# Trail Health & Environment Committee

# **MINUTES**

Meeting: Tuesday, September 4, 2012, 7:00 p.m. City of Trail Committee Room, Spokane St. Entrance

#### Committee Members in Attendance:

Alternate Chair: Councilor Gord DeRosa Jeannine Stefani, Interior Health Brad McCandlish, BC Ministry of Environment Mark Tinholt, Teck Trail Operations Ron Joseph, Community Rep. John Crozier, Councillor, Village of Warfield Chris Stroich, BC Ministry of Environment Craig Adams, Community Rep. Graham Kenyon, Community Rep.

#### Other in Attendance:

Ruth Beck, THEP Program Manager Bruce Enns, SNC-Lavalin Environment Cindy Hall, SNC-Lavalin Environment Tim Schafer, Trail Daily Times
Dr. Nelson Ames, Retired MHO
Richard Deane, Teck Trail Operations

**MEETING MINUTES:** Dated July 10, 2012. Accepted as presented.

#### **REPORTS & RECOMMENDATIONS**

Air Quality: Mark Tinholt, Teck Metals Ltd., Trail Operations - report attached

Mark presented an update on lead and arsenic in community air, as measured at Butler Park and Birchbank stations. In follow up to July THEC meeting, the charts used for reporting total suspended particulate (TSP) were modified to include Bi-Daily data. A Box-Plot chart for Butler Park was also added to provide a more technical, close-up look and clearly illustrates the spread of data and outliers. In particular, a single wind event during  $Q_2$  skewed the Butler Park trend line and the combined quarterly average.

Question: Why does the stack lead emissions line stop in  $Q_2$  of 2011? Answer: This is based on a yearly average and will be reported once the 2012 year is over. It is expected that the stack emissions for 2012 will stay level.

Question: Mark asked the group what is the basis of comparison for the THEP ambient lead and arsenic targets. Is it an annual or quarterly average? Answer: We think it's annual but we need to check. The lead target is based on the Ontario Standard (2007) and the arsenic target is based on the Alberta Objective (2005).

Action: MT will check into the source documents to verify the basis of comparison for the ambient lead and arsenic targets (i.e. annual or quarterly).

Question: It appears that Tadanac is an anomaly in dustfall levels compared to other sites. Also, can the statistics be analyzed to see if there are trends (or not) in the dustfalls?

Answer: There is a higher concentration of metals in dustfall closer to the facility.

This was followed by a discussion about fugitive dust and if it is possible that that may be the cause. **Action: MT will look into doing a statistical trend analysis of the dustfall data.** 

Question: Is the intent of the Fugitive Dust Reduction Project to pin down some of these dustfall sources? And, is there something closer to the source that can be zeroed in on?

Answer: There is work being done to improve sampling methods to get a better handle on where dust loading is occurring or where it is coming from. Torreón, Mexico has not had a lot of success even after trying a wide range of different sampling methods. As such, similar to Torreón, Teck is proceeding with feasibility studies for the construction of cover buildings rather than continuing to focus only on sampling.

In regards to Arsenic (PM10),  $Q_3$  is not yet over, so the graph is the same as last reported in July.

Program Planning & Operations: THEP Program Manager, Ruth Beck - report attached

Ruth reported on the progress of the 5 Year Plan and provided an overview of the work that the Working Group has done to prepare the draft recommendations. Ruth guided everyone through the draft recommendations point-by-point, as follows.

#### Goals

The 5 Yr Plan Working Group has proposed that THE Program have one main goal and that "the goals" we've called "goals" up to now be considered specific measurable objectives towards reaching that goal. Mark reminded everyone that the draft goal reflects THEC's approach of adaptive management and that reducing exposure to metals is an ongoing process. Our response to the new US CDC guidance is an example of how THE Program adapts. It was expressed by the group that THE Program is committed to making continual changes and improvements regardless of the lead guidance levels.

Action: Add an explanation of "reference value".

Action: Add an explanation of the relevance of "10µg/dL" in the statement re. Target 2.

# Primary Prevention of Lead Exposure

Question: In reference to the recommendation that aims to increase knowledge of Trail area physicians, what is the process for educating physicians?

Answer: Jeannine suggested writing a module for the province's Division of Family Practice. Ruth also informed the group that she will be making a presentation during the Oct 4<sup>th</sup> & 5<sup>th</sup> Kootenay Boundary Regional Hospital (KBRH) education day for all KB physicians & nurses. Overall, this will be a process and the education piece for physician will have to be developed over time.

It was mentioned that a mission statement is missing and it should be considered. This led to a discussion and it was decided to include the development of a vision and a mission statement as a recommendation.

Action: Add a recommendation: Develop a vision and a mission statement for THE Program. Action: In bullet point 5 of the Primary Prevention section, emphasize the first part of this point re. new Home & Garden visits. Make the part about remediation a sub-point.

# Testing and Screening

Ruth and Mark provided background information and spoke to the rationale for reinstating blood lead testing in Area 1. This testing will determine if there are children that with BLLs  $>5~\mu g/dL$ . It was noted that this recommendation is really about determining if we need to expand the geographic area for our programs for families. We're not "reinstating" testing, just conducting one round to see if our geographic area should expand to include Warfield, Oasis, Casino and Waneta.

Action: Phrase this recommendation to reflect the above conversation and to name the communities rather than using the term "Area 1".

Question: Do the PHN's have the capacity to take on and incorporate the proposed changes to THE Program within current FTEs?

Answer: The Home & Garden Team will be assisting the PHN's as needed and appropriate, and will be developing and conducting the "Healthy Home & Garden" visits.

Action: In bullet point 4, add "in Greater Trail" after "...testing up to 5 years..."

#### Secondary Prevention

Action: Move bullet point 2 to primary prevention.

Action: Change title of this section to "Secondary Prevention/Case Management"

# Monitoring & Evaluation

The group discussed the recommendation that refers to consideration of a third party review for the 5 Year Plan. Dr. Ames mentioned that he had some ideas on how this can be achieved and will work with Mark to coordinate the review process.

Action: Dr. Ames to work with Mark re. possible third party review of the 5 Year Plan.

Question: What is the expected timeframe for completion of the 5 Year Plan? Answer: It is expected that the 5 Year Plan will be completed early in the 2013 calendar year.

#### Communication

The group discussed the key messages that were proposed in the recommendations. It was noted that THE Program is a health and environment program and that communication of our goals should refer to health and the environment, not just children's exposure to lead.

Action: Add "re. CDC Guidance" to the sentence "Communicate the following...Key Messages..."

Action: Include in key message #1, reference to "working with community partners". Action: Include in key message #2, reference to our broader aim "to improve the health & environment for children".

The discussion continued regarding communications and related topics.

Action: Ruth to ask a Family Action Network representative to make a presentation at the **next THEC meeting.** *Note to minutes: Request for presentation deferred to a future meeting.* 

Craig raised an issue about THEP's radio ads needing to provide more context as they resulted in a potential investor deciding not to come to Trail. This led to a discussion about public communications and the Moving to Trail brochure. A suggestion was made that this brochure, when developed, could go in the LCCDT recruitment package.

Action: Ruth to follow-up with the City of Trail about the "Moving to Trail" brochure. Richard to provide support with messaging, as needed.

Action: Ruth/Cindy to send the THEP website url to THEC so that THEC members can comment on the public messaging prior to the site going live.

Question: Why does THEC follow the US CDC blood lead guidance?

Answer: The US CDC is widely recognized as one of the world's leading authorities on health issues including exposure to lead. We have used the US CDC guidance historically and will continue to do so.

Question: Why doesn't THEC use Health Canada blood lead guidelines?

Answer: To date, there has been no updated guidance from Health Canada.

Suggestion: Dr. Larder suggested that the BC Ministry of Health, the local MLA's office, and MOE representatives be included in THEC's planned communication strategy so they are aware of the issues.

#### Website Revamp Project

Ruth reported that the site would go live by September 21, in time for promotion of the Fall blood lead clinics. The site will evolve continually to incorporate new information and improvements to our messaging.

Action: Gord will look into coordinating the City of Trail website link with the THE Program website.

Action: Ruth and Richard will look for someone outside of Trail area community to review

#### the website.

#### Family Health: Jeannine Stefani, Interior Health - report attached

Jeannine updated everyone on the status of the upcoming blood lead clinics. The letters to parents have also been sent out and this year parents have been assigned specified appointment dates. The feedback from parents has been positive. Jacquie Johnson, PHN, will assist Jeannine during the testing period. Jeannine has extended an invitation to individuals working in early childhood development to attend and will also ask a Family Action Network representative. It was suggested that members of the Home & Garden team also attend.

Action: Mark/Richard to put up posters at Teck and circulate an electronic version to Teck employees.

Action: Bruce/Cindy to follow-up with Jeannine re. the H&G team attending the blood lead clinic.

### Home & Garden: Bruce Enns, SNC-Lavalin Environment - report attached

Bruce gave an update on activity at the Community Program Office. In follow-up to a suggestion made at the July 10<sup>th</sup> THEC meeting, Bruce reviewed the revised charts (i.e. soil assessments by year) to include information from previous years and show cumulative work over time.

In regards to the Home Renovation Support Program (HRSP), it was noted that there has been a recent decline in the number of HRSP requests. It was felt that this may be due to staff turnover and lack of awareness. With the expected changes to THE Program, and added emphasis on "Healthy Homes" it is anticipated there will be an increase in the number of HRSP requests.

This led into an in depth discussion regarding contractor training and areas of responsibility. Specifically, Gord DeRosa noted that he has observed situations in Trail where roofers use methods to remove shingles that generate significant dust that may contain heavy metals. This poses a hazard to workers and contamination of the surrounding area. It is an issue that we need to deal with. Mark confirmed that there is a plan in place to develop and offer a contractor training program. The intent is to involve the contracting community. Ron Joseph expressed his concern that this could lead to more regulations which, in turn, will lead to more costs resulting in resistance from the contractors. Currently, the Regional District of Kootenay Boundary (RDKB) is contracted by the City of Trail to issue building permits. It was thought that it would be worthwhile connecting with RDKB. Overall, the general feeling was that this issue remains complex and despite past efforts so far there has been little result.

Action: Bruce will follow-up with the Sig Dreher, Chief Building/Plumbing Official RDKB Building Inspection Department to seek guidance for a strategic approach. Ron Joseph offered to assist Bruce if needed.

Bruce proceeded to review each chart noting that while there has been an increase in number of yards and garden sampled, fewer yards are requiring remediation. Specifically, for Case Management families, there are fewer results > 1000 PPM while cases of high blood lead remain. This suggests that there isn't a strong correlation between metal concentrations in the yard and case management children's blood lead levels.

Question: What is the status of the grass clipping study? Answer: Currently, there are only two volunteers and more are required. Ron Joseph offered to participate and has several properties that

may be eligible.

Action: Bruce/Cindy to follow up with Ron.

#### Other Business:

#### Communications re. Northport

Gord informed committee members about recent reports in the news, in particular CBC, that the Teck Trail Operation is alleged to be linked to a high occurrence of colitis and Crohn's disease in Northport Washington residents. There are two studies about health findings for the Trail area showing that Trail area does not have increased incidence of these diseases.

#### Community Greening

Question: What is the status of community greening in and around the Trail community, in particular along Highway 22?

Answer: Teck has been very focused on moving forward with the Lower Columbia Ecosystem Management Plan project and initiatives. This isn't the same as "greening" but includes eco-system restoration in and around Trail. It is expected that Dave Derosa, Teck Trail Operations, will make a presentation during a future THEC meeting. In regards to greening the area along Highway 22, this is subject to budget approval and development of a more comprehensive approach. A long-term management approach is required, rather than doing "one-offs" due to factors such as soil condition, moisture, irrigation, as well as landowner issues.

# Groundwater ammonium sulphate plume

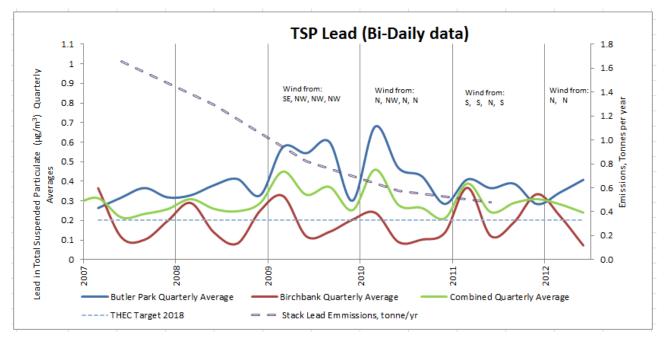
Teck will providing an update on the groundwater ammonium sulphate plume at the next feasible THEC meeting.

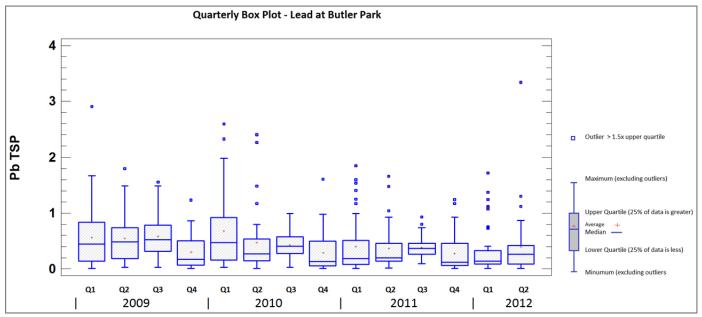
**NEXT MEETING:** Tuesday, November 6, 2012

# Trail Health & Environment Committee – Teck Report Sept 4, 2012 Air Quality Program

# **Lead – Total Suspended Particulate:**

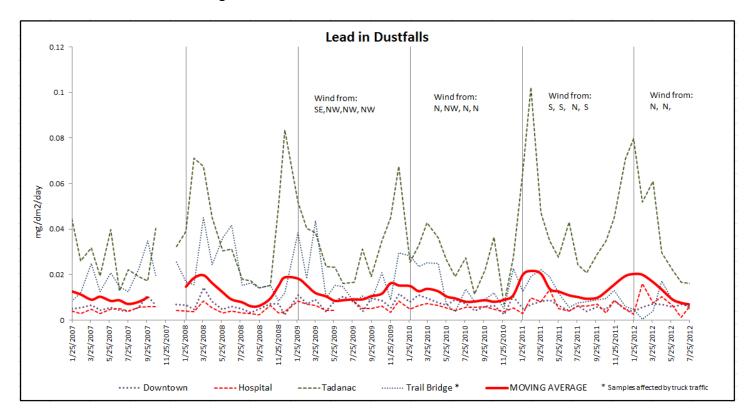
- o Graphs have been improved to also show stack emissions and predominant wind direction (quarterly, as measured at Maintenance Services Building) for last 3 years, using Bi-Daily rather than NAPS day (6 day) data. A Box-Plot graph for Butler Park has also been added so show more data transparency.
- O Stack emissions have continue to drop- the discrepancy in trends between stack emissions and measured TSP in air is believed to be sourced from fugitive dust.
- O Most recent Quarterly averages for Lead in ambient (community) air at Butler Park are similar to 2011, however this corresponds with lower levels at Birchbank a reflection of the influence of predominant wind. The combined average is generally consistent with previous years, with a decreasing trend so far in 2012.
- The box plots show that outliers can influence the average calculation, whereas the median may be more representative of typical concentrations.
- o Trail smelter's releases of lead to air are still amongst lowest in industry.





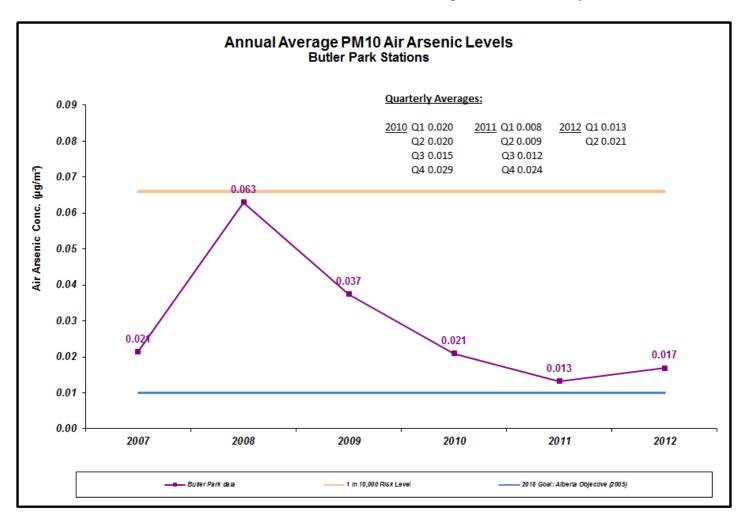
# Lead in Dustfalls (monthly):

- Chart has been improved so trends are easier to see, including quarterly predominant wind as measured at Maintenance Services for last three years.
- No regulatory basis for comparison- used by Teck to monitor trends over a wider area (more stations).
- In general, <u>average</u> data appears to follow a seasonal cycle that has not changed significantly during the reporting period. The seasonal cycle peaks during the winter months, with some variation that appear to be due to weather conditions.
- The January 2011 winter peak in Tadanac came back down to a more typical range in December 2012 Teck's data interpretation is that the peak in Tadanac January 2011 is the result of unusual winds during that season. A decreasing trend continues in 2012.



# Arsenic-PM10:

- Arsenic in ambient (community) air had returned to pre-2004 levels in 2011. Improvements appear to be the results of actions taken at the Continuous Drossing Furnace and Refinery Scrubber Stack.
- $\circ$  2012 average to date of 0.017  $\mu g/m^3$  has increased again slightly but only reflects Q1 and Q2 and may be subject to seasonal variation.
- o Trail smelter's releases of arsenic to air are amongst lowest in industry.



# THEP Program Manager's Report September 4, 2012

# 1. 5 Year Plan Support

• There has been quite a bit of preparatory work done this summer re. the 5 Year Plan. This includes the development of recommendations about THE Program and our goals and communications. We expect to discuss various issues at subsequent THEC meetings, including updating THEC's Terms of Reference and developing some statements about the THEC vision/mission/guiding principles etc.

# 2. Website revamp project

• The website is almost ready to go live. The expected date is September 14. Public announcement about the new website will take place via the Fall Newsletter. We'll send you all an e-mail to let you know when the site goes live.

# 3. Program Planning

• The Program Team has been working to propose new program changes to expand our primary prevention work with families.

#### 4. Communications

- Fall Newsletter We're working on a draft newsletter to be distributed to families by the time of the first blood lead clinic, September 21.
- Nutrition brochure After the last THEC meeting, this brochure was revised. It will be ready for the website when it goes live, and copies will be printed for distribution to families.
- Issues paper This is a communication document being drafted re. the new CDC guidance and THE Program

# 5. Correspondence

• A copy of the letter from the City of Trail to the Ministry of Environment Land Remediation Section was included in the agenda package.

# Trail Health and Environment Committee Interior Health Report September 4, 2012

# 1. Fall Blood Lead Clinics

- a) Sent out letters last week, that included an appointment time inviting families to attend the Fall Blood Lead Clinics
- b) Clinics: September 21, 24, 27, 28, October 2 & 3
- c) Total invited 244
- d) Posters to be distributed out to community this week.

# 2. Sandboxes

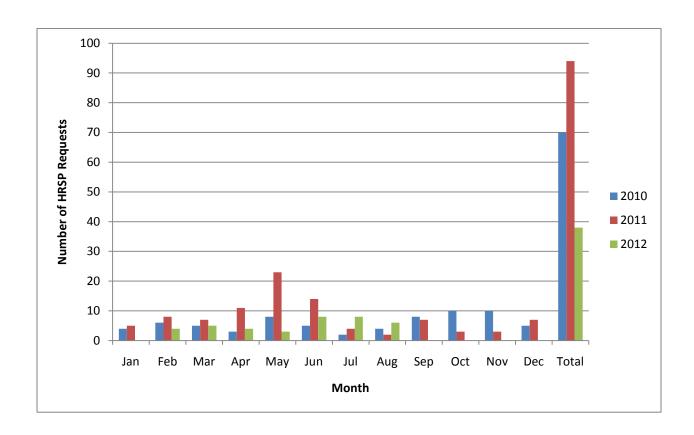
Meeting with Trail Middle School staff and Community Development Services planned for September 5.

# THEP Home and Garden Update - September 4, 2012

# **Summaries of Home and Garden Program Activities**

- 1. We now (finally!) have 4 certified XRF operators so the new XRF can be used in the field for soil and paint assessments.
- 2. We are in the very early stages of planning for changes to the database to include new information, improve accuracy, ease of reporting and mapping, and data-sharing with IHA.
- 3. We are currently doing assessments of LTS gardens and vegetables.
- 4. Staffing increase Andrea McCormick returns in October.
- An increased number of assessments have been done this year, but a decreased number of remediations has been required under the current guidelines (see included graphs and tables below).
- 6. Home renovation support requests are down from this time last year.

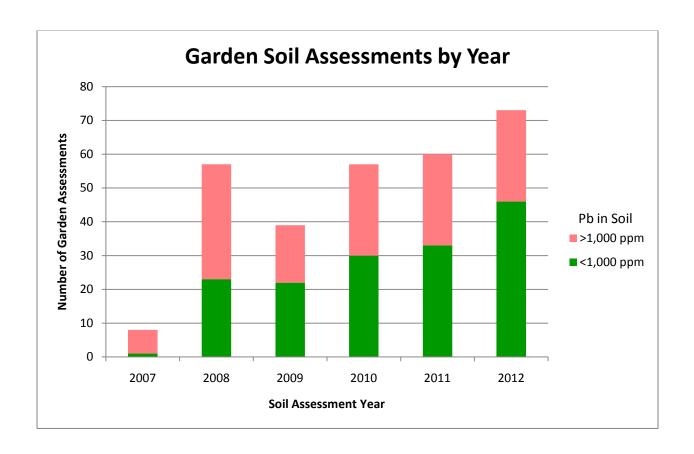
# **Home Renovation Support Program**



Month	2010	2011	2012
Jan	4	5	0
Feb	6	8	4
Mar	5	7	5
Apr	3	11	4
May	8	23	3
Jun	5	14	8
Jul	2	4	8
Aug	4	2	6
Sep	8	7	
Oct	10	3	
Nov	10	3	
Dec	5	7	
Total	70	94	38

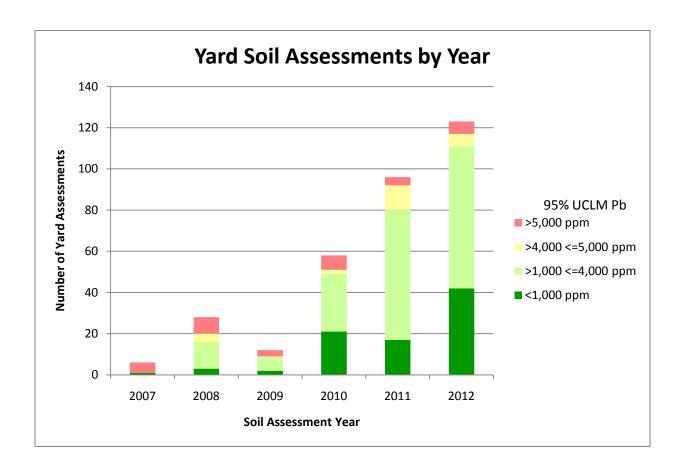
# Soil Assessments by Year

# Gardens to August 20, 2012



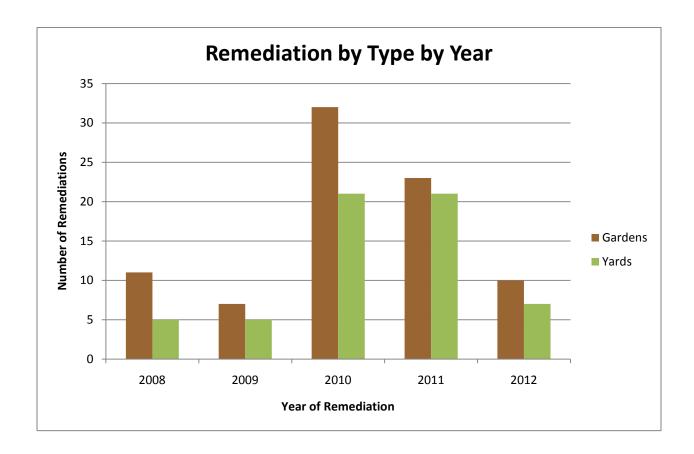
Row Labels	<1,000 ppm	>1,000 ppm	Total
2007	1	7	8
2008	23	34	57
2009	22	17	39
2010	30	27	57
2011	33	27	60
2012	46	27	73
Total	155	139	294

# Yards to August 20, 2012



	<1,000	>1,000 <=4,000	>4,000 <=5,000	>5,000	
Year	ppm	ppm	ppm	ppm	Total
2007	1			5	6
2008	3	13	4	8	28
2009	2	7		3	12
2010	21	28	2	7	58
2011	17	63	12	4	96
2012	42	69	6	6	123
Total	86	180	24	33	323

# Remediation to August 20, 2012

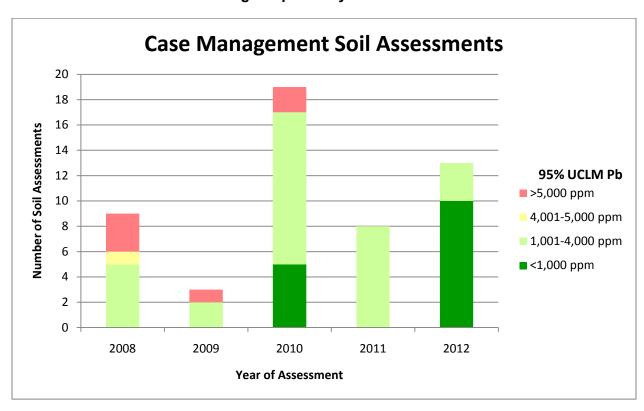


Year	Gardens	Yards	Total
2008	11	5	16
2009	7	5	12
2010	32	21	53
2011	23	21	44
2012	10	7	17
Total	83	59	142

# Case Management Assessment and Remediation to August 20, 2012

# Soil Assessments\*

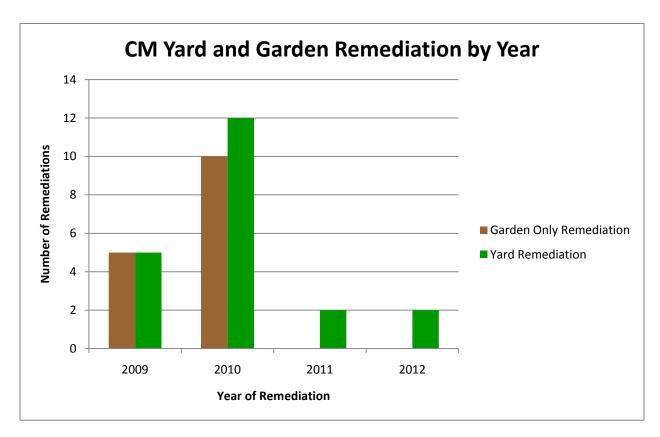
# 2012 assessments include some grandparents yards



<sup>\*2012</sup> assessments include 2 of grandparent's yards

	<1,000	1,001-4,000	4,001-5,000	>5,000	
Year	ppm	ppm	ppm	ppm	Total
2008		5	1	3	9
2009		2		1	3
2010	5	12		2	19
2011		8			8
2012	10	3			13
Total	15	29	1	6	52

# Soil Remediation\*



<sup>\*</sup>includes both partial and full remediation

Year	Yard Remediation	Garden Only Remediation
2009	5	5
2010	12	10
2011	2	
2012	2	
Total	21	15