
Port Stakeholder Working Group Minutes of Meeting

10am - 11:30am, Friday 25 November 2016
Port of Townsville Boardroom Meeting Room

Present

David Donohue
Melinda Loudon, Raneen Crosby, Sharon Hoops, Kim
Gebbers
Charlie McColl, Wendy Tubman
Graeme Neilsen, Tracey Bauer
Judy Newman, Ian Ferguson, Clive Berger
Damien Farrington
David Zammit
Chris Wake
Gavin Hammond
Ken Dunlop
Peta Connelly, Sonia Brown
David King

Organisation

Chair (QCCN)
POTL

NQCC
South32
Community Reps
QLD Health
Glencore
DEHP
TCC
Sun Metals
TBSH
NSS

Apologies

James Hobbs	Community Representative
Juliette Sperber	NSS
Lucy Ball	South 32
Annie Williams	Glencore

1. Welcome, Introductions

2. Minutes of Previous Meeting

Minutes of the previous meeting were adopted

3. Port Update

- Port of Townsville was awarded 'Port or Terminal of the Year' at the 21st Annual Maritime and Shipping Awards in Sydney during November. This is the first time a port has won the award two years in a row. The Port's nomination covered the infrastructure improvement projects such as the Berth 4 upgrade, the removal of Berth 6/7, the removal of the Breakwater stub, White and Grey Ship-Attraction Committee and its innovative approach to community engagement, particularly its use of social media.
- Action – Sharon to distribute a copy of the nomination to all PSWG members (done).
- The Community Amenity Project is currently in a community consultation phase – a flyer was distributed to homes that are located close to the port on 21 November. POTL will invest around \$1 million into improving buffers and aesthetics around the port over the next 3 years.
- The next Community newsletter will be out before Christmas
- PEP AEIS consultation period has closed.

4. PSWG Data Dashboard

- POTL submitted the September Port Operations Data Dashboard. Will be released today to media and community.

5. Regulatory Reports

- DEHP – the EHP monitoring graphs for September 2016 were tabled at the meeting (noting two months of updated data) - the continuing downward trends are evident with levels at a low level of around 0.1.
- Chris Wake noted that the monitoring trends for EHP/DSITI were reflected in the port's monitoring results, even though samples were not taken on the same day.
- Wendy Tubman asked if the closure of QNI activities had affected dust levels. Melinda Loudon responded that dust levels have remained relatively stable, if not slightly in decline.
- Update on the North Ward air quality monitoring site (at the Sports Reserve) – location has been approved and task is progressing with an expectation of installation of the monitoring equipment early in the New Year.
- QLD Health had no updates to table at this meeting.
- Clive Berger asked TCC if cleaning of playground equipment had been affected by the water restrictions. Gavin Hammond responded that cleaning schedules have not been affected.
- Clive Berger asked if signage was going to be installed at the playgrounds to warn people of risks of using them. Gavin responded that TCC had no intention of installing such signs. Sharon Hoops asked Clive if, hypothetically, more swipe testing of playgrounds was completed and the results proved satisfactory would that put your mind at ease. Clive responded yes but he believes "this group (PSWG) resists that).
- Charlie McColl added that "the community talks about black dust and this issue was formed because we have lead in dust." David Donohue responded that was not correct, the regulators had already confirmed, in writing in the Q&A, the dust does not contain significant levels of lead and zinc

6. General Business

- Q&A – the group went through the Q&A and discussed responses and allocated tasks to different members to update the document. Sharon Hoops requested all amendments and submissions be sent through to her by Friday 9 December for inclusion and review at the next meeting. It was resolved that the Q&A, once finalised, would be subject to an update every 6 months for relevance.
- Objectives versus Achievements Report was completed.
- Premier's Sustainability Awards – David discussed his attendance at the Premier's Sustainability Awards in Brisbane on 17 November. Stated there were lots of entrants in the community section – Moreton Bay Regional Council was the winner, sustainability water and Save the Reef common themes.
- Clive tabled a report compiled by him titled "Analysis of Lead in air from Townsville Coast Guard data. He stated "The conclusion agrees with previous port and EHP statements that activities involving mineral concentrate loading can result in elevated levels of metals in air."
 - The group discussed the findings.
 - David King stated that "ships nominated in your report (carrying containers containers) do not handle lead or zinc, so how can there be a correlation?"
 - Clive – diesel fuel used in ports contain lead, could this be a factor?
 - David Donohue suggested that bunker fuel does contain lead, however that would mean every ship in port should be elevating levels of lead in air (in

principal) if they are operating – and that is not happening.

- Kim Gebers noted that the age of ships does not have any bearing on the type of fuel used.
- Damien Farrington stated “I believe your method is flawed (mathematically), I discussed with our statistician. Can discuss with you offline after this meeting.”
- Chris Wake stated – “a lot of the lead sources not included need to be investigated such as zinc concentrate – correlation needs to be further investigated.”
- Raneer Crosby – probably a simpler way to address this - shiploading, the trucking/rail loading of zinc and lead are all part of the “shipping process”, not just the act of loading a ship. Customers are addressing this as part of the work of this group, noting the continuous improvements.”
- Wendy Tubman agreed with Raneer that it’s the overall process of shipping and loading that needs to be factored in.
- David Donohue stated that “we come back to risk - the fact that the risk is minimised, and the regulator is satisfied”.

7. Meeting Close

The PSWG Meeting closed at 11:30am and the next meeting is to be held on Friday 16 December.

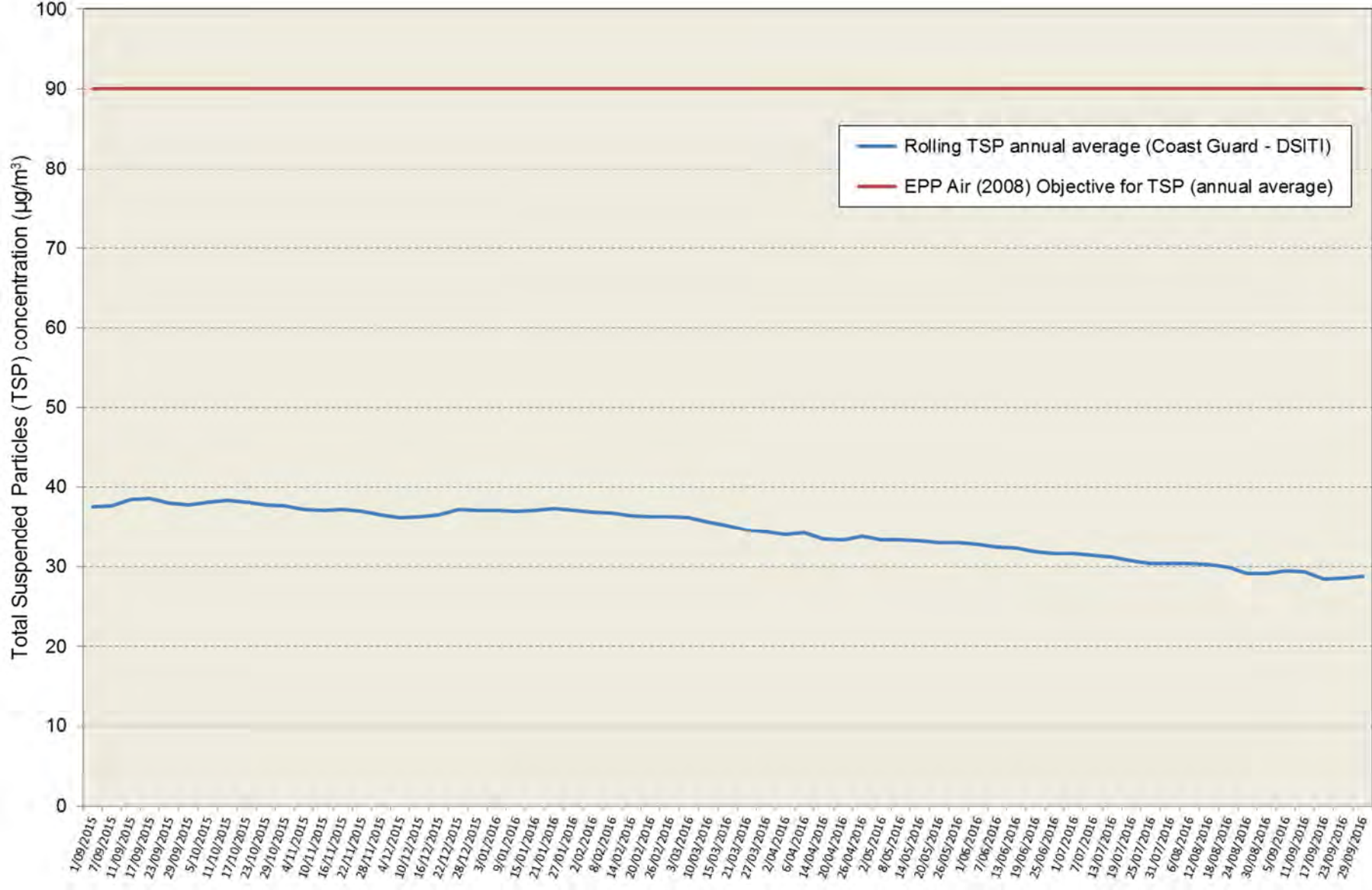
David Donohue, Chair

Date

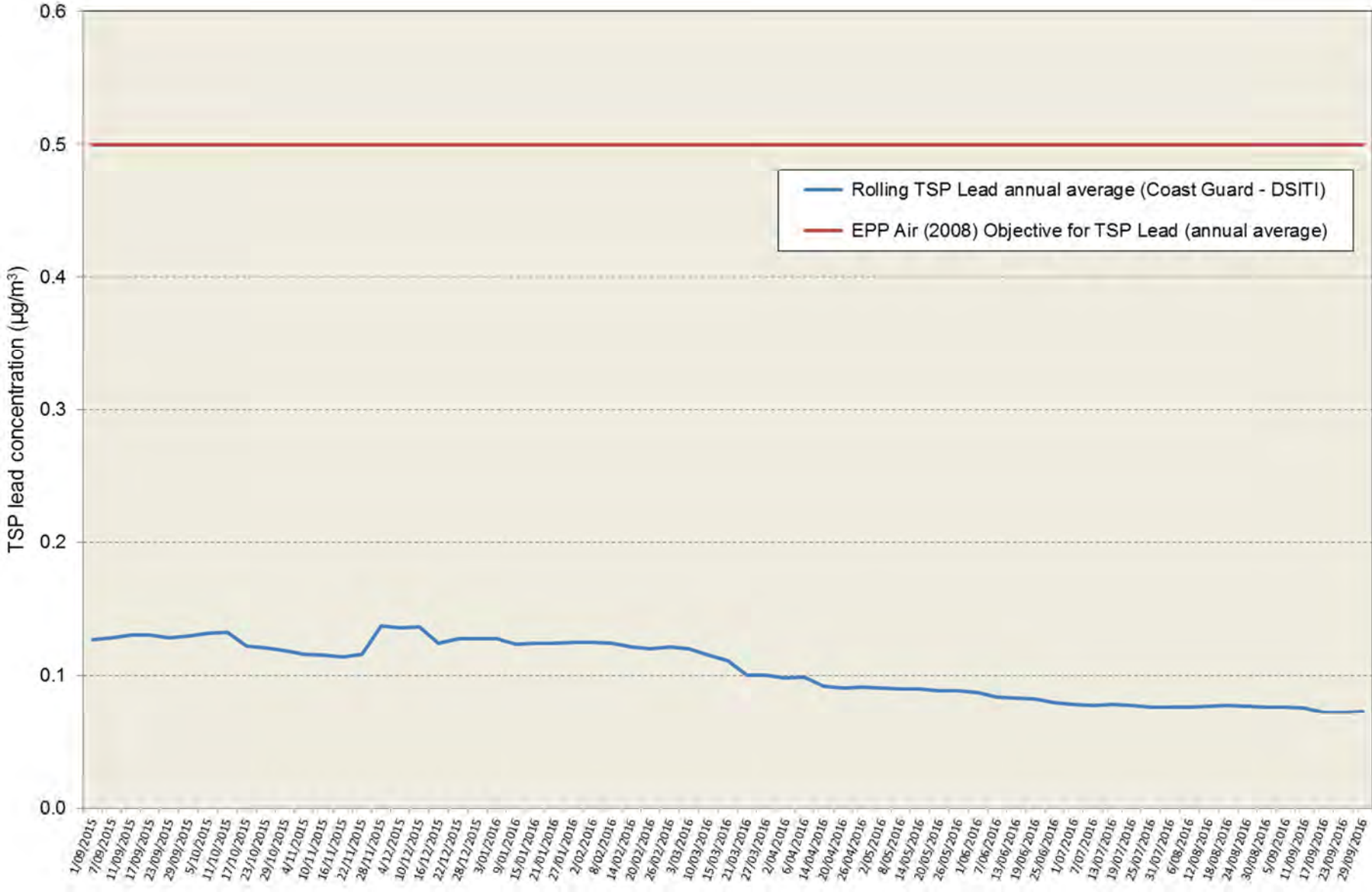
.

.

DSITI Total Suspended Particles (TSP) levels (one in six day sampling) at the Townsville Coast Guard Site for the last 13 months (September 2015 to September 2016)



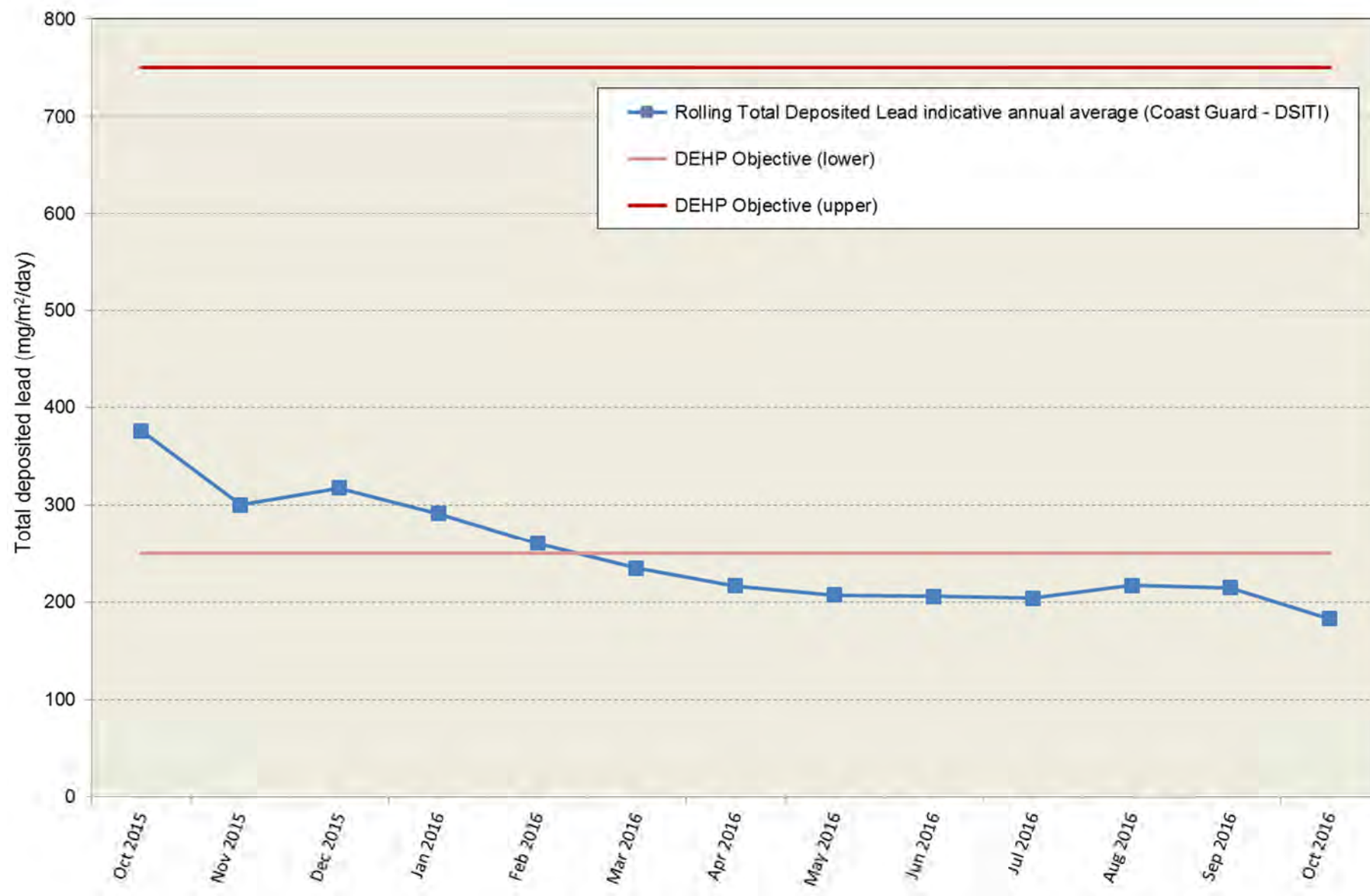
DSITI Lead in TSP levels (one in six day sampling) at the Townsville Coast Guard Site for the last 13 months (September 2015 to September 2016)



DSITI Deposited Dust levels (monthly sampling) at the Townsville Coast Guard Site for the last 13 months (October 2015 to October 2016)



DSITI Lead in Deposited Dust levels (monthly sampling) at the Townsville Coast Guard Site for the last 13 months (October 2015 to October 2016)



Analysis of Lead in air from Townsville Coast Guard Data

(28/9/15-17/10/16)

Introduction. The data was obtained from hourly samples of lead in air as measured by the continuous metals analyser (Xact) at the Coast Guard Site. The analysis proves the thesis, already given by Chris Wade, that lead pollution is caused by ships loading lead concentrate.

The analysis has also, however, indicated a second possible cause of lead pollution. High lead level readings were obtained when one of the following four container ships were in port: Mel Solomon, Sofrana Tourville, Papuan Chief and Changtu. It is hoped that the committee will be able to suggest reasons for this empirically discovered relationship.

Analysis. 9273 viable readings were obtained. Of these 4561 data readings corresponded to wind directions between 30 and 105 degrees (i.e. from a North- Easterly direction). Of these 4561 readings, 1315 corresponded to times when a ship with concentrate (mainly in berth 11) was in port and 169 times corresponded to times when one of the following 4 container ships were in port. The mean lead depositions and their standard deviations are given below.

	Data excluding N-E wind	Data for N-E wind With no target ships in berth.	Data for N-E wind & Concentrate Ships in berth	N-E wind and selected Container Ships in berth
Data points	4708	3077	1315	169
Mean Lead Deposition ($\mu\text{g}/\text{m}^3$)	$M_1 = 0.015$	$M_2 = 0.0284$	$M_3 = 0.154$	$M_4 = 0.333$
Standard Deviation of Mean	$S_1 = 0.00002$	$S_2 = 0.00011$	$S_3 = 0.015$	$S_4 = 0.054$
Z Calculation for Test of Statistical Significance		$\frac{M_2 - M_1}{S_2} = 121.8$	$\frac{M_3 - M_2}{S_3} = 100.8$	$\frac{M_4 - M_2}{S_4} = 5.64$

For $Z > 3.29$ the significance of the difference in the means is greater than 99.95%. **The results thus show that ships loading concentrates almost certainly result in raised levels of lead pollution (with greater than 99.95% confidence).**

The results for the container ships also seem significant but a causal link needs to be established.

Note that these results are very conservative as the average values of lead measurement were calculated for the total days the ships were in port. The loading activity and hence the polluting activity would have occurred over significantly less time.

An alternative test for the dependence of lead pollution on the two causes given above is to consider the number of times the lead measurement exceeds a limit of $5 \mu\text{g}/\text{m}^3$ (the acceptable limit for an annual average) with and without the suggested causes. The following results were obtained.

	Number of Readings	Readings exceeding Threshold=0.5	Ratio
Without Target ships	3077	9	.009
Ships with Concentrate	1315	75	.057
Designated Container Ships	169	37	.22

The results again justify the hypothesis that lead pollution is caused either by ships loading concentrates or by certain container ships.

Community Award

Queensland community group or a community partnership for measurable environmental care and natural resource stewardship.

Defined as a group of interacting people, generally in social units larger than households (neighbourhoods, clubs, schools, workplaces, etc.) and possibly living in close proximity, that work together for a common purpose.

Partnership is defined as a consortium of community groups working in partnership to achieve shared environmental and sustainability targets.

The sponsor

Queensland Water and Land Carers

In the paddocks and backyards, on balconies and beaches of Queensland, citizens are working together in their local communities to make a difference. The many thousands of voluntary members of Queensland Water and Land Carers make a significant and visible contribution to the environmental, social and economic health of the state. More than 300 groups and 30,000 volunteer members across Queensland demonstrates the enormous value of people collaborating to make a difference. The natural landscapes Queenslanders treasure, from the reef and ranges to the red dust, are all enhanced by the practical on-ground achievements of this community of many hands.

'Every day as you wake up, all around Queensland, landcare and natural resource management volunteers are working together to enhance, repair and viably manage our precious natural resources.'

This unique partnership between landholders, communities, organisations and government is making a visible difference to the places we love and live in.'

Geoff Elliot | Chairperson, Queensland Water and Land Carers



The entrants

Anita Christian
Moreton Bay Regional
Council Community waste
minimisation

Anita Ong
InTheBin

**Australian Trust for
Conservation Volunteers**
Gladstone Harbour Catchment
Care Program

Boral Limited
Boral Ormeau Quarry—
Restoring the Pimpama Creek
Riparian Corridor

Brooke Summerville
Boomerang Bags Stanthorpe

Christine Glennie
Surfrider Clean Up Double
Island Campaign

**Coolum and North Shore
Coast Care**
Turtles? What Turtles?

David Donohue
Townsville Port Stakeholder
Working Group

Elli Webb
Waste Minimisation and
Waste Diversion for the
Gympie Region

Energex Limited
Granard Wetlands

Healthy Waterways
Healthy Waterways Program

Jennifer Loder
Empowering reef champions
in South East Queensland

Melissa Spalding
Promoting the Caring for Central
Queensland's Soil Health

Ruth Lewis
Ipswich Koala Protection
Society Inc

**Tangalooma EcoMarines
Foundation Pty Ltd**
Tangalooma EcoMarines

Tina Embrey
Bayside Transformation Ltd -
Waste to Worth

**Yellow Crazy Ant
Community Taskforce**
Eradication program

**Yuku Baja Muliku Indigenous
Land & Sea Rangers**
Yuku Baja Muliku Junior
Ranger Program



▲ Coolum and North Shore Coast Care—dedicated volunteers, passionate about protecting turtles and their habitats from the Mooloolah River to Noosa.



▲ Yuku Baja Muliku Junior Rangers Program—creating a sustainable community where young people on country can learn from their elders.