Rathmines
PROGRESS ASSOCIATION

Postal Address:
THE SECRETARY
43 Cheapside Street
Rathmines
N.S.W. 2283

28th February 2013

REF: **The impacts of health of air quality in Australia**,

Australian Senate Committee,

Community.affairs.sen@aph.gov.au.

Dear Senate Committee,

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 (Appendix 1)

Our Association submits the following four pages and respective appendices for your consideration.

Yours Faithfully,

W McArthur

Hon. Secretary

Submission by Rathmines Progress Association dated 28th Feb 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 (EPS)

Eraring Power Station 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. (Appendix 2 *now removed from web site*)

Also there could be issues on burnt furnace ash from Vales Point Power Station (VPPS) which is approximately fourteen kilometres from Rathmines. Tea Gardens residents had dust on their front veranda analysed which turned out to be coal dust and the nearest mine is sixty kilometres away. (Appendix 3)

Also we understand at Eraring Power Station 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 an operating practice that all coal trucks and truck trailers are covered for dust.

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.

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

Eraring Power Station, Vales Point Power Station & Cobbora Coal Transportation

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 (Appendix 4).

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 Cobbara, New South Wales. Lake Macquarie, with its own local mines should not require to source coal from distant suppliers. The local coal is transported by dedicated covered conveyor and covered trucks. We consider this more environmentally practical than using uncovered coal wagons. (Appendix 4).

Centennial Coal

We understand Currently Centennial Coal has opened the Mandalong Mine Extension. It is in the process of developing the Westside Mine (Newstan Colliery) and also into the early process of developing the Newstan Extension. The Newstan Extension runs into Rathmines and then south to the outskirts of 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 probable the Newstan Extension will require upgrading the Newstan Coal Handling Infrastructure, Coal Preparation Plant, increasing coal storage and handling areas and probably increase in size of the Newstan Rail Loading Facility.

It is understood millions of tonnes of coal are delivered to the Newstan site by covered trucks and then reloaded on uncovered rail wagons, if no washing of the load is required.

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 Colle ge	0	610
Dora Creek Public	313	136
Fassifern Public	0	58
Lake Macquarie High	500	508
Morisset High	15	836
Morisset 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 (Appendix 5).

TOTAL SNAPSHOT OF AIR QUALITY IN POSTCODE 2283 AND SOCIAL IMPACT

Current Activity	Future Activity
Boiler Ash	
Eraring increase of 84 tonnes	Slight increase when upgrade complete
About 1500 tonnes per year	
in surrounding areas	
Power Station. Approx. 14 Km	
Airborne Coal Particulate Matter	
Eraring 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/conveyor systems.	Eraring 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. (Appendix 6).

Therefore to summarise, the surrounding areas of postcode 2283 have had a recent increase of burnt boiler ash from Eraring Power Station 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, plus 2 000 000 tonnes of coal annum Vales Point into Lake Macquarie from outside the area.

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. 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 10 000 000 tonnes of coal per annum to a total of 16 000 000 tonnes per annum in uncovered wagons.

Our understanding is that each train operated by Centennial 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 16 000 000 tonnes of coal equates to 26 uncovered wagon train trips per day throughout residential areas.

Please see article from Aurora Catholic Church Maitland – Newcastle Diocese publication, titled King Coal Social Justice Issues for Hunter Residents (Appendix 7)

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.

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. At the very least covering coal wagons should be made mandatory by Legistlation.

Our Association is also concerned that there are no adequate public or privately installed air quality monitors. Those that do exist are sparsely placed and unable to identify the polluter.

We believe those that exist in the Hunter Valley do detect exceedances, however the culprits are not identifiable.

Toronto

APPENDIX (1)

Ref Toronto Lake Macquarie web site

Toronto is the commercial hub of western Lake Macquarie. Just 10 minutes from the F3 Freeway, it is a perfect location for businesses servicing the Central Coast, Newcastle, and wider Hunter region.

Central business district:

229 businesses and 55,514m² leasable floor area

QuickStats

Total persons Toronto and surrounding areas (postcode 2283)		22,729
Total persons Toronto suburb (excluding overseas visitors)		5,161
Primary age group	25-54 years	33.6%
Total labour force		
(includes employed and unemployed persons)		1,832
Occupation – top three		
(employed persons aged 15 years and over)	Professionals	16.8%
Technicians and Trades		16.8%
Clerical and Administration		14.1%
Industry of employment – top three		
(employed persons aged 15 years and over)	Residential Care Services	3.8%
Café, Restaurants and Takeaway Food Services		3.7%
Hospitals		3.5%

Suburbs within Post Code 2283

Arcadia Vale - Awaba – Balmoral – Blackalls Park – Bolton Point - Buttaba

Cary Bay - Coal Point – Fassifern – Fennell Bay – Fishing Point – Kilaben Bay

Rathmines – Ryhope - Toronto

CARING FOR OUR ENVIRONMENT

IN RESPONSE TO ONGOING COMMUNITY, GOVERNMENT AND REGULATORY DEBATE, WE HAVE COMMITTED TO TAKING A LEADERSHIP ROLE IN REDUCING CO_2, 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 exceedences in the 2009/10 year.

Recycled Ash

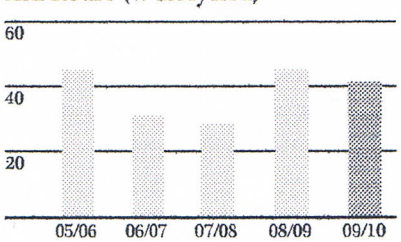
We currently recycle approximately 41% of the flyash produced by Eraring Power Station.

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.

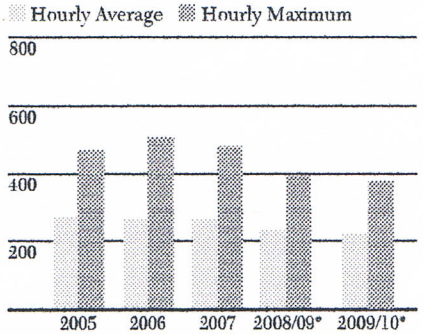
Reducing Emissions

We are part of an industry responsible for a large proportion of greenhouse gas emissions. The main greenhouse gases are carbon dioxide (CO_2), methane and nitrous oxides (NOx).

Ash Reuse (% Recycled)



SO_2 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_2 and NOx emissions associated with the upgrade of Eraring Power Station include a reduction by 200,000 tonnes per year of CO_2 and a 40% reduction of NOx emissions.

Greenhouse Intensity

Greenhouse Intensity is a measure of the amount of CO_2-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_2 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_2 emissions per year for the life of the Power Station, with the potential for a further reduction of 600,000 tonnes of CO_2 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.

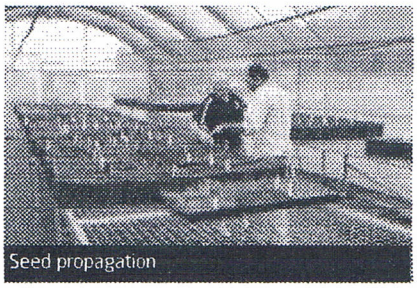
Other sources of energy consumption are diesel, gasoline and LPG for our vehicle fleet (565 kL), electricity usage at Eraring Power Station (4,237,109 kWh) and electricity usage at the Sydney office (93,164 kWh).

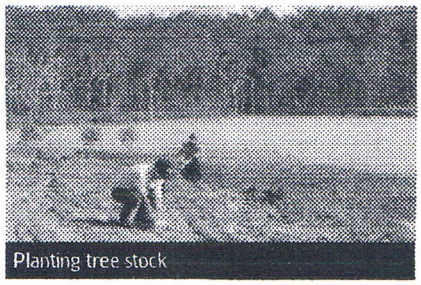
Land Management

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 Koomphatoo 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_2 emissions from our vehicle fleet. Through its relationship with us, Koomphatoo 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.


Seed propagation

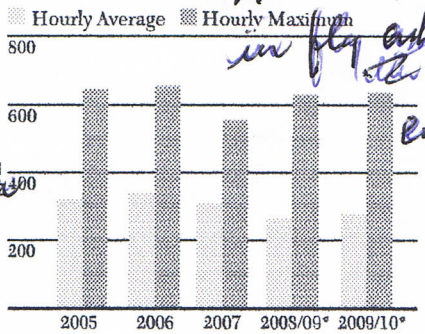

Planting tree stock

Specific sub-plans are particular to land management issues, such as rehabilitation of the attemperation 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 OR x 24 = 4.032 tons per day
OR 1471.68 tons per year

NOx Emissions



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

AIR EMISSION TYPE

Weight of Air Emissions

WEIGHT (KG) per MWH Net Generation

Air Emission Type	Weight (kg) per MWH Net Generation
NOx	2.35
SO_2	2.07
PM10	0.06

* Calculations based on NGERs and LVL data

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Tests reveal coa

NH 21/1/2013 (APPENDIX 3)

Tea Gardens couple seek answers

By **MATTHEW KELLY**
Environment Reporter

THE holiday village of Tea Gardens is the latest frontier in the Hunter's coal-dust debate.

An analysis of dust from the town has revealed it contained coal, although the area is not traditionally associated with the effects of mining.

Raymond Terrace GP Nigel Ince and his wife Jenny Perkins discovered the dust soon after moving into their Marine Drive home six months ago.

Dr Ince submitted a sample for microscopic testing at a Newcastle pathology laboratory.

"Every couple of days we sweep and it's there. When it rains it's on the car," he said.

"I was interested to see if it was road dust because we are adjacent to the road but, no, they said coal dust."

He said he had an open mind about its origin.

"It's hard to say. What I do know is that when you are on the beach you can sometimes see a greyish cloud coming up from Newcastle," he said.

The Office of Environment and Heritage's head of climate and atmospheric science, Matthew Riley, said pinpointing the origin of dust was a complex science.

"Dust can travel a very long way but it's very difficult to determine exactly where it comes from," he said.

"This is one of the reasons why we are undertaking a very detailed study in the Upper Hunter to try and find out the most likely source of PM2.5 [particulate matter less than 2.5 microns]."

The closest mining operations to Tea Gardens are the Duralie mine, about 40 kilometres away, and the Stratford mine, about 60 kilometres away.

A spokesman for the mines said they operated within strict environmental guidelines.

"In the absence of any other reports from much closer neighbours perhaps new samples should be taken and tested by an independent lab experienced in these procedures," he said.

Share your experience
letters@theherald.com.au

DRIFTING: Jennie Perkins of Tea Gardens believes coal dust on her verandah is from mines

SOOTY: Coal dust swept up from the verandah

Mining comp

UPPER Hunter residents made 10 complaints about the impact of min operations during December.

The complaints included six for b two for dust and one for noise.

The six blasting complaints relate odour, blast fumes and their effect o residents and road closures.

The Department of Planning's mo compliance report said compliance officers met with the mines linked to complaints and held site meetings v three of the mines.

"The department met with the mi

s reveal coal dust

2013 (APPENDIX 3)

FTING: Jennie Perkins of Tea Gardens believes coal dust on her verandah is from mines at least 40 kilometres away. *Pictures: Dean Osland*

DTY: Coal dust swept up from the verandah

Mining complaints scrutinised

UPPER Hunter residents made 10 complaints about the impact of mining operations during December.

The complaints included six for blasting, two for dust and one for noise.

The six blasting complaints related to odour, blast fumes and their effect on residents and road closures.

The Department of Planning's monthly compliance report said compliance officers met with the mines linked to the complaints and held site meetings with three of the mines.

"The department met with the mine facing a blast odour complaint and the mine agreed to suspend blasting in certain wind conditions that may affect downwind residents and to review its blasting procedures," the compliance report said.

The department also met with the mine associated with the road closure complaint. The mine agreed to engage with the community consultative committee about its scheduling of road closures and to look into improving procedures.

Matthew Kelly

Delays to increase

(APPENDIX 4)

NH 23/10/201-

Coal train waits even longer

By **IAN KIRKWOOD**

MOTORISTS waiting seven hours a day and more at the Adamstown and Clyde Street gates will face even longer delays once the state government starts moving coal from Mudgee to the Central Coast.

The Cobbora mine is scheduled to supply coal to Liddell, Bayswater, Eraring and Vales Point power stations for 21 years from next year.

Vales and Eraring were built on the Central Coast to be close to ample supplies of coal but much of this is now exported, and the government was forced to seek new coalfields at Mudgee to ensure a stable supply.

Confirmation of the Cobbora impact comes after the *Newcastle Herald* revealed that trains between Teralba's West Wallsend mine and Vales Point were being driven on a 40-kilometre "U-turn" through Newcastle because Railcorp would not spend $15 million on a short section of track at Teralba.

Four years ago the government confirmed that motorists were waiting six hours a day at Adamstown, but declined to do anything about the delays.

Now, documents on public display for Cobbora's approval show the average delay has reached 432 minutes (7.2 hours) at Adamstown and 463 minutes (7.7 hours) at Clyde Street.

And with Cobbora sending up to four full and four empty trains a day through each set of gates, the delays are set to increase by another 40 minutes a day to 473 minutes (7.8 hours) at Adamstown and 503 minutes (8.4 hours) at Clyde Street.

Liberal Newcastle MP Tim Owen said he was aware of the problem and he and Charlestown MP Andrew Cornwell were tomorrow meeting Roads and Ports Minister Duncan Gay.

Mr Owen had no immediate solution to the problem but said the situation was "totally unacceptable".

"If the Hexham to Fassifern freight rail bypass is not going to work in the short term then we must have an outcome that allows the traffic to flow," Mr Owen said.

"This is a serious safety issue if an ambulance or a fire engine gets stuck on one side of those gates."

Although Cobbora was criticised by the Coalition in opposition it has continued with the plan in government.

JAM: Traffic at Adamstown railway gates yesterday, the scene of long delays. *Picture: Simone De Peak*

NH 4/8/2015

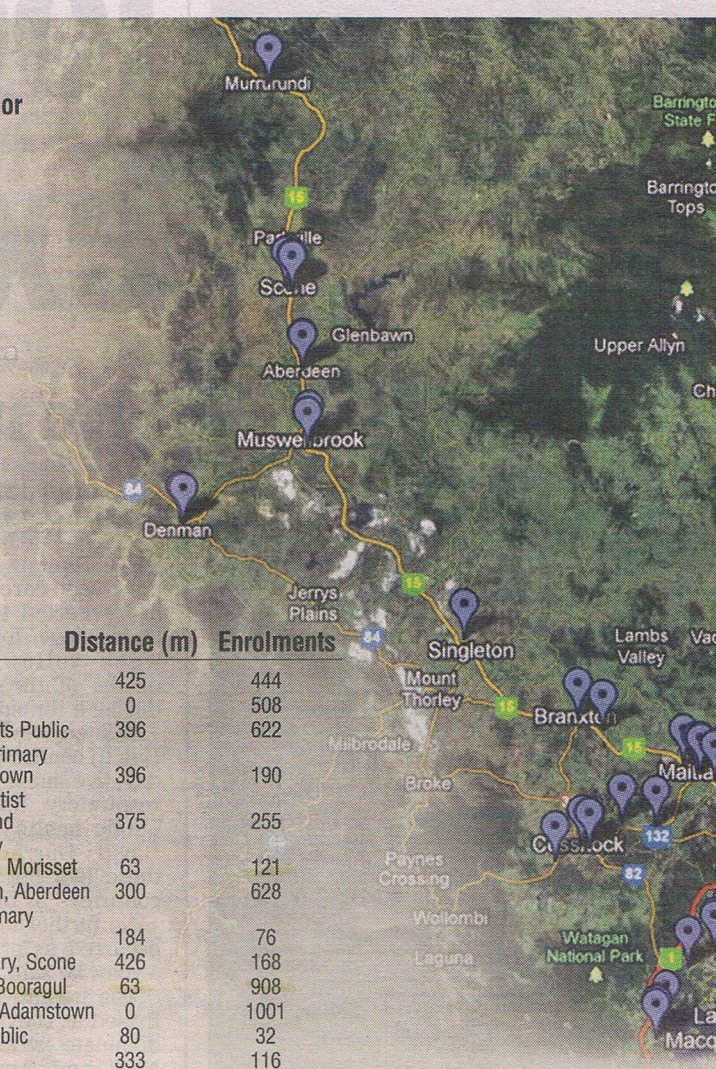
Lung impact

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
Morisset High	15	836
Morisset Public	458	239
Murrurundi Public	364	51
Muswellbrook High	257	778
Muswellbrook South Public	200	396
Scone Grammar	200	600
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 estimat measured from the shorte Enrolments are based on 2012 and

** 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

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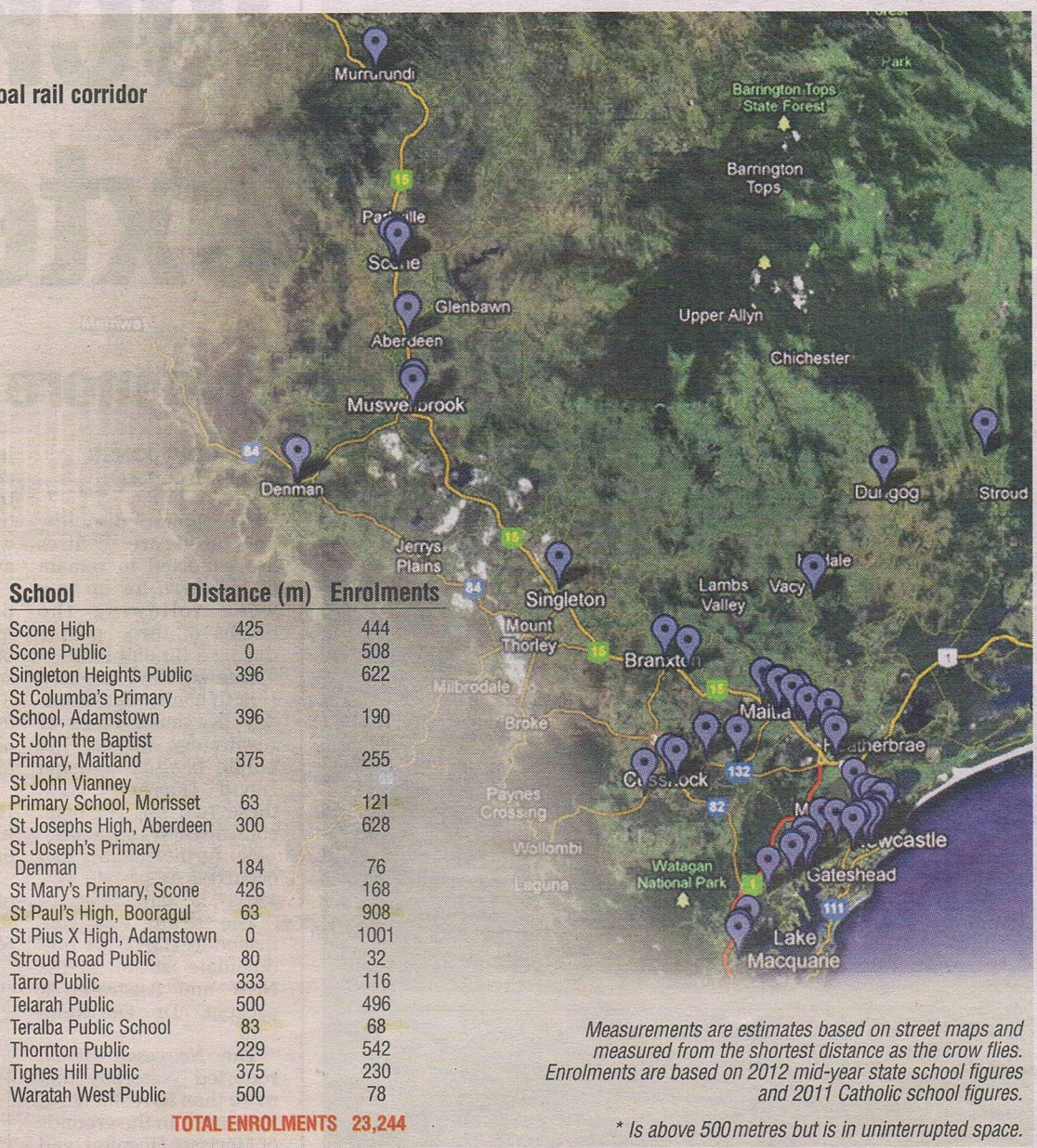
g impact alert



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

Dr Au said the small par-

lments, concern over coal: report

ne third of ought the ail- d by coal. quarters of veyed were nt) or "some- nt) concerned of coal trains astle suburbs. f the survey xclusively to ald yesterday. ed by 55 com- s 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 region had higher than average rates of emergency department 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.

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Appendix 5

NH 4/8/20

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.

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Picture: Jonathan Carroll

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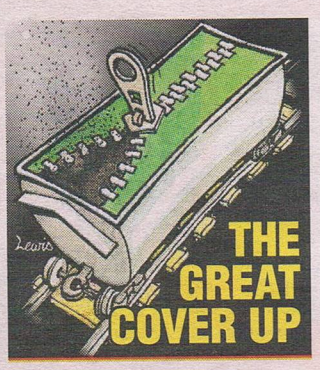

Sign the *Newcastle Herald's* Great Cover Up campaign petition to get the Hunter's coal wagons covered: www.theherald.com.au

Boom's home truths
Inside H2 today

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."

Alison Branley

This should go in

APPENDIX 6.

Major dust sources uncovered

APPENDIX 6.

NH 24/10/2011

MATTHEW KELLY
ENVIRONMENT

THE movement of coal and the erosion of exposed stockpiles were found to be among the major sources of dust at a Lake Macquarie colliery, a new report has found.

Xstrata Coal undertook the study at its West Wallsend underground colliery as part of a variation to the environmental protection licences for all NSW coalmines in 2010.

The unloading and loading of coal, bulldozing coal at stockpiles, ventilation shaft exhaust and wind erosion of exposed areas were identified as the primary sources of particulate matter emissions.

The five sources accounted for 87 per cent of total suspended particles, 86 per cent of particulate matter of 10 microns or equivalent and 83 per cent of particulate matter 2.5 microns or equivalent.

The report recommended a range of measures to reduce dust emissions including improved visual monitoring, increased use of moisture, plant screening and rehabilitation of eroded areas.

An Xstrata spokesman said the mine was already undertaking an environmental management program before the review of its environmental protection licence.

"The net result of this is that many of the best practice measures recommended in the pollution reduction programs are already in place at our mines," he said.

"West Wallsend has had one dust complaint this year. The previous dust complaint was in 2008."

The spokesman said the company's real time environmental monitoring program involved the development of a network of more than 60 monitors near mining operations over the past six years.

"Our environmental monitors are sending continuous data on noise and dust from mining activity to a dedicated internet portal, where the data is graphed and tabulated to provide information on impacts as well as prevailing weather conditions," the spokesman said about the environmental watch.

EXTRACT FROM OPINION PAGE 20

Catholic Diocese of Maitland – Newcastle February 2013 edition of AURORA

Web Site www.mn.catholic.org.au

by John L Hayes, February 2013

John L Hayes ponders current issues raised by coal mining.

Coal mining began in the Hunter at Coal River, now known as Newcastle, about 1800. There has been co-existence between that industry and the people of the Hunter ever since – sometimes easy and peaceful, sometimes difficult and combative.

For more than two centuries, members of many Hunter familles have been employed by the mines, or in industries processing, distributing and exporting coal.

Much of Newcastle and the Hunter is undermined, and in many places buildings can't easily co-exist with undermining. Costly grouting and remediation is often needed to allow construction of larger new buildings over old coal workings, and in other cases, building restrictions apply.

Ownership of the coal mines and the exporting facilities used to be in local hands, but that has changed dramatically. Now, more than 80% of coal mines are owned by multinationals — with most of their profits going overseas to foreign shareholders and/or foreign governments. All the coal export facilities in Newcastle, all coal export ships and most Newcastle tugs are also owned by multinationals. Almost all new large machinery and equipment used in the mines and in handling and haulage is made overseas by foreign companies and imported here.

In the heyday of Broken Hill Proprietary (BHP) and the big Hunter coal-fired power stations — which used to provide cheap electricity for industry and residents — the catch cry for all this activity and Industry was jobs, jobs, jobs — and anything done in the name of jobs was good. Health and environmental considerations were mostly put to one side, and as most coal mining was underground, there was usually an 'out of sight – out of mind' mentality.

Then four things happened:

1. The development and rapid expansion of open cut mining, then and now driven by significant increases in prices for export coal.
2. Different methods, more mechanisation and then increasing automation gradually led to fewer jobs per mine and per tonne of coal mined, processed, transported and exported.
3. Coal prices went up, existing mines were expanded and new open-cut mines were opened. Recently we have seen that when coal prices go down, there is a rush by some miners to increase tonnages, to compensate for the lower prices.
4. Cheap electricity disappeared.

So in the last 40 years there has been a quantum shift.

Remember the beautiful Hunter Valley, the very rich Liverpool Plains and the picturesque Gloucester valleys? Let's look forward from that time.

Mining once co-existed fairly easily with most residents, as well as with general agriculture, the wine makers and grape growers and the thoroughbred studs. Increasingly, mining is becoming an

unwelcome neighbour that is driving people and industries away. World famous vignerons and horse studs are now saying they will struggle to remain in the Hunter.

What used to be beautiful landscapes, with clean air and clean water, are increasingly looking like huge moonscape craters, and increasingly, clean air and clean water are distant memories. Statements by miners and governments that these once beautiful valleys will be “remediated” when mining stops are impossible pipe dreams.

No amount of attempted remediation will bring back rich soils, lost flora and fauna, significant natural forests, great vistas and landscapes, naturally flowing clean water and clean air.

Whole populations of small villages and farmers are being driven from their homes and properties, and property prices – which until recent years were either steady or rising – are now dropping. Larger centres are also under threat.

We are becoming more and more aware of the negative effects of mining and coal dust on our health – at the mines, along the coal corridors, at and near the coal export facilities.

Experts differ, but the more I read and hear about the effects of mining, the more I’m convinced that over the last forty years, the serious increase in asthma and other respiratory diseases in the Hunter has an uncomfortably close relationship with the increase in coal mining.

As one university expert said at a recent Dust Seminar in Waratah, “There is no safe level for airborne dust particles, just as there is no safe level for cigarette smoking.”

Matters of global warming and climate change need to be considered in the context of ever expanding, and largely unconstrained coal mining; very rarely is permission for a new coal mine refused. The claim that humans contribute to global warming and climate change is supported by thousands of non-aligned scientists around the world, who communicate regularly and who produce increasingly gloomy reports. Let the naysayers say and do what they like. Nightly news reports from around the world should cause them to stop and think, “Hey! Maybe the climate scientists do have a point!”

Alternative non-polluting renewable energy sources are now available, most notably solar and wind power. New technologies are enhancing these, and making them more cost efficient all the time, and brand new non-polluting sustainable techniques and machines are being developed every year. Despite statements to the contrary, BASE load power generation is possible with renewables now, and is already operating.

The cost curves of electricity from coal-fired power and renewables are getting closer, and will soon converge and cross over. How soon depends on many factors but removing some of the freight and investment subsidies for coal will hasten that convergence.

The role of Governments, especially the Environmental Protection Authority (EPA) should be to protect people, the environment and flora and fauna.

The facts are that the EPA licenses industry to pollute through the issuing of Pollution Reduction Licences. Many argue it does not do enough in its “Protection” role.

Governments make a fortune from coal royalties and will not easily surrender that revenue. However, thinking politicians and governments should and will realise that many benefits in employment and to the environment will flow from fostering the renewable energy industries in the Hunter and gradually pulling back from non-renewable and polluting coal.

Common sense will tell you all is not right with coal.

I hope you have enough information here to continue your own research and to ask the hard questions — of politicians and others.

John L Hayes retired to Newcastle nearly nine years ago, after working in Sydney for about 40 years in various roles, including senior management and administration for major organisations. He is now involved in many community organisations, including the Social Justice Council of the Diocese of Maitland-Newcastle.