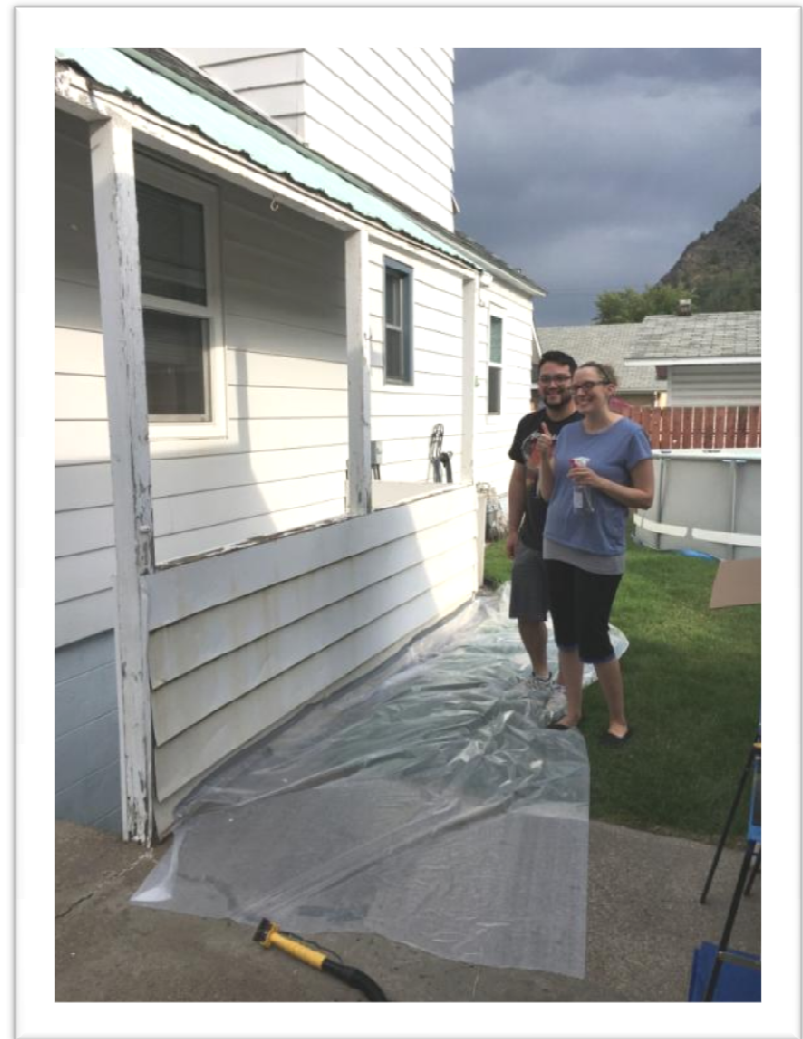
Healthy Renovation Visits

Supported 6 families with:

- Delivery of LSR supplies
- Paint screening
- Project set up
- Problem solving
- Additional clean up supplies

Next steps:

- Provide more of this service. 19 families accessed LSR for supplies



Soil Programs



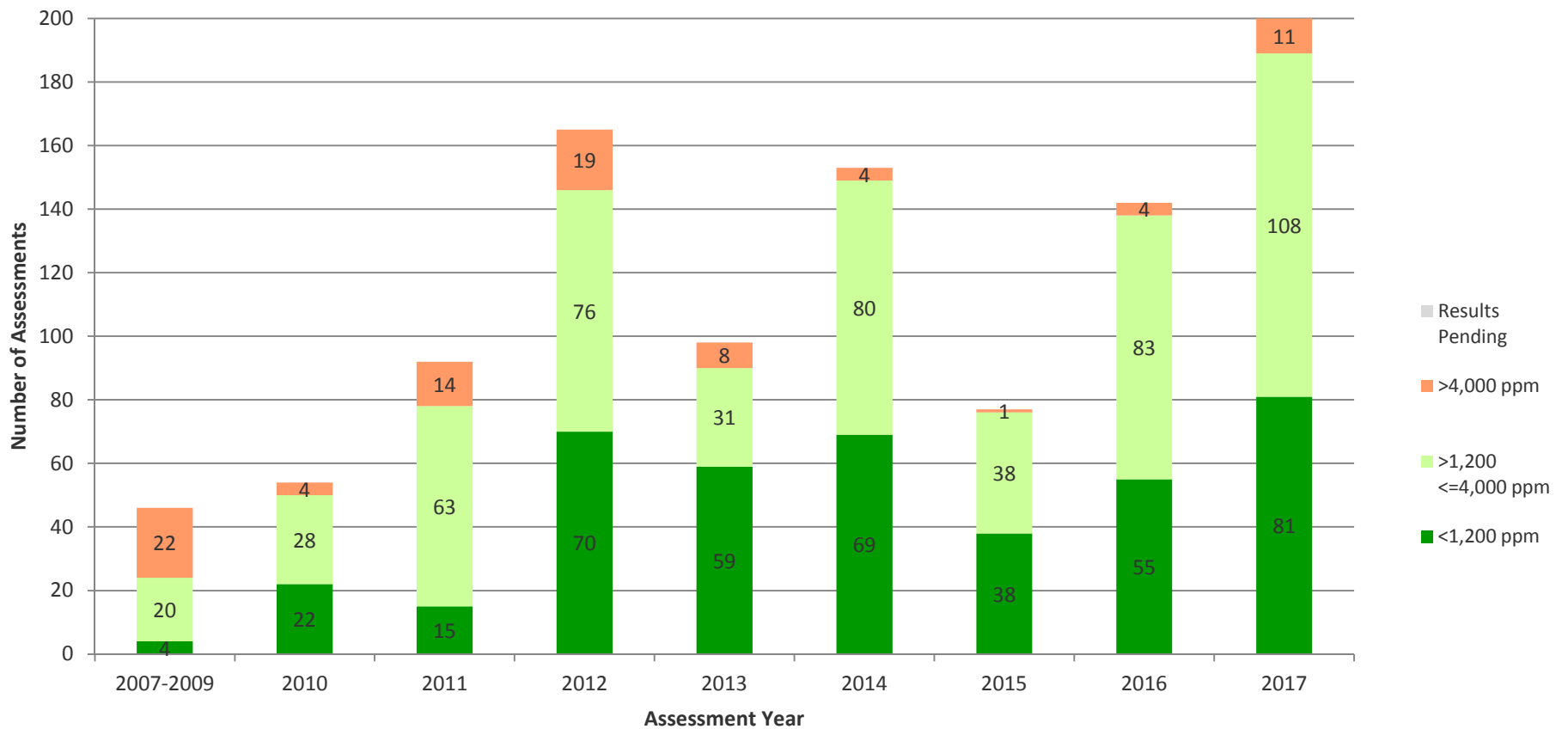


Yard Assessment 2017

- **47 Healthy Homes yards sampled**
 - 1 new request in December and will be sampled in the spring.
- **153 Community Program residential yards sampled (78 in East Trail)**
 - 3 new requests in December for the spring and 1 request was not filled due to a locked gate.

Type	Number of Properties Sampled	Average Wait Time (days)
Healthy Homes Yards	47	20
Community Program Yards	153	25

Yard Assessment 2017 results



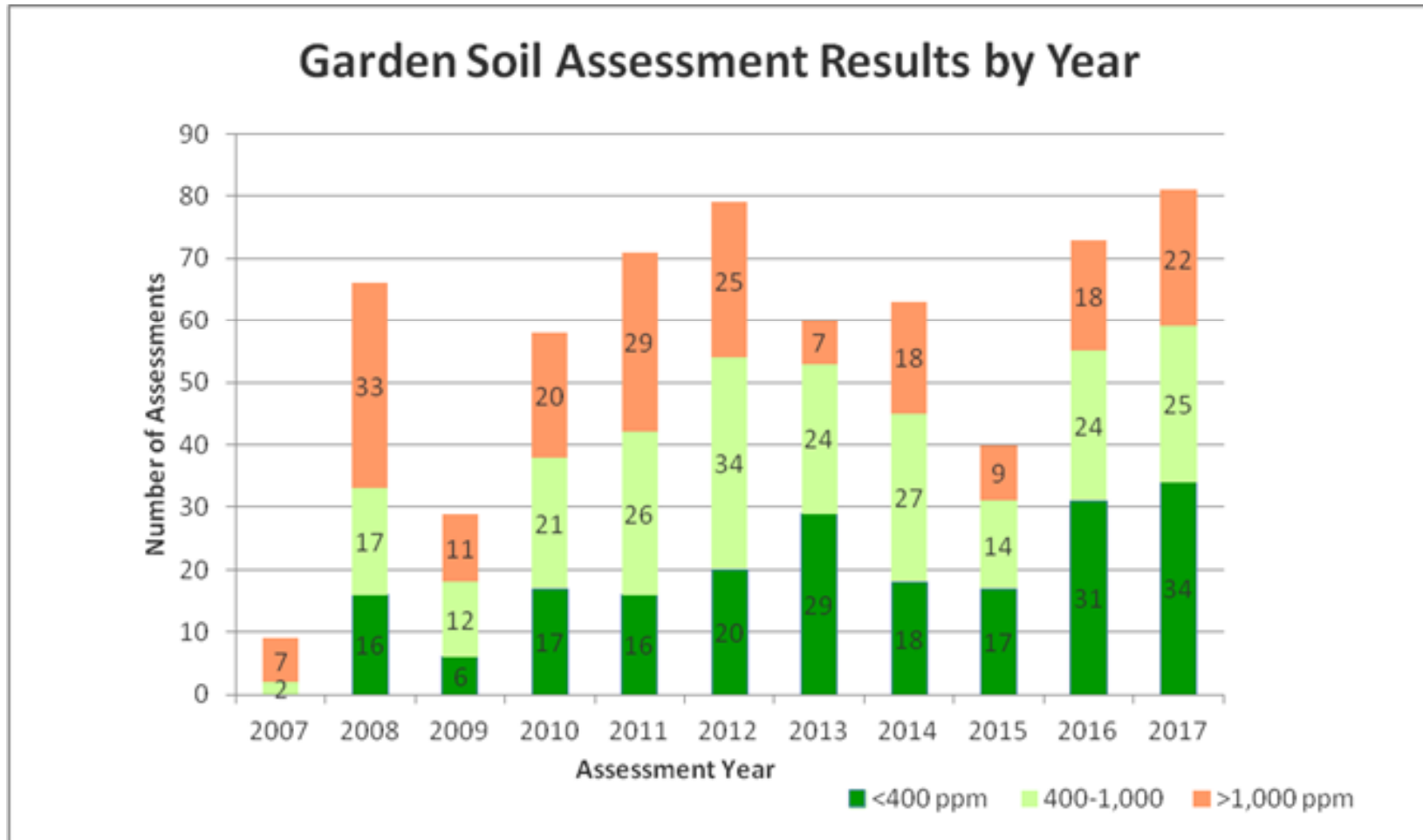


Garden Assessment

- **81 vegetable gardens were sampled in 2017**
 - Most gardens were assessed as part of a yard (6 were gardens with no yard to sample)
 - Average wait time for Vegetable Garden soil assessment is 25 days

Type	Number of Gardens Sampled	Wait Time (days)
Vegetable Gardens	81	25

Garden Assessment



Remediation & Yard Improvement



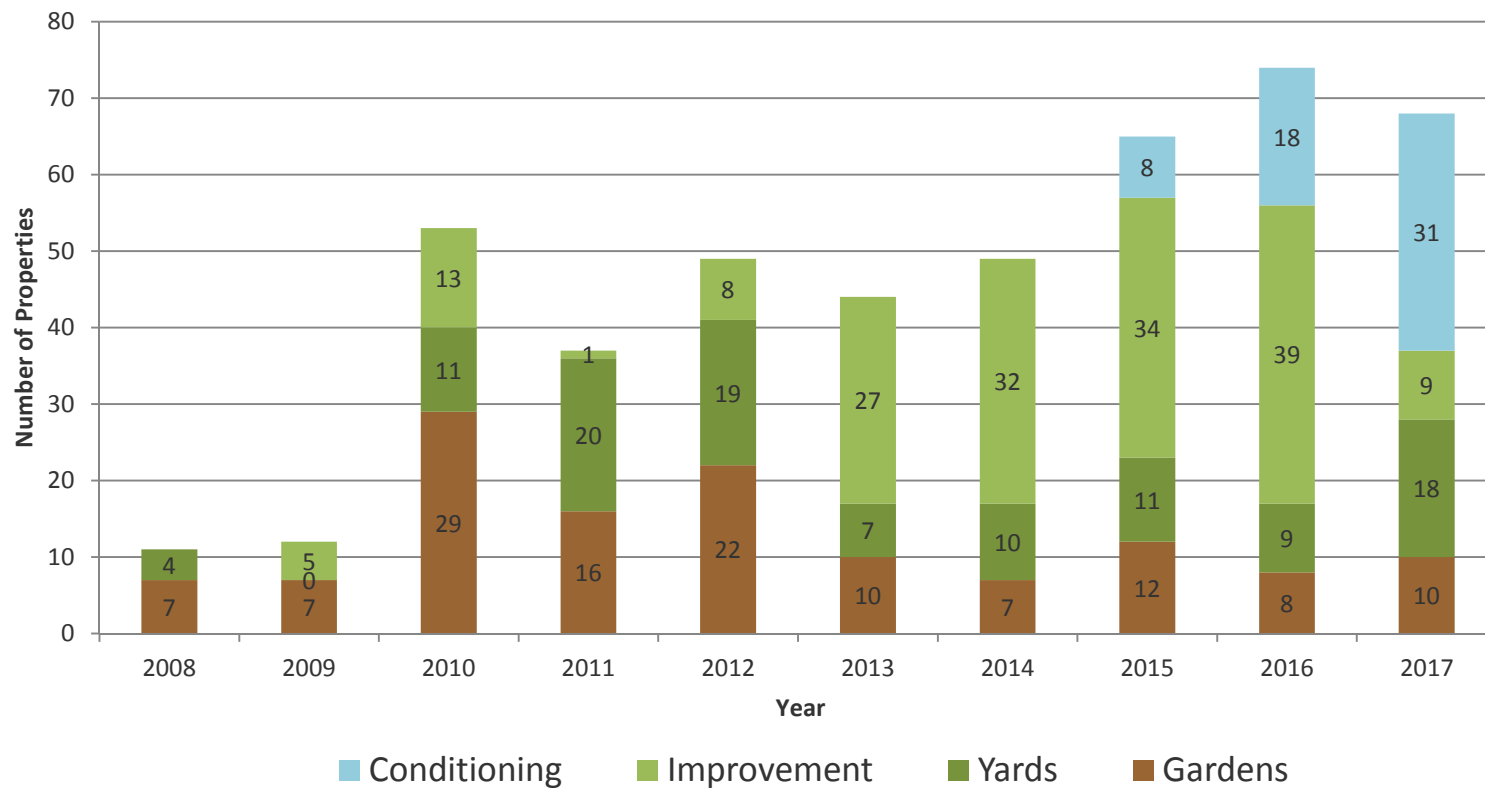


Yard Remediation

- **Slightly different remediation year with more focus on full remediation.**
- **A total of 68 properties received work**
 - 9 yards received yard improvement work
 - 31 additional properties received yard conditioning
 - 18 yards were remediated (8 were Healthy Homes)
 - 10 vegetable gardens remediated (4 more as part of yards)
- **Service times from signed consent to completion of work:**
 - 10 week average for Yards (one was 2 years)
 - Under 5 weeks for HH Yard Improvement

Yard Improvement & Remediation

Summary of Remediation and Improvement Work by Year



Wait times for Remediation & Yard Improvement

Wait time in months from Soil Assessment letter to start of yard remediation or improvement

Type of Property		Shortest Wait in MONTHS	Longest Wait in MONTHS	Average in MONTHS
HFHH	Improvement	- 1	11	4
	Remediation	1	14	8
CP	Gardens	2	12	5
	Yards	3	23	12



2018 Remediation Programs

- 27 HFHH Families will be offered remediation
- 22 gardens will be offered remediation
- Ongoing support for Healthy Homes properties to improve ground cover where soil is less than proposed action levels

Upcoming in 2018

- Continuation of Healthy Homes Programs
- Housecleaning for CM Families
- Outreach for HFHH
- Healthy Renovation Visits
- Increase in Soil Assessments
- Focus on Soil Remediation for Healthy Homes





February 6, 2018

RECENT HIGHLIGHTS

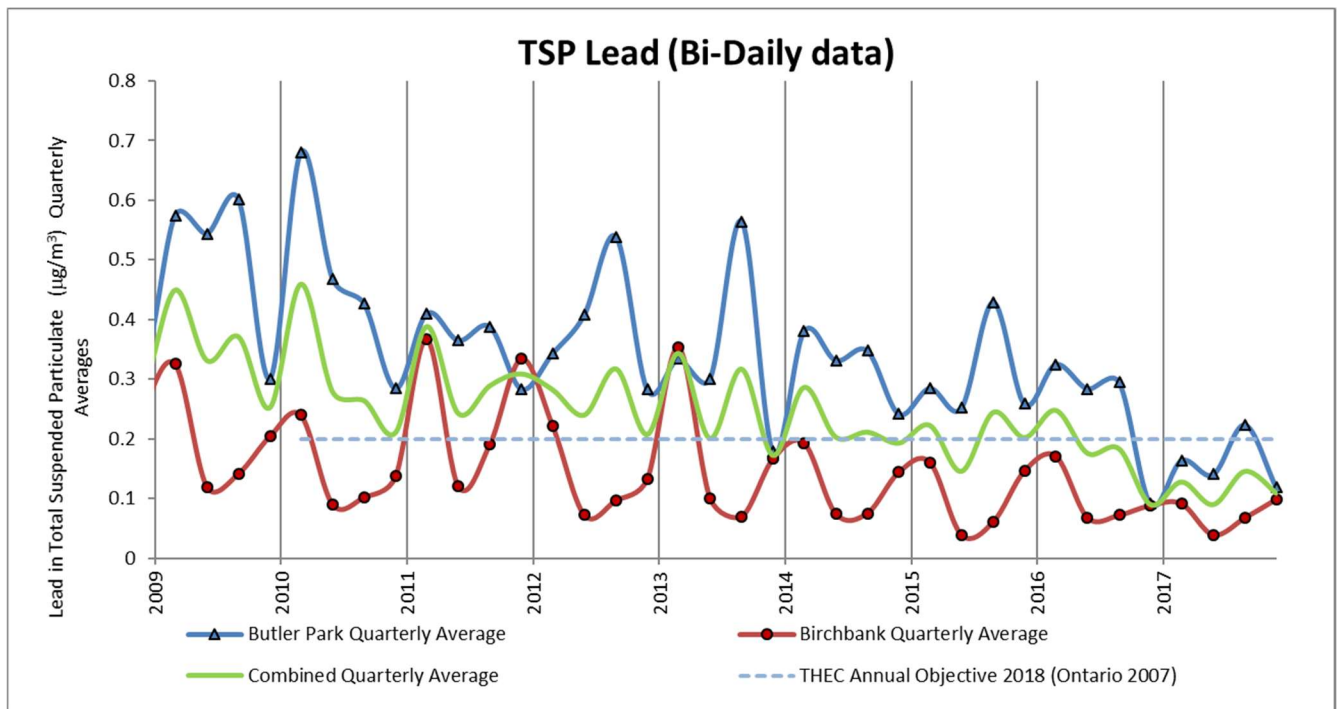
1. Lead in Air:

- The 2017 annual lead in air at the Butler Park station was below the THEC 2018 Annual Objective and was the lowest recorded annual average.

Details:

The chart shows quarterly averages for Lead in air (measured in Total Suspended Particulate) for Butler Park (dark blue) and Birchbank (red), in comparison to the 2018 THEC Air Quality Objective (dashed line). The green line is the average of the two. Quarterly averages for Lead in ambient air are expected to have some variability due to season, weather, predominant wind direction and operational variance. The 2017 average for lead in air at Butler Park ($0.16 \mu\text{g}/\text{m}^3$) is below the 2018 THEC Annual Objective ($0.2 \mu\text{g}/\text{m}^3$) and reflects ongoing fugitive dust reduction efforts including the Smelter Recycle Building.

Figure 1: Average TSP lead (bi-daily), Butler Park station



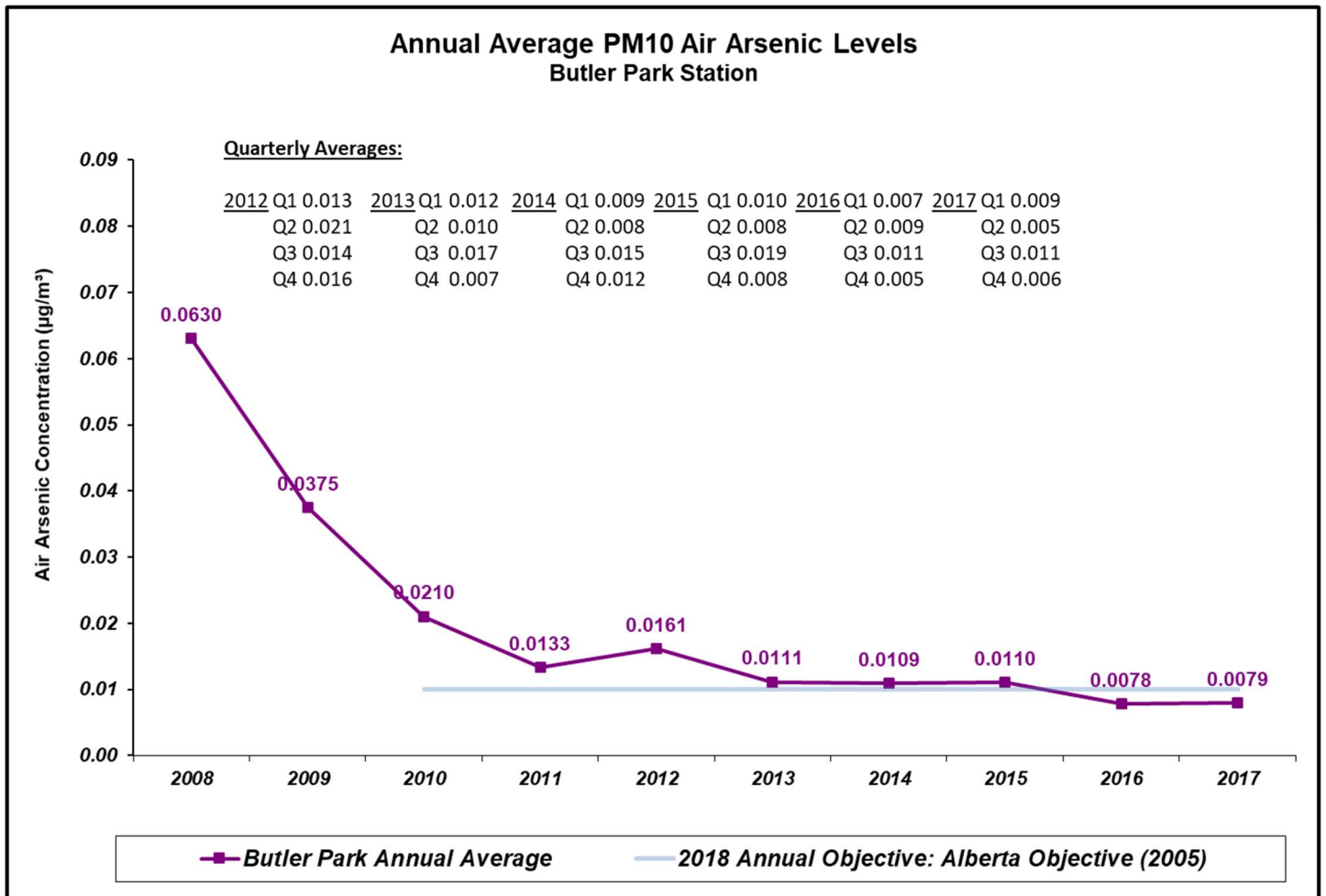
2. Arsenic in Air:

- The 2017 annual average for arsenic in community air at Butler Park was lower than the THEC 2018 Annual Objective for the second year running.

Details:

The chart shows the annual average for Arsenic in air (measured as inhalable PM₁₀ fraction) for Butler Park (purple) in comparison to the 2018 THEC Air Quality Objective (blue line). The 2017 annual average was 0.0079 µg/m³ at Butler Park which remains lower than the THEC objective of 0.01 µg/m³ for the second year in a row.

Figure 2: Annual average PM10 air arsenic levels, Butler Park station





February 6, 2018

RECENT HIGHLIGHTS

1. 2017 Children's Blood Lead Testing Results
2. February 19th and 20th, 2018 blood lead clinics
3. Healthy Families Visits
4. Community Outreach
5. New Trail Blood Lead Program Database

ADDITIONAL DETAILS

1. 2017 Children's Blood Lead Testing Results
 - See power point presentation
2. February 19th and 20th, 2018 blood lead clinics
 - 43 children invited
 - 16 Case Management
 - 23 turned 6 months old since Fall clinic
 - 3 requests from out of area
 - 1 request as missed Fall clinic
3. Healthy Families Visits
 - 67 done 2017
 - Average 8.4 months old (range 2.5 months to 40.5 months old)
 - 6 declined - 92% participation rate
 - 3 had previous Healthy Families visit with older child
 - 19 since last THEC meeting November 28/2017
 - 4 more visit scheduled
4. Community Outreach
 - Attended local pregnancy outreach program on December 12th, January 16th and continue about once a month.
5. New Trail Blood Lead Program Database
 - Continue to work collaboratively with Interior Health's Information Management Information Technology department and Teck to develop a new Trail Blood Lead Program Database.
 - Used New Trail Blood Lead Program during Fall 2017 clinic
 - Phase 1 finalizing formal completion and to start on Phase 2
 - Old Trail Blood Lead Program Database has been archived