

# Rathmines

PROGRESS ASSOCIATION



*Postal Address:*

THE SECRETARY

43 Cheapside Street

Rathmines

N.S.W. 2283

TEL 02 4975 3277

18th June 2013

REF: SSD 4974

Public Submission to Wallarah 2 Coal Project

[www.majorprojects.planning.nsw.gov.au](http://www.majorprojects.planning.nsw.gov.au)

## **Who We Are**

The Rathmines Progress Association has been in existence since 1945. The Association covers the suburbs of Rathmines, Fishing Point, Balmoral and Buttaba.

## **What We Stand For**

To quote from our constitution:

Aims and Objectives.

The Rathmines Progress Association and its members shall individually and collectively interest themselves in and work for the good of the community in general and provide and/or maintain Community Amenities.

## Where we live

We are situated on Western Lake Macquarie New South Wales; our nearest Town Centre is Toronto Postcode 2283. Rathmines, Fishing Point, Balmoral and Buttaba are all in postcode 2283

Postcode 2283 adequately describes the suburbs around Toronto with a total population of 22,729.

Our Association submits the following 6 pages of documentation together with 4 appendices for your consideration.

Yours Faithfully,



W McArthur

Hon. Secretary

# Rathmines

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Submission by Rathmines Progress Association dated 18th June 2013

Please note that due to limited technology some Appendix Documents are in overlapping .jpg files.

### CURRENT MAJOR AIRBORNE DUST SOURCES IN THE AREA

#### Eraring Power Station & Centennial Coal

##### Eraring Power Station (Eraring PS)

Eraring PS is approximately six kilometres from Rathmines and approximately eight kilometres from Toronto Town Centre.

It has recently had an upgrade of its four coal fired boilers from 2,640MW to 2,780MW in total. It is planned that all boilers be increased in upgrade to 2,880MW in total.

It is understood that coal consumption for 2011 was 6 000 000 Tonnes/Year for the four units. This will increase as the upgrade is finished. It is understood that the fabric filter dust collection plant is 99.89% efficient, burnt coal ash dust particulate matter escape can range up to 0.05mm in diameter.

It is understood that at there has been an increase 84 tonnes of ash per year of PM10 emissions to a total of about 1500 tonnes per year over the surrounding local areas. This will increase further as the installed capacity reaches 2,880 MW. The increase is certainly noticed by the community, on exterior glass table tops and cars parked outside at night. These figures were available on Eraring Power's Website but have now been removed. We do however have a copy in attached Appendix (1). Also there could be issues on burnt furnace ash from Vales Point Power Station (VPPS) which is approximately fourteen kilometres from Rathmines.

Also we understand at Eraring PS there is a live coal storage stockpile of approximately 200 000 tonnes and a reserve stockpiles of approximately 1 000 000 tonnes on the power station site. These areas at times would be subject to wind erosion depending on weather conditions and ability to handle coal dust on the stockpiles.

Currently the private coal road which runs between Eraring Power Station and the Newstan Mine transports millions of tonnes of coal along it from other Centennial Coal mines. It has a long standing operating practice that all coal trucks and truck trailers are covered for dust.

Railway coal wagons that deliver coal into Eraring Power Station from the main northern railway spur loop, unlike the road coal trucks and trailers on the private coal road, do not have to cover their coal as an operating practice.

The coal mines in this area were principally developed for the operating power stations (Eraring, Vales Point & Munmorah) where most of the coal was delivered by covered dedicated coal conveyors and covered trucks on the private coal road with some exported by rail via Newstan Rail Loading Facility. The coal conveyors have a low roof cover, protecting the coal from rain. This structure provides a low profile, in corridors through the bush, therefore minimising coal dust to the atmosphere.

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### Centennial Coal

It is our understanding that currently Centennial Coal exports 4 000 000 tonnes of coal per annum via Newcastle or Port Kembla using uncovered coal rail wagons from its Newstan Rail Loading Facility.

This also means taking millions of tons of coal per annum to Port Kembla through the suburbs of Sydney, using uncovered coal wagons.

Its mines also deliver, via private coal road or conveyor belt systems to Eraring Power Station around 6 000 000 tonnes of coal per annum, plus 2 000 000 tonnes of coal per annum to Vales Point Power Station.

### PROPOSED ADDITIONAL MAJOR AIRBORNE DUST SOURCES IN THE AREA

Eraring Power Station & Vales Point Power Station (Cobbora Coal Transportation) plus Centennial Coal exporting coal from Mandalong Southern Extension, proposed Newstan Extension plus Wallarah 2 coal rail transport

It is our understanding during 2002 Powercoal which owned the mines developed for the power stations sold them to Centennial Coal with existing coal supply agreements. These agreements are almost completed. The State Government decided to develop and open the Cobbora Mine to supply coal to Eraring & Vales Power Stations for the next twenty one years.

Therefore at least 8 000 000 tonnes per annum of coal for Eraring and Vales Point Power Stations will have to be mined and transported 500 km by rail from Cobbora, New South Wales to Lake Macquarie in uncovered rail wagons. Thus replacing local mines transporting coal in low profile dedicated covered conveyors and covered trucks.

It is considered that the covered trucks and conveyors are much more environmentally practical than using uncovered coal wagons.

### Centennial Coal

It is understood that Centennial Coal is in the process of development of the Mandalong Mine Southern Project Extension (56 longwalls). It is in the early process of getting approval for the Newstan Extension. The Newstan Extension (7 longwalls) runs into Rathmines and then south to the outskirts of Arcadia Vale, Wangi Wangi and east to Eraring Power Station.

It is proposed to export 8 000 000 tonnes of coal per annum (double the current approval) from Centennial Coal mines in our area to either Newcastle or Port Kembla in uncovered coal rail wagons from its Newstan Rail Loading Facility. Also we understand it is possible the Newstan Extension will require upgrading the Newstan Coal Handling Infrastructure, Coal Preparation Plant, increasing coal storage and handling areas and possibly an increase in size of the Newstan Rail Loading Facility.

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### Wallarah 2 Mine Coal Rail Transport to Newcastle

The Rathmines Progress Association understands the above will transport approx. 100 000 tonnes (5.2mtpa) from Wyee to Newcastle. It is noted in an article published by Newcastle Herald dated 5th June 2013 in which the Project Manager Mr K Barry comments "There's been a lot of talk about dust related to coal trains and whether wagons should be covered. If that ever becomes a requirement we should abide by that".

Clive Palmer's Waratah Coal is in the process of transporting coal in covered wagons in Bowen North Queensland and they have been used successfully in the United States of America.

Reference Newcastle Herald 8th June 2013. Please see Appendix (2)

The Rathmines Progress Association strongly advocates covered coal wagons be made a mandatory requirement for approval of the Wallarah 2 Mine Coal Project

### Coal Particulates and the Community

The houses of Fassifern/Fennell Bay Postcode 2283 are around 0.75 kilometres away from the Newstan coal areas and the Newstan Rail Loading Facility.

We list local schools in our areas near the main rail corridor exposed to dust from uncovered trains.

School	Distance (metres)	Enrolments
Awaba Public	208	29
Booragul Public	438	267
Charlton Christian College	0	610
Dora Creek Public	313	136
Fassifern Public	0	58
Lake Macquarie High	500	508
Morriset High	15	836
Morriset Public	458	239
St John Vianney	63	121
St Pauls High	63	908
Teralba Public	83	68
Total Students		3,780

There are many more schools along the coal route to Newcastle. The Newcastle Herald (Regional Newspaper) breakup is quite alarming as the total schools number 59 and school children, 23 244 See attached Appendix (3).



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## TOTAL SNAPSHOT OF AIR QUALITY IN POSTCODE 2283 AND SOCIAL IMPACT

### Current Activity

#### Boiler Ash

Eraring PS increase of 84 tonnes

About 1500 tonnes per year

in surrounding areas

Approx. 14 Km from main centre

Toronto 2283

#### Airborne Coal Particulate Matter

Eraring PS 6 000 000 tonnes per annum

plus Vales Point 2 000 000 tonnes

per annum burnt, negligible effect due

to coal being transported by covered

trucks/roofed low profile conveyor systems.

### Future Activity

Slight increase when upgrade complete

Eraring PS sources 6 000 000 tonnes per

annum, plus Vales Point 2 000 000 tonnes per

annum for next twenty one years from Cobbora

open cut mine in uncovered coal wagons .

Dust into air, schools, homes near rail.

#### Centennial Newstan Coal Preparation

Loading Facility. Currently approved

four million tonnes per annum for export.

Centennial Newstan Coal Preparation Plant,

coal storage and handling areas and Newstan

Rail Loading Facility. Probable increase in size

due to plans to export a total of eight million

tonnes of coal per annum shipped from

Newcastle & Port Kembla. Transported there

via suburbs of Sydney in uncovered coal wagons.

The result is coal fines into atmosphere.

Also increased dust Issues with extra loading at

Newstan Rail Loading Facility.

The Newstan Extension has not been finalised

to date, so this could have additional effects to

the atmosphere as this process progresses.

Wallarah 2 Mine Additional 5.2 million tonnes per annum in uncovered wagons for next twenty five years releasing coal fines into atmosphere

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Therefore to summarise, the surrounding areas of postcode 2283 have had a recent increase of burnt boiler ash from Eraring PS of 84 tonnes per year to a total particulate matter of about 1500 tonnes per year. There will be an increase of 6 000 000 tonnes per annum delivered to Eraring Power Station, plus 2 000 000 tonnes of coal per annum to Vales Point into Lake Macquarie from Cobbora in uncovered coal wagons.

Current plans by Centennial is to seek permission to increase additional rail transport from 4 000 000 tonnes of coal per annum to 8 000 000 tonnes per annum from the local mines for export in uncovered coal wagons.

Wallarah 2 Mine Additional 5. 2 million tonnes per annum in uncovered wagons for next twenty five years releasing coal fines into atmosphere

Also when the uncovered coal wagons return from their delivery points empty, there will be a residue not discharged. Extra coal fines will be vortexed into the atmosphere.

The net increase is 13 200 00 tonnes of coal per annum to a total of 21 200 000 tonnes per year in uncovered wagons with return empty trips vortexing fine dust into the atmosphere.

See Appendix 4

## Uncovered Rail Wagon Rational

### Centennial Coal

Our understanding is that each train operated by Centennial in this area is on average forty four wagons. The capacity of each wagon is about 78 tonnes. The average coal train loaded is about 3 400 tonnes. As each train delivery includes a return trip, therefore the annual quota of 8 000 000 tonnes of coal equates to 6 uncovered wagon train trips per day plus return throughout residential areas.

### Wallarah 2 Mine

Our understanding is that each train operated by Wallarah 2 Mine will have thirty eight wagons.

The capacity of each wagon is about 105 tonnes. The average coal train loaded is about 4000 tonnes. As each train delivery includes a return trip, therefore the annual quota of 5 200 000 tonnes of coal equates to 5 uncovered wagon train trips per day plus return throughout residential areas.

Cobbora Mine about 350 kilometres from Lake Macquarie

(The following has been sourced from Cobbora Coal Project, Rail Transport Assessment, Append L )

The indications are that each train operated by Cobbora would be large wagons. Due to the distance travelled the average coal train would have the capacity of 7800 to 8800 tonnes. This would require a minimum of four dedicated train paths each way to be available seven days per week.

Therefore the annual quota of 8 000 000 tonnes of coal equates to 4 train trips in uncovered wagons per day, plus return trips throughout residential areas.

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In summary of the above it is understood there will be fifteen extra trains carrying approximately 73 600 tonnes of coal a day in uncovered coal wagons with return empty wagons (another fifteen trains) vortexing fine dust into the atmosphere.

Please refer to "Centennial Newstan Air Quality Impact Assessment" prepared by Global Environmental Solutions (SLR), Report No. 630.10002, dated 12th September 2011.

We direct you to page 60 - 9.8, the bullet point Covering Load (e.g. tarpaulin or lid)

It clearly states in Train and Truck Load Out Transportation, covering loads is best practice.

Now we also direct you to page 63 of the same report under the headings of "Activity" and "Currently Implemented" Rail Corridors, covering loads - IMPLEMENT - NO . However the same requirement for Trucks - IMPLEMENT - YES.

## Parliamentary Ministerial Concern

The Hon. Greg Piper MP (State Independent Member for Lake Macquarie) in his June 2013 publication of 'Lake Macquarie Matters' had an article headed 'Clearing the Air', we quote in part.

"The National Pollutant Inventory, a Federal Government internet database, shows Lake Macquarie has been amongst the State's highest emissions of nitrogen oxides, sulphur dioxides and particulate matter, pollutants are considered to pose significant health risks"

Also in this article he is lobbying to have an independent, government – operated air quality monitor in Lake Macquarie.

The Rathmines Progress Association congratulates our Hon. Member on this article.

Lake Macquarie on this article and for

In conclusion The Rathmines Progress Association submit the social implications for the planned increases of transportation of uncovered coal wagons in Lake Macquarie coupled with the double whammy of increased coal ash in our areas is completely unacceptable.

We ask for the covering coal wagons to be made a mandatory requirement for approval of the Wallarah 2 Mine Coal Project

Yours Faithfully,

W McArthur

Hon. Secretary



~~MISSO~~  
FLY ASH DUMP INTO

ATMOSPHERE

4.032 Tonnes per day

OR 1471.68 tonnes per year

APPENDIX 2 FROM EPLRNC  
QUICK START KIT SITE  
(now removed)  
**CARING FOR OUR  
ENVIRONMENT**



IN RESPONSE TO ONGOING COMMUNITY, GOVERNMENT AND REGULATORY DEBATE, WE HAVE COMMITTED TO TAKING A LEADERSHIP ROLE IN REDUCING CO<sub>2</sub>, INCLUDING OPERATING AND TRADING OUR EXISTING RENEWABLE ASSETS TO MAXIMUM BENEFIT.

#### Challenges

- "Uncertainty surrounding future carbon obligations and the impact on operations and the community in a climate of rising energy demands"
- "Working with key stakeholders to reduce our impact on Lake Macquarie"

Eraring Energy continues to undertake environmental initiatives to enhance our environmental performance and improve stakeholder perceptions. These initiatives include a comprehensive range of environmental performance and awareness activities.

The Environmental Policy is reviewed annually by the relevant Executive and Board Committees with final approval from the Board.

#### Environmental Monitoring and Reporting

Monitoring and reporting is undertaken in compliance with our Environmental Policy, ISO14001 Environmental Management System (EMS), National Greenhouse and Energy Reporting System (NGERS), Environment Protection Licence (EPL) and other licence requirements. The EMS is an important tool for continually improving environmental management. Environmental management plans are developed for all activities with a significant environmental risk component.

We maintained our ISO14001 accreditation for all the generating sites and gained accreditation against ISO14064 for NGERS for Eraring Power Station.

**There were no externally reportable incidents and no licence exceedances in the 2009/10 year.**

#### Recycled Ash

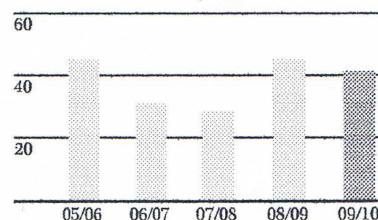
**We currently recycle approximately 41% of the flyash produced by Eraring Power Station.**

Following the installation of the new Coal Combustion Products Plant and associated facilities we are targeting to recycle 80% of ash produced by 2015. We are taking a leadership role in improving the recycling of coal combustion products.

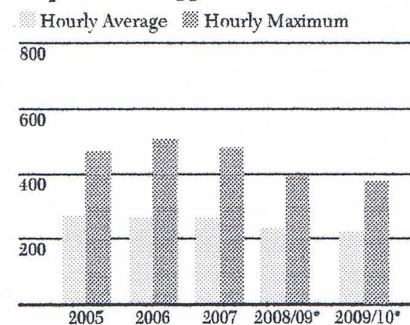
#### Reducing Emissions

We are part of an industry responsible for a large proportion of greenhouse gas emissions. The main greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane and nitrous oxides (NOx).

#### Ash Reuse (% Recycled)



#### SO<sub>2</sub> Emissions (ppm)



\* Note that this data is financial year, not calendar year due to a change in reporting schedules.



# APPENDIX 2 FROM ERARING POWER STATION NETT SITE (NOW REMOVED).

All air emissions from Eraring Power Station were well below licence limits specified in the site operating licence. Reduction of CO<sub>2</sub> and NOx emissions associated with the upgrade of Eraring Power Station include a reduction by 200,000 tonnes per year of CO<sub>2</sub> and a 40% reduction of NOx emissions.

## Greenhouse Intensity

Greenhouse Intensity is a measure of the amount of CO<sub>2</sub>-e released per MWhr of energy generated. Our Greenhouse Intensity for 2009/10 was 913.56 kg/MWh compared to 907.27 kg/MWh in 2008/09.

This increase in Greenhouse Intensity can be attributed to a higher proportion of our generation occurring in the summer months when cooling water temperatures are higher and therefore less efficient.

Our Greenhouse Intensity is expected to reduce upon the completion of our capacity upgrade project in 2012.

## Offsetting Our Carbon Emissions

We have a portfolio of electricity generating assets, including wind farms, hydro power stations and a thermal power station. In addition to the green energy produced by our wind farms and hydro power stations, we have invested in the following projects to assist in offsetting our carbon emissions from our thermal power station and vehicle fleet:

- Ongoing CO<sub>2</sub> sequestration initiatives including Mallee plant forest sequestration with CO2 Australia and the offsetting of our vehicle emissions through planting trees on the ash dam; and
- As a result of the upgrade of Eraring Power Station, a reduction of 200,000 tonnes of CO<sub>2</sub> emissions per year for the life of the Power Station, with the potential for a further reduction of 600,000 tonnes of CO<sub>2</sub> emissions each year as our Power Station displaces less efficient power stations in the NEM.

## Energy Consumption

The largest area for direct energy consumption is the generation of electricity, with over 5,000 kilotonnes of black coal being consumed this year.

Other sources of energy consumption are diesel, gasoline and LPG for our vehicle fleet (565 kL), electricity usage at Eraring Power Station (4,237,109 kWh) and electricity usage at the Sydney office (93,164 kWh).

## Land Management

Our Land Management Plan covers all aspects of the management of the 1,150 hectare of Eraring Power Station lands, including rehabilitation of disturbed lands using local providence tree stock generated by Koompahtoo (now NSW Aboriginal Land Council). We share a four year relationship with Koompahtoo in the development of a native seed collection, propagation and planting project at Eraring Power Station to remediate and rehabilitate disturbed areas on site such as the ash dam and reservoir areas. To date over 100,000 trees have been planted with an additional 50,000 being raised for further plantings.

Approximately 7,000 trees have been planted as a green fleet offset to compensate for CO<sub>2</sub> emissions from our vehicle fleet. Through its relationship with us, Koompahtoo has been able to expand into a commercial entity and are supplying their services to other corporations including RTA, Hunter Water, local schools and local councils.

The Aboriginal Land Council has used this enterprise as a benchmark for the development of further collaborative commercial enterprises in the aboriginal community.



Specific sub-plans are particular to land management issues, such as rehabilitation of the attenuation reservoir construction site or relocation of threatened plant species.

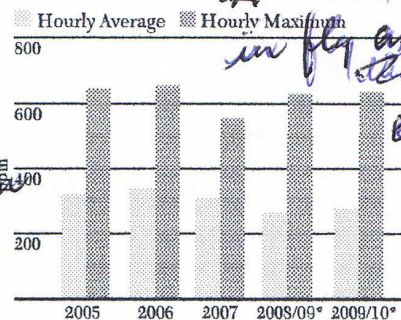
A Habitat Offset Plan was developed to create areas of compensatory habitat that are comprised of stable, near natural eco-systems for the purpose of offsetting the upgrade works. This was also a requirement of the development approval. These compensatory habitats of high value areas include an apple peppermint forest which will be managed in perpetuity under the Eraring Power Station land management plan.

OUTPUT MW 2800 MW

PM10 WEIGHT 2800 x 0.06 KG = 168KG PER HOUR

168 KG x 24 = 4.032 ton per day

NOx Emissions 1471.68 tons in fly ash to year



\* Note that this data is financial year, not calendar year due to a change in reporting schedules.

## AIR EMISSION TYPE

### Weight of Air Emissions

Air Emission Type	Weight (kg) per MWh Net Generation
NOx	2.35
SO <sub>2</sub>	2.07
PM10	0.06

\* Calculations based on NGERs and LVL data



N14 8/6/2013

# Open-and-shut case of 'streamline' trains



By MATTHEW KELLY

CLIVE Palmer's Waratah Coal will become the first mining company in Australia to transport coal in covered wagons.

The company has proposed using wagons with fibreglass covers to transport loads from the China First Coal Mine in Central Queensland to the Abbot Point coal terminal in Bowen, north Queensland.

The tippler or gondola wagons use hydraulic jacks to open and close the wagon covers, which have been successfully used in the United States.

"The covers not only protect the environmental values to which the rail alignment abuts but covering the wagons



ON TRACK: Waratah Coal will unveil the first covered wagons.

streamlines the train and makes it more fuel efficient and operationally superior to any other coal train system being proposed within the Galilee Basin," Waratah Coal chief executive Nui Harris told the *Newcastle Herald*.

The company's supplement any environmental impact

unloading sites," the report said. "Consequently the covers and handling equipment are designed as a system to match the speed of loading or unloading the coal trains."

The *Herald* is campaigning to have similar covers installed on trains operating along the Hunter's coal corridor.

The Australian Rail Track Corporation last week published the results of a second round of coal wagon dust emissions conducted in the Hunter.

The tests, conducted at Raymond Terrace Drive in Melford from November 30, 2012 to January 2013, found loaded coal trains passing through the site did not have a stronger association with elevated particulate matter concentrations than other trains.

The Environment Protection Authority chairman and chief executive, Barry Buffer, said:

"The EPA will not consider imposing additional requirements on industry, such as covering of coal loads, unless clear evidence becomes available which demonstrates the need for further studies or measures to control coal dust emissions from loaded coal trains."

"It is essential that the application of the covers to rail coal wagons does not in any way add to the train cycle times or cause any delays to the trains either at the loading or

## Coal rail study ends in dust-up

PORT Waratah Coal Services has challenged the findings of the Coal Terminal Action Group's study into coal dust pollution along the Hunter's coal line.



JAMES WHELAN

The company commissioned air quality specialist Dr Nigel Holmes to review the "Coal Dust in Our Suburbs" study.

The CTAG study's report, released in March, monitored air pollution at 12 houses in suburbs in Newcastle and Maitland.

It found that levels of particulate matter less than 10 microns were higher than the national standards at most locations on most days.

Dr Holmes challenged the report's methodology, the accuracy and reliability of its results and the extent to which the data collected supported the authors' conclusions.

The review raises concerns that due to the type of monitors used for the CTAG study, the results cannot be measured against Australian air quality standards.

Dr Holmes also criticised the report's

title, saying the study did not collect appropriate data to make reliable conclusions about the type or source of dust monitored.

Coal Terminal Action Group spokesman James Whelan said the group's finding that particle pollution levels exceeded national standards in Newcastle was beyond dispute.

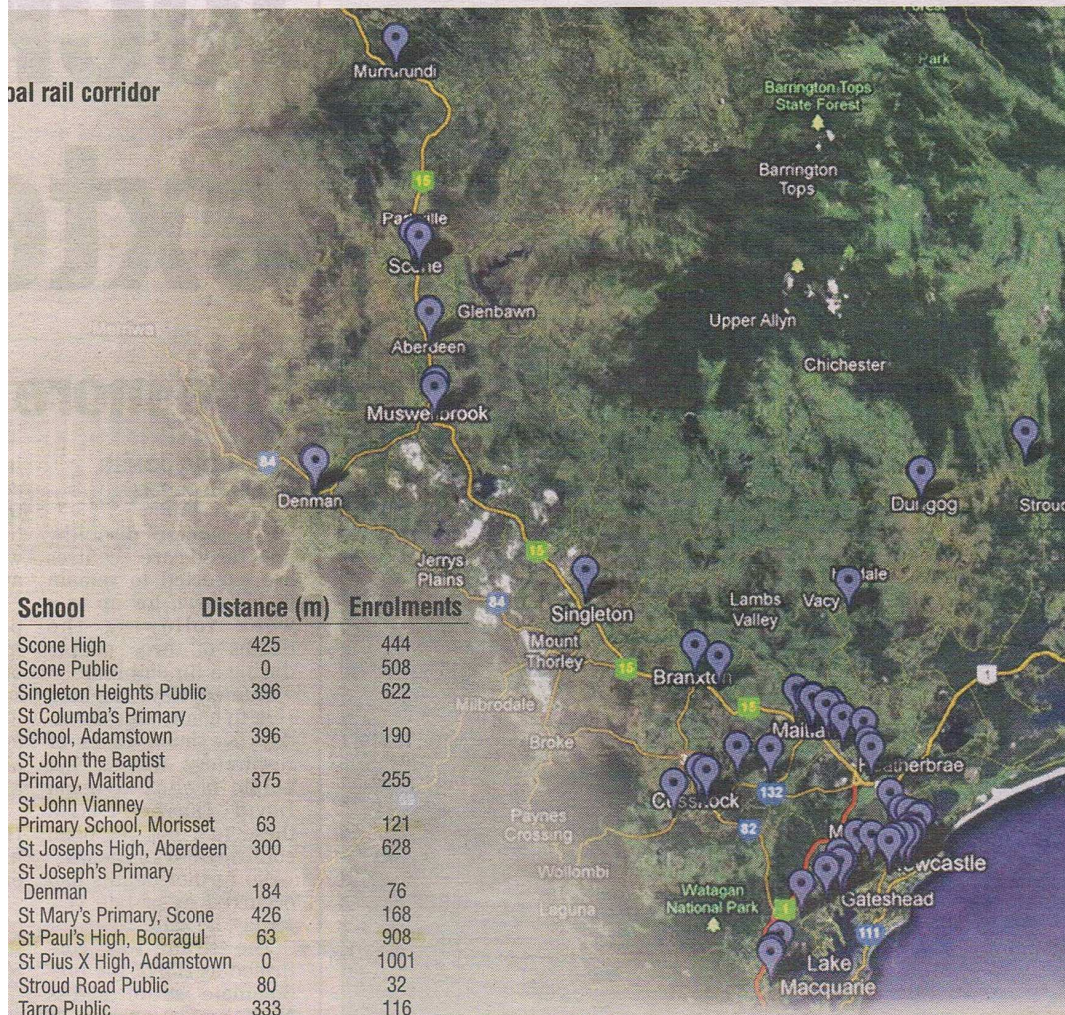
"Levels above the standard have been monitored many times in recent months at the Orca monitoring station in Stockton, just hundreds of metres from one of PMCS's uncovered coal stockpiles," he said. "Our monitoring confirmed that elevated levels are found in other suburbs close to stockpiles and uncovered coal wagons."

Matthew Kelly



F/8/2017

# Impact alert



School	Distance (m)	Enrolments
Scone High	425	444
Scone Public	0	508
Singleton Heights Public	396	622
St Columba's Primary School, Adamstown	396	190
St John the Baptist Primary, Maitland	375	255
St John Vianney Primary School, Morisset	63	121
St Josephs High, Aberdeen	300	628
St Joseph's Primary Denman	184	76
St Mary's Primary, Scone	426	168
St Paul's High, Booragul	63	908
St Pius X High, Adamstown	0	1001
Stroud Road Public	80	32
Tarro Public	333	116
Telarah Public	500	496
Teralba Public School	83	68
Thornton Public	229	542
Tighes Hill Public	375	230
Waratah West Public	500	78

**TOTAL ENROLMENTS 23,244**

Measurements are estimates based on street maps and measured from the shortest distance as the crow flies. Enrolments are based on 2012 mid-year state school figures and 2011 Catholic school figures.

\* Is above 500 metres but is in uninterrupted space.

## Pupils close to railway lines

By ALISON BRANLEY  
Education Reporter

MORE than 23,000 Hunter school students spend their lunchtimes within 500 metres of the Hunter's coal rail corridor.

A review of the locations of Hunter public and private schools has shown 16 per cent of school grounds, 60 schools, are within walking distance of the region's coal railway lines.

It means students spend their lunchtimes playing while breathing air filled with coal dust emanating from passing trains.

Many also spend their days in classrooms without air-conditioners or air filters to protect them from damaging particulates that are contained in the dust.

Two Hunter schools even have dust monitors in place.

The NSW Minerals Council said it took the issue of air quality seriously and had backed research and monitoring that would lead to better understanding.

Singleton GP Dr Tuan Au has been investigating a link between open-cut mining operations and rising respiratory illness in his community and has thrown his support behind a *Newcastle Herald* campaign to put covers on the trains.

He conducted a study three years ago that involved more than 680 students in the Singleton area and found one in six had diminished lung function, which was on the "high side" compared to other areas.

In nearby Braxton where children were further from the mines only one in 20 had lower lung function.

Dr Au said the small par-

## ments, concern over coal: report

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nt) or "some-  
nt) concerned  
of coal trains  
stle suburbs.  
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xclusively to  
ald yesterday.  
ed by 55 com-  
s who door

knocked almost 500 house-  
holds close to coal-related  
infrastructure, with others  
completing the survey online.

The community question-  
naire was developed and anal-  
ysed with input from social  
scientists Dr James Whelan  
and Dr John Mackenzie.

The residents were also  
given the chance to make  
comments, which they did on  
issues including cancer  
rates, carcinogens in coal,

and general health impacts.

One resident said he/she  
had been diagnosed with  
lung cancer "because of dust  
in the lungs".

Another said it was diffi-  
cult to control the dust: "It  
gets in our lungs. There are  
carcinogens in coal".

A 2010 Department of  
Health report on respiratory  
and cardiac illness and cancer  
in the Hunter New England  
Area Health Service found the

region had higher than aver-  
age rates of emergency depart-  
ment attendance for asthma  
and respiratory disease.

There were also higher  
rates of hospital admissions  
for all respiratory conditions  
and cardiovascular disease.

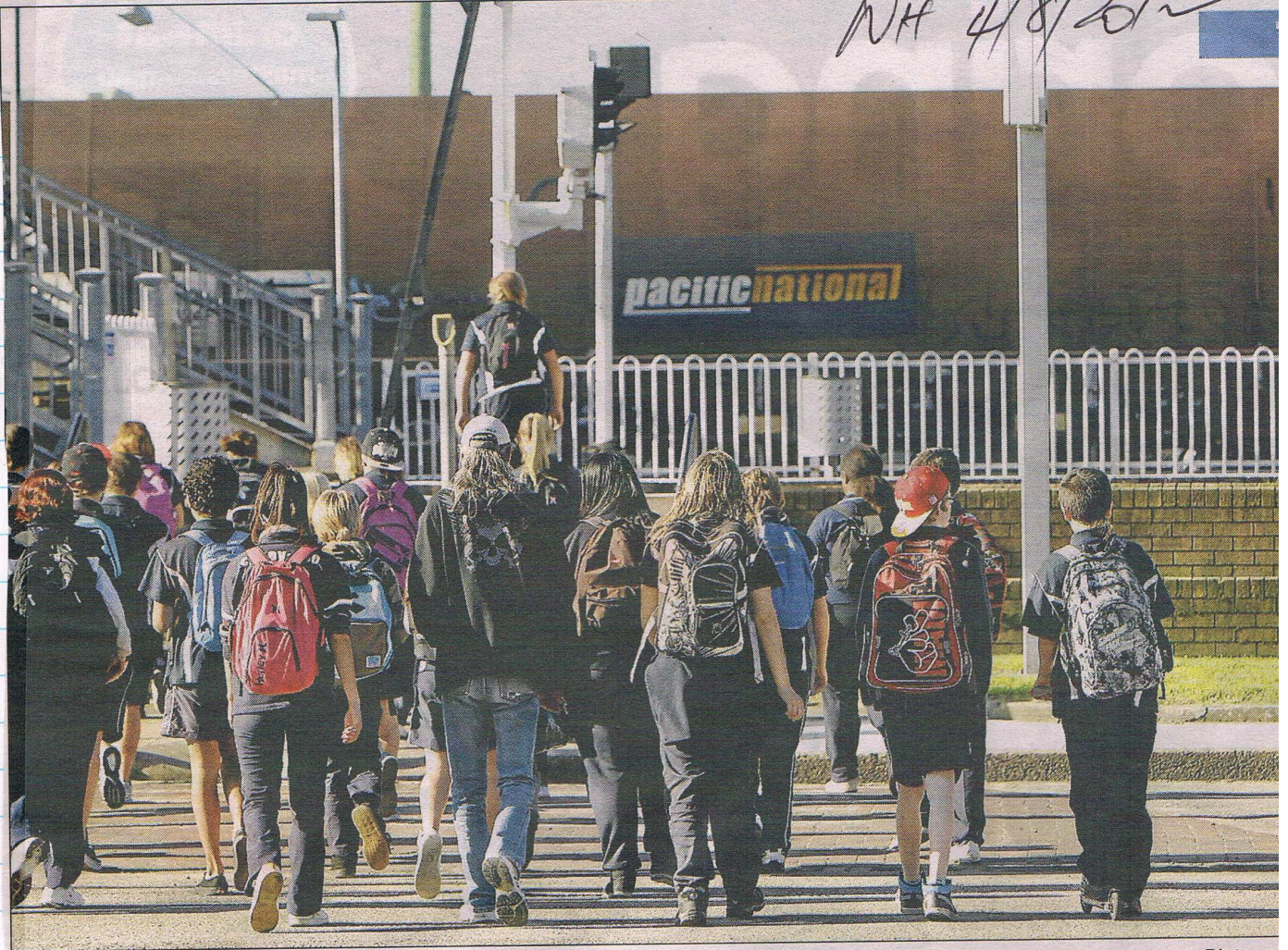
The study concluded the  
findings may have been  
affected by exposure to coal-  
mining and coal-fired power  
generation, however, further  
investigation was required.



# in school grou

APPENDIX 5

NH 4/8/2012



**OPEN BOOK:** Students near Waratah Train Station as a coal train passes through.

Picture:

ticulates in the dust had been shown to damage lungs in children.

"The membrane in the lung is not mature enough," he said. "The particulates cause inflammation in the lung and vessels. Inflammation causes destruction."

Maitland-Newcastle Diocese Catholic Schools Office said two primary schools, St James' Muswellbrook and St Joseph's Denman, had dust monitoring devices in place.

Special precautions were also taken by St Catherine's Kindergarten to Year 12 College at Singleton where staff brought students indoors when it was windy or dusty.

"The Catholic Schools Office and its schools follow the advice of Hunter New

England Health, however [they] are open to all initiatives which lead to cleaner air," an office spokeswoman said.

A NSW Education Department spokesman said no schools had approached it about coal dust as a health issue.

"The department and schools would co-operate with the health or environmental authorities if they saw schools as having a role to play," he said.

"Any parents with concerns are advised to seek medical advice."

Charlton Christian College at Fassifern is separated from the rail line by a small amount of bushland.

Principal Sue Skuthorpe

said the school previously opposed a semi-open-cut mine nearby because of concerns about particulates in the air and backed the *Newcastle Herald's* campaign.

"We don't see the trains, but we can hear them," she said.

"To be polite to your neighbours is something we value and to cover the load over the fence and minimise dust coming off is that.

"It's something that would probably not cost them a lot of money and would be beneficial."

NSW Minerals Council chief executive Stephen Galilee said it was important to monitor air quality and establish the facts.

Mr Galilee said coal-train dust could be influenced by

train speeds, distances travelled, coal moisture content, loading techniques and the shape of the coal in the wagon.

The council had reviewed sites to improve dust management, funded research on dust-management techniques and funded the Upper Hunter Air Quality Monitoring Network.

He said specific studies in NSW were needed and the council supported current studies.

"We're keeping a close eye on the progress of this work so we can develop the right response and implement better methods of dust suppression," he said.

Dr Au said the longer children were exposed to pollution the more lung damage done.

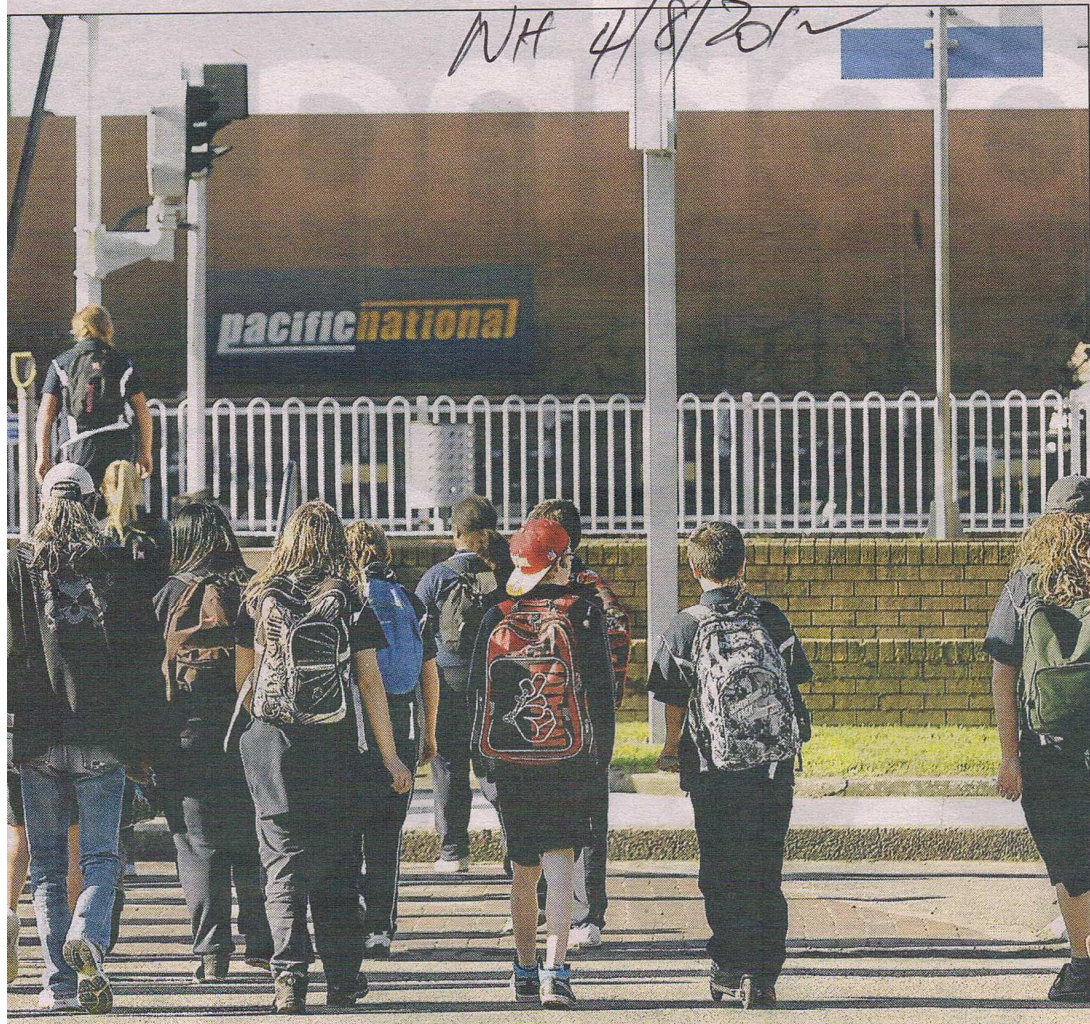


Sign the New Great Cove petition to go coal wagon [www.thehe](http://www.thehe)





# chool grounds



## Health service monitors findings

HUNTER New England Health says a rise in dust particulates in the air is detrimental to health but it is waiting on the findings of a pollution reduction program in the region to respond.

The *Newcastle Herald* approached Hunter New England Health for its stance on coal dust from trains following acknowledgement from Hunter schools in the region that they relied on the service's advice.

A spokeswoman said the NSW Environmental Protection Agency was responsible for the regulation of air pollutants.

The health service did state that increased air particulates had a detrimental effect on health.

"All reasonable attempts should be made to limit exposure, for adults and children," she said.

"Particularly in areas where high ambient levels already exist due to industrial, agricultural or environmental sources."

The Environmental Protection Agency, which licences rail track managers in NSW, has started a pollution reduction program in the Hunter in response to community concern.

"Hunter New England Health welcomes the investigation into air monitoring along Hunter rail lines," she said.

"The monitoring program will provide an objective measure of what contribution coal trains with uncovered coal loads contribute to dust levels and guide decisions on ... mitigation measures.

"Once completed, the [program] findings will be analysed and appropriate action will be taken."

Picture: Jonathan Carroll

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Sue Skuthorpe

said the school previously opposed a semi-open-cut mine nearby because of concerns about particulates in the air and backed the *Newcastle Herald's* campaign.

"We don't see the trains, but we can hear them," she said.

"To be polite to your neighbours is something we value and to cover the load over the fence and minimise dust coming off is that.

"It's something that would probably not cost them a lot of money and would be beneficial."

NSW Minerals Council chief executive Stephen Galilee said it was important to monitor air quality and establish the facts.

Mr Galilee said coal-train dust could be influenced by

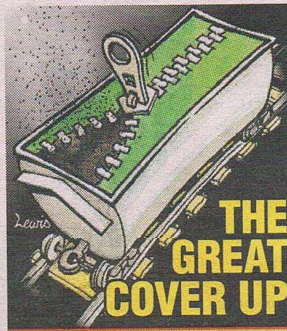
train speeds, distances travelled, coal moisture content, loading techniques and the shape of the coal in the wagon.

The council had reviewed sites to improve dust management, funded research on dust-management techniques and funded the Upper Hunter Air Quality Monitoring Network.

He said specific studies in NSW were needed and the council supported current studies.

"We're keeping a close eye on the progress of this work so we can develop the right response and implement better methods of dust suppression," he said.

Dr Au said the longer children were exposed to pollution the more lung damage done.



Sign the *Newcastle Herald's* Great Cover Up campaign petition to get the Hunter's coal wagons covered:  
[www.theherald.com.au](http://www.theherald.com.au)



Boom's home truths  
Inside H2 today

Alison Branley



# Lung impact

NH 4/8/2017  
APPENDIX 5

## KEEPING TRACK

Hunter schools located within 500 metres of coal rail corridor

School Distance (m) Enrolments

Aberdeen Public	160	208
Abermain Public	188	212
Adamstown Public	479	235
All Saints College		
St Mary's Campus	125	632
Argenton Public	21	53
Awaba Public	208	29
Bellbird Public	333	245
Booragul Public	438	267
Branxton Public	438	330
Callaghan College		
Waratah Campus	250	507
Cardiff North Public	521	126
Cessnock High	83	595
Cessnock Public	333	320
Charlton Christian College	0	610
Denman Public	140	212
Dora Creek Public	313	136
Dungog High	567	645
Dungog Public	429	203
East Maitland Public	333	543
Fassifern Public	0	58
Francis Greenway High	188	812
Greta Public	458	206
Hunter School of		
Performing Arts	125	1164
Hunter Wetlands Centre	250	0
Islington Public	208	75
Kotara School	188	22
Kotara South Public School	271	258
Kurri Kurri High	604*	815
Lake Macquarie High	500	508
Maitland Grossman High	292	1255
Maitland High	417	856
Maitland Public	230	300
Martins Creek Public	82	16
Merewether High	479	1090
Metford Public	229	318
Morriset High	15	836
Morriset Public	458	239
Murrurundi Public	364	51
Muswellbrook High	257	778
Muswellbrook South Public	200	396
Scone Grammar	200	600

School Distance (m) Enrolments

Scone High	425	444
Scone Public	0	508
Singleton Heights Public	396	622
St Columba's Primary		
School, Adamstown	396	190
St John the Baptist		
Primary, Maitland	375	255
St John Vianney		
Primary School, Morisset	63	121
St Josephs High, Aberdeen	300	628
St Joseph's Primary		
Denman	184	76
St Mary's Primary, Scone	426	168
St Paul's High, Booragul	63	908
St Pius X High, Adamstown	0	1001
Stroud Road Public	80	32
Tarro Public	333	116
Teralah Public	500	496
Teralba Public School	83	68
Thornton Public	229	542
Tighes Hill Public	375	230
Waratah West Public	500	78

TOTAL ENROLMENTS 23,244

Measurements are estimated  
measured from the shortest  
Enrolments are based on 2012  
and 2013

\* Is above 500 metres

## Respiratory ailments, concern over coal

By GABRIEL WINGATE-PEARSE

DUST, health and pollution were the chief concerns of 588 Hunter residents who responded to a survey titled "Sick of Coal" commissioned by an alliance of 14 community and environment groups.

More than a third (39 per cent) reported that they or a member of their household suffered from a respiratory

ailment, and one third of those people thought the ailment was caused by coal.

Nearly three quarters of residents surveyed were "very" (46 per cent) or "somewhat" (23 per cent) concerned about the impact of coal trains passing in Newcastle suburbs.

The results of the survey were released exclusively to the *Newcastle Herald* yesterday.

It was conducted by 55 community members who door

knocked almost 500 households close to coal-related infrastructure, with others completing the survey online.

The community questionnaire was developed and analysed with input from social scientists Dr James Whelan and Dr John Mackenzie.

The residents were also given the chance to make comments, which they did on issues including cancer rates, carcinogens in coal,

and general health impacts. One resident said he/she had been diagnosed with lung cancer "because of dust in the lungs".

Another said it was difficult to control the dust: "It gets in our lungs. There are carcinogens in coal".

A 2010 Department of Health report on respiratory and cardiac illness and cancer in the Hunter New England Area Health Service found the

regional age-related mortality and rates for a number of findings affecting the general population

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June 14 2013

# Dust debate deepens



IN THE OPEN: The large pile of coal "fines" sitting beside rail tracks near Warabrook station . . . sources said they had been cleaned from the tracks recently.

Role of empty wagons highlighted



# Role of empty wagons highlighted



IAN KIRKWOOD

RAIL industry insiders say more coal is lost from supposedly "empty" wagons than full ones and the impact of coal dust on track and rolling stock maintenance is a major cost.

The "empty wagon" problem was confirmed by the Rail, Tram and Bus Union's Newcastle organiser, Steve Wright, who said it was well known to the industry.

The Coal Terminal Action Group, which reignited the dust debate this week with allegations an official report had been changed in a cover-up, said the empty wagon claims needed to be investigated.

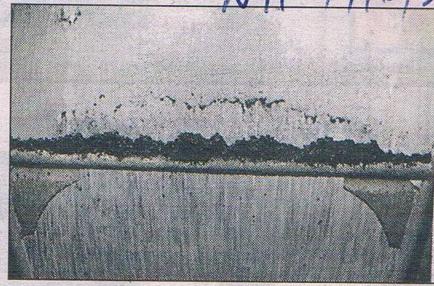
But group member James Whelan said the focus should stay on invisible, respirable, particles of coal rather than "the coal you can see on the side of the tracks".

"There is almost certainly a relationship, but health experts are not so concerned about coal that cannot be deeply inhaled," Dr Whelan said.

"The smaller the particles, the greater the health impact. And even PM10 is not visible, let alone PM2.5 or PM1."

Asked about the "empty wagon" scenario, the Environment Protection Authority said the study by the Australian Rail Track Corporation was "required by the EPA in response to community concerns that loaded coal wagons should be covered".

"If you are correct in your hypothesis that empty trains are the problem, then it



NOT CLEAN:  
This  
"empty"  
wagon  
headed for  
the Hunter  
Valley from  
Newcastle  
still contains  
coal.

would not be effective to cover loaded coal trains - which is what the debate has been about so far," an EPA spokeswoman said.

She said both versions of the ARTC study suggested there was "no appreciable difference between the dust levels measured from the movement of loaded coal trains and other types of freight trains".

But Dr Whelan said that was just one of 18 conclusions.

"The important thing is that both versions of the report accept that coal trains, loaded and unloaded, have statistically significant elevations of particulate matter concentrations when compared with no trains."

He said the action group would continue to analyse the report differences and take up ARTC's offer of "raw data".

Though the rail union has not been active in the debate so far, dust came from coal trains in both directions, Mr Wright said.

"Especially on long trips down from Ulan or Gunnedah, coal that's been through a washery can start to dry out - especially on hot days," he said.

"The new bat-wing wagons

are more aerodynamic and it's not such a problem. But with the older wagons you'd see the dust coming off the top.

"With the empties, they are never really empty.

"Every time the cars go over a set of points or anything that jars the wagons, it tends to shake the coal out the bottom.

"Even though the doors at the bottom are shut, the dust still makes its way through the cracks onto the tracks and the ballast.

"And then it gets swirled up by the next train and the one after that, and so on."

He said the tracks were cleaned using machinery that lifted a section of rail by about 30 centimetres while mechanical "fingers" loosened the ballast rocks from both sides.

Coal dust was vacuumed out and new ballast stones added if needed.

Rail sources directed the *Newcastle Herald* to a large pile of coal "fines" sitting beside the rail tracks near Warabrook station, which they said had been cleaned from the tracks in a recent maintenance "possession".



Obscured by dust  
Editorial, Page 10

NH 14/6/2013