

# Rathmines

PROGRESS ASSOCIATION



DOC ONE

26<sup>th</sup> October 2012

Att: Christine Chapman

NSW Planning, Mining and Industry

23 - 33 Bridge Street Sydney NSW 2000

*Postal Address:*

THE SECRETARY

43 Cheapside Street

Rathmines NSW 2283

Re: Environmental Assessment Addition to Awaba Waste Management

Facility Application No. 10\_0139 Awaba Landfill Extension

Local Government Area of The City of Lake Macquarie.

Submission by Rathmines Progress Association with reference to possible subsidence of proposed mining activities by others.

## **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.

Yours Faithfully

-----  
William McArthur

Acting Hon. Secretary

02 4975 3277

mcArthur.julie@bigpond.com



Postal Address:

THE SECRETARY  
43 Cheapside Street  
Rathmines,  
N.S.W. 2283

10<sup>th</sup> October 2012

Cardno(NSW/ACT)Pty Ltd

Level 9, The Forum,

203 Pacific Highway

St Leonards N.S.W 2065

Dear Sir/Ms

Drop-in Community Information Session Wednesday 10 October 2012 4pm to 8pm  
Councillors Workroom Council Administrative Building 126-138 Main Road, Speers  
Point

### Questions

1. Why were other disused tips(Kilaben Bay & Dorrington Rd) present in the vicinity of Kilaben Bay not mentioned in the Environmental Assessment of Additions to Awaba Waste Management Facility?

The Rathmines Progress Association (RPA) understands that Kilaben Bay Tip (approx 475,000M<sup>3</sup>). It was never capped properly and water continually leaches from the tip after rain. The only thing covering it is lantana vine and spots of morning glory vine. It has very steep batters (approx 1:1.5). The upper areas have been left in a disgraceful condition and dangerous state with sharp garbage and broken bottles sticking out all around the very steep batters. This site is now classified a Crown Land Reserve. At the base of the garbage mound is heavy dis-colouration, still pools in the upper section had an absence of the normal healthy pond e.g. mosquito wrigglers, water boatmen, tadpoles or frogs. They do not support animal life to the naked eye. We enquired of the head of *Landcare*, if the tea trees growing out of the still water would deter animal life and was told no. The dis-coloured area should be tested by the Environmental Protection Authority as a matter concerning public health. At lower the tidal interchange area there was proof of small fish and healthy movements in the water.


2. Dorrington Rd Tip (approx. 725,000<sup>3</sup>m) which also drains into Kilaben Bay and is intended to be longwalled (LW110 & LW111) also. Please advise if this tip was capped when closed.
3. The RPA has had a number of meetings with Centennial coal regarding the Newstan Life Extension and Subsidence Management Plan Longwalls 101 to 103 going back to 8th March 2012 where Kilaben Bay and Dorrington Rd tips were mentioned and written issues papers left with them. It is very concerning that as LMCC staff/consultants have been in contact with Centennial Coal for around at least twelve months. Please advise if any of this information was received by you.
4. The EIS did not disclose asbestos disposed of at this facility. It is understood that all asbestos submitted to Awaba Waste Facility (AWMF) is required to be doubly wrapped and taped. It is also understood that there is a register kept of asbestos weight delivered, name and address of person or company bringing asbestos to the tip. Please supply total quantities for the last two years.
5. Please give timeline construction of proposed 2.5 km sewer pipeline from AWMF to Rathmines No.6 WWWS. i.e. before or after longwall 110 & 111 is completed.
6. It is the understanding of the RPA that in the event of an environmental catastrophe from leachate spill into the local creeks or Kilaben Bay whether from the AWMF and/or privately owned pipeline, the onus of proof is on Lake Macquarie City Council (LMCC) (us as ratepayers) to prove in the first instance that it was not LMCC's fault. Even though there has been longwalling under either LMCC asset. Is this correct.
7. It is understood that significant quantities of gas are released upon longwalling. Please advise if the LMCC AWMF methane gas capture and energy generation on site has any dangerous conflict with released gas from the longwall underneath.
8. Two of our members visited the information session held in LMCC Council Chambers on 24/05/2012. The attached Community Forum Questionnaire attached asked about environmental degradation of Stockyard Creek. To which there was not a follow up. In the Subsidence Management Plan from Centennial Coal there were issues of reference is made to Appendix 10 Surface Water Impact Assessment GHD Page 72. Almost the whole page is indicating higher than ANZECC trigger results for Lords, Stockyard and Kilaben Creeks for levels of aluminium, iron, chromium, copper, and zinc. Please advise if you were aware of this.
9. Please advise of the AWMF of final submission final public submission date to NSW Planning.

10. Could you please advise your email as there may be more questions as the RPA examine AWMF Environmental Assessment?

Finally by the geographical location of the RPA, its members consider that we are stakeholders in this process.

Our members and communities, swim, fish, eat, sail, and generally enjoy Kilaben Bay and the broader waters of Lake Macquarie. We respectfully request to be included in the information streaming between Lake Macquarie City Council and Centennial Coal with reference to this Environmental Impact Assessment

Yours Faithfully,

A handwritten signature in black ink, appearing to read 'W McArthur', written over a horizontal line.

W McArthur

Acting Secretary

10/10/2012 ✓



# Awaba Alternative Waste Treatment (AWT) Facility Environmental Impact Statement

## Community Forum Questionnaire

Community Forum, 24 May 2012

Committee Room, Lake Macquarie Council Administration Building, 126-138 Mam Rd, Speers Point



Question 1: What do you think of LMCC's plans to build an Alternative Waste Treatment (AWT) Facility on the parcel of land adjacent to the current landfill site? Do you have alternative suggestions?

No alternative suggestion.  
An increase in the activity of the site is reasonable as long as there is no environmental degradation of Woddyard Creek.  
\* Lake Macquarie (Kilaben Bay) The planning of Longwall 102 and Longwall 103 raises huge concerns as possible subsidence of 0.8 metres leading to leachate into Kilaben Creek and

Question 2: What are your key concerns about the proposal?

A significant damage as was not envisaged when the AWT facility was originally designed.  
The new Environmental damage to the people of using Kilaben Bay, residents on both sides of Kilaben Bay & special damage in a significant Wetlands in a corner.

Please provide any additional comments you consider relevant:

When the EIS is produced a clearer picture will be evident.

*[Signature]*  
24/5/2012

ATTACH 16/05/12

*DOC THREE*

*This is a copy of the submission by Rathmines Progress Association (RPA) with reference to the current Subsidence Management Plan (SMP) Newstand Coal Mine*

*This document outlines our concerns to the Enviromental Impact by this Long Wall Mining. These concerns we believe, reflect directly to the proposed additions to Awaba Waste Management Facility*

COPY

43 Cheapside Street

Rathmines,

N.S.W. 2283

21st September 2012

Director of Environment and Sustainability,

NSW Department of Trade, Investment , Regional

Infrastructure and Services: Division of Resources and Energy

P.O. Box 344

Hunter Region Mail Centre

N.S.W. 2310

Dear Sir/Ms

**Submission to Subsidence Management Plan (SMP) Development and Extraction of Longwall Panels LW 101 – 103 within Mining Lease ML1452, New Stan Coal Mine Extension situated in the Local Government Area of the City of Lake Macquarie**

**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

## Background History of Mining Lease ML1452

- 1 The Association has had a long history in dealing with underground mining proposals in this area.
- 2 In the late 1990's, Powercoal originally held Authorisation A285 and proposed to extract coal from under large tracts of urban development in our area. Several meetings were held with Powercoal representatives, Umwelt (Powercoal's Environmental Consultants) and Rathmines Progress Association's Strategy Committee. The proposal raised considerable community angst and a community meeting was organised on 25 March 1998 at Rathmines Community Hall. Powercoal had planned to attend and address the community's concerns directly and take part in a debate about mining under urban areas. Both parties agreed to have retired Police Commander Mr. Ron McSporran as an independent Chairman for the debate.
- 3 Invitations were made to all local residents, all Lake Macquarie City Councillors, The Mine Subsidence Board, the press and any other interested parties.
- 4 A few days before the debate was scheduled to occur the Hon. Jeff Hunter MP rang this Association and advised that Power coal had withdrawn from portion of A285 and mining was going to be limited to the border of Main Road 217 (Wangi Road) which lies to the west of the built up areas.
- 5 Although the proposed mining would not be going ahead, Powercoal still attended the community meeting, with over 200 in attendance.
- 6 Please see **Attachment 1** press clipping and **Attachment 2** Letter from Mr. Darryl Stevenson for Chief Coal Geologist of Department of Mineral Resources, dated 15 April 1998.

## Current Position on Newstan Mine – Extension of Mining Project

- 7 On 24 January 2012 an article by Damon Cronshaw appeared in Newcastle Herald stating that *"Centennial Coal was planning to expand its Newstan mine, in west Lake Macquarie"*. A copy of that article can be found in **Attachment 3**.

- 8 As a consequence of this Association contacting Centennial Coal's General Manager of External Affairs on Monday 30 January 2012 re the newspaper article, an information letter (dated 01/02/12) was letter-box dropped to a number of areas to be affected by the proposed mine subsidence. Please see **Attachment 4**.
- 9 The letter contained no detail about the proposed mining under Rathmines or surrounding areas and most people put it in the bin. At a meeting held between this Association and Centennial Coal staff the pamphlet drop was queried, as some homes in the affected area did not get the original notice in their letterbox. Centennial acknowledged they may have missed some people.
- 10 Finally on 3rd May 2012 a letter and diagram of the proposed Extension to the Newstan Mine was provided, but stated that it was subject to change. A copy of that document can be found in **Appendix 5**. In this diagram it shows the intention to mine into Rathmines, please see Longwalls 110 & 111.

#### **Meetings with Centennial Coal**

- 11 To date this Association has had three meetings with Centennial Coal re Extension of Mining Project longwalls 110 & 111 (into Rathmines).
- 12 On **8th March 2012**, a meeting was held at Newstan Colliery Area (Fassifern) comprising two representatives of Centennial Coal and six members of the Rathmines Progress Association and local residents. At this meeting we supplied Centennial Coal with a photocopy of the former Toronto Waste Facility Kilaben Bay Tip (located off MR 217), mentioned the former Rathmines Waste Facility (located off Dorrington Rd. Rathmines) and the current Lake Macquarie City Council (LMCC) Waste Management Facility at Awaba (off Wilton Road). The LMCC are proposing to extend the life of the current Awaba facility for another 20 years. **Appendix 6** contains details of Kilaben Bay Tip.
- 13 On **27th March 2012**, by invitation of this Association and using a Centennial Coal vehicle, an Environmental Officer from Centennial Coal, their Public Relations Consultant and two members of this Association went on an inspection of the surrounding areas starting at Toronto Fire Station and ending at Rathmines. The tour lasted approximately three and one half hours. At the beginning of the inspection, a list of route and issues were given to Centennial staff. **Attachment 7**
- 14 We inspected the disused Toronto Waste site. The head of Kilaben Bay Landcare, Mr. K McPherson, acted as guide for this site. We traversed from Main Rd 217 to the intertidal zone where that part of Lake Macquarie Catchment meets the Lake. Part of the lower area is zoned *7(1) Conservation*

(Primary) under the LM LEP 2004 and forms part of the SEPP 14 protection zone for the Kilaben Bay Wetlands.

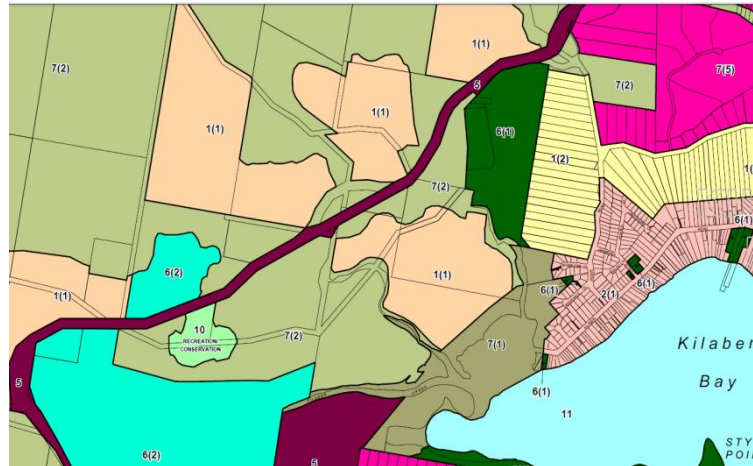


Figure 1



Figure 2 – Kilaben Bay

- 15 Our understanding is that Toronto Waste( kilaben Bay Tip) site closed in 1977 and is now located in the 6(1) zone as shown in Figure 1 above. It was never capped properly and water continually leaches from the tip after rain. The only thing covering it is lantana vine and spots of morning glory vine. It has very steep batters (approx 1:1.5). The upper areas have been left in a disgraceful condition and dangerous state with sharp garbage and broken

bottles sticking out all around the very steep batters. This site is now classified a Crown Land Reserve. At the base of the garbage mound is heavy dis-colouration, still pools in the upper section had an absence of the normal healthy pond e.g. mosquito wrigglers, water boatmen, tadpoles or frogs. They do not support animal life to the naked eye. We enquired of the head of *Landcare*, if the tea trees growing out of the still water would deter animal life and was told no. The dis-coloured area should be tested by the Environmental Protection Authority as a matter concerning public health. At lower the tidal interchange area there was proof of small fish and healthy movements in the water.

- 16 Centennial Coal officers were given a sheet outlining our issues and concerns at the start of the tour. Toronto Tip at Kilaben Bay, Dorrington Road Tip Rathmines and Awaba Tip were listed.
- 17 On 6th September 2012, a third meeting with Centennial Coal was held at Newstan Colliery to discuss the Subsidence Management Plan Longwalls 101 to 103.
- 18 This Association provided photocopies of Appendices 1 and 2 as referred to in earlier background papers of this document reference to background history of Mining Lease ML1452. It established that current longwalls 101 to 105 were the same coal seams and locations as Powercoal Papers "Newstan Colliery Life Extension Project Planning Focus prepared by Umwelt (Australia) Pty Ltd October 1977.
- 19 We referred to the tour conducted on Tuesday 27th March 2012 and our outline of broad issues which included the 3 waste tips: the current state of the disused Toronto Waste Tip, Kilaben Bay and its leachate; and the Awaba Waste Management Facility and its design constraints, surface cracking, unresolved further investigation, damage to existing leachate systems, subsidence impact, unresolved groundwater & leachate matters and mining uncertainty.

**The Rathmines Progress Association's input into Centennial Coal Subsidence Management Plan(SMP): Longwalls 101 to 103 Written Report plus Appendices 1 to 10**

- 20 This Association is mindful of the large contribution the Mining Industry makes to our economy, our communities, the balance of trade and way of life in Australia. Its member's empathise with Centennial Coal and its parent company Banpu in the difficulties experienced winning ore from mining.
- 21 We cannot tolerate, however, any threat to the destruction and health risk to our communities or the environment of Lake Macquarie.

- 22 The Awaba Waste Treatment Facility (AWTF) no matter how you dress it up is basically a LMCC Tip.
- 23 We will reply to issues raised in the SMP and cite the relevant section in turn.

*SMP: Executive Summary - Introduction page ii*

- 24 Reference to combined Young Wallsend Seam and part Yard seam at Newstan Colliery conclusively proves (and agreement from Centennial Coal on the 6th September 2012 meeting) that papers in our records "Powercoal Planning Focus October 1997" is the same location and body of ore mentioned in this document.

*SMP: Executive Summary - Consultation page iii*

- 25 Detailed consultation between Lake Macquarie City Council (LMCC) and Centennial Coal (CC) has been ongoing on for approximately twelve months. There are no details of the other two tips in close vicinity of Kilaben Bay. These all ultimately drain into Lake Macquarie and a protected SEPP 14 Wetland.

- 26 Please refer to **Attachment 8**, In this attachment the Existing Tips :

Toronto (uncapped & unlined) best estimate	475,000m <sup>3</sup>
Rathmines ( uncapped & unlined) best estimate	725,000m <sup>3</sup>
Awaba Tip( yet uncapped and not fully lined) Council report	2,200,000m <sup>3</sup>
	Total <u>3,400,000m<sup>3</sup></u>

( Awaba Tip proposed extension to 3,500,000 m<sup>3</sup> – not included in totals))

- 27 The Toronto and Rathmines waste sites, being earlier entities, do not have leachate systems and ultimately leach into Kilaben Bay and the greater Lake Macquarie. It is our understanding that tip leachate is a very noxious substance and is active for some 50 years. It is our understanding that Toronto Tip Closed in 1977 is still emitting substances after rain and is draining into SEPP 14 Wetland.
- 28 The Rathmines Waste Site (Dorrington Road) we understand, was originally a quarry, filled by the RAAF Rathmines Base. Commencing around 1939/1940, it was Australia's Largest Seaplane Base. Garbage disposal for up to three thousand enlisted RAAF & WAAF personnel plus contractors used this site. In addition industrial type waste from overhauling aircraft / boat/ vehicle & machinery was un ceremonially dumped at the site.
- 29 Tip fossickers even reported uncovering live ammunition. These finds were reported to the RAAF.



- 30 This Tip was taken over by LMCC and it took the overflow from the Toronto and Bonnells Bay tip before closing down in 1985/1986 when Awaba Waste Management Facility came on line. The Awaba facility is the only waste facility operated by the LMCC in its LGA.
- 31 It is remarkable that there is no mention of the Toronto Waste Tip and Rathmines Waste Tip in the SMP, principally because there is move to longwall under Awaba tip and the wider tip presence should have been brought up in the Kilaben Bay catchment.

*SMP Executive Summary - Subsidence Prediction*

- 32 Longwalls 102 & 103 have predicted subsidence of 1.0 metre and 1.2 metres respectively.
- 33 The Awaba Tip is a legally approved waste facility but was never designed for longwall intrusion. There are surface/ groundwater water leachate issues in the vicinity of Awaba Tip mentioned in the SMP Appendices.
- 34 It is the Rathmines Progress Associations understanding that Lake Macquarie City Council was fined \$40,000 by the Environment Protection Authority during an incident in August 1997. In reply to our query of that time, please refer to **Attachment 9**.
- 35 It is evident that there was no environmental operational ground staff training until 1999, Awaba Waste Management Facility, amongst other things, is a registered facility for the disposal of asbestos.
- 36 Under the regulations governing the disposal of this hazardous and toxic substance all asbestos including dust and fines must be wrapped in plastic sealed by tape and put on a register which is kept by LMCC. There is no mention of this product or quantities in the SMP. Subsiding on mass including tilt and strain and sharp objects within the landfill puts the whole system of containment at risk.
- 37 Subsidence in the natural valley above longwall 103 reference Appendix 4 Page 89 MSEC fig 6.35. If there is a shift in the natural original valley due to subsidence faulting of around five metres it would in our opinion alter the original height of RL76mAHD. The slump created could cause any additional fill to RL94mAHD to be compromised and probably tip over the natural barrier. If deep fault line cracking occurred all clay based compaction lining would be compromised.
- 38 This Association questions why longwalls 104 and 105 were not included in the SMP submission. Centennial Coal explained at the last meeting it was more difficult geology and it would need different mining extraction equipment in this area. However, looking at the Powercoal Planning Focus October 1997 maps Figure 2.2 Geological Structures(Intersected & Projected ) & Borehole Locations and overlaying the longwalls and faults zones from the



Powercoal papers and Appendix 4 MSEC document onto our own maps it is evident that there is a fault zone running across longwall 104 which is not in the SMP. However, this fault zone also runs on the Awaba Tips south western boundary and under longwall 103. This interpreted fault does not appear in Appendix 4 Fig 1.10, 1.11 or 1.12. This transposition was done by one of our members a retired Spatial Science Professional. **Attachment 10**

*SMP Executive Summary - Risk Assessment Surface Characterisation, Impacts and Management*

- 39 This touches on seventy four potential risk aspects. However the failure to include the Toronto and Rathmines Waste sites, glaring anomalies of things like composition of hazardous substances and their quantities, leachate waste treatment figures which should be readily available and included, identifiable knowledge gaps requiring further investigation, loss of papers on the original Awaba Waste Management Facility construction and many more issues has skewed the risk assessment process.
- 40 Surely public safety, public health and environmental health would be one of the most significant potential risks.
- 41 Looking briefly through the Report for LMCC : *Awaba Waste Management Facility Feasibility Analysis July 2010, Management Facility Feasibility Analysis Groundwater* - there is high significance possibility that the excavation will impact on the groundwater system.
- 42 Then onto Additions to Awaba Waste Management Facility Preliminary Environmental Assessment 29/06/2010, Environmental Risk analysis Groundwater. There is high significance possibility that the excavation will impact on the groundwater system.

*SMP: Appendix 8 - Groundwater Chemistry*

- 43 It states "Overall, an assessment of existing site levels and groundwater elevations indicates that the original disposal area and main leachate ponds are currently in close proximity to groundwater" It goes onto say there may be some interaction between leachate and groundwater at MP2 and MP4. Finally ending in "Based on available data, the migration pathway of leachate to groundwater is unknown."
- 44 Reference is made to Appendix 10 Surface Water Impact Assessment GHD Page 72. Almost the whole page is indicating higher than ANZECC trigger results for Lords , Stockyard and Kilaben Creeks for levels of aluminium, iron, chromium, copper, and zinc.
- 45 This Association has been made aware of an Ex RAAF structure situated behind the New Substation at the Corner of Wilton Rd and MR 217 (Awaba Rd) there are two dirt tracks leading to it.

- 46 The Structure is above ground dimensions approx 30m by 15m. It is understood the concrete is reinforced and approx 30cm thick. It is very surprising that this was not included in the structural list in the SMP. We understand it was used for the storage of ammunition and bombs or their components. There is a high probability that other war rubbish was buried in this area. This area is in the vicinity of Stockyard and Kilaben Creeks.
- 47 On 24th May 2012, two members of Rathmines Progress Association attended an information evening at Council Chambers. It was hosted by Cardno Consultants. It was held before the Centennial's SMP was released. We contributed to a Community Forum Questionnaire, see **Attachment 11**. No response or feedback to our concerns have been received to date.
- 48 The signatory has lived in Rathmines for twenty eight years. Over these years he has observed the absence of water-birds in Stockyard Creek west of the bridge. These birds are prolific in the surrounding area. There is usually water in the creek. The water always appears black.
- 49 Kilaben and Stockyard Creeks should be sounding alarm bells at this time. Longwalling under Awaba Waste Management Facility is fraught with danger.

### Summary

- 50 The overriding concerns for the Rathmines Progress Association are without a doubt the public safety, public health and the environmental health of Kilaben Bay and the wider Lake Macquarie environs.
- 51 Lake Macquarie although huge, has only a 1% water interchange through the Swansea Channel, and has limited tidal flushing and largely landlocked with thermal water movements.
- 52 Every resident and commercial tenant has been contributing by an environmental levy for improving Lake Macquarie for many years the enclosed Newcastle Herald Article dated 25/08/2012 by departing Mayor Greg Piper and Hon. State Member. **Attachment 12** His estimate of twenty million dollars is considered on the low side of investment by the State and Lake Macquarie Communities. The Change of W1 Natural Waterway would be a great achievement.
- 53 A disturbing point, is that both Council and Centennial have Consultants advising on these matters. Should misunderstandings arise which leads to a major environmental event, who pays? Such an incident could lead to protracted court proceeding. If this should happen Lake Macquarie City Council and the residents are as one in this respect, they would bear the cost.
- 54 Rathmines Progress Association has no objection to Centennial Coal Mining Longwall 101. Once mining of Longwall 101 is undertaken and nearly completed we will have more factual geological data. We respectfully request

that Longwalls 102 and 103 have deferred approval until more information is available.

- 55 This Progress Association by its geographic location is a stakeholder.
- 56 Its members and communities, swim, fish, eat, sail, and generally enjoy Kilaben Bay and the broader waters of Lake Macquarie. We respectfully request to be included in all the information streaming between Lake Macquarie City Council and Centennial Coal with reference to this Subsidence Management Plan.

Yours Faithfully,

*Signed W McArthur*

W McArthur

Acting Secretary

*Dated 24/9/2012*

*Note scanned attachments 1 to 12 (included)*

# Lakeside residents call for new ban on mining

ATTACHMENT 1

By SALLY CROXTON  
Lake Macquarie

FACED with the prospect of longwall mining below their lakeside suburb, concerned Rathmines residents called last night for a ban on underground mining beneath residential and commercial areas.

The meeting of about 200 residents called by the Rathmines Progress Association agreed to ask State MPs to seek legislation for the ban.

Among the concerns raised by residents was the depreciation in property values said to be already occurring in the area from publicity about the proposed Newstan Colliery extension, loss of peace and future uncertainty.

Originally the meeting was called after the State Government-owned company, Powercoal, told residents that Rathmines would be included in a development application for an extension of underground mining at Newstan Colliery, at Fassifern.

The development application was planned to be lodged with Lake Macquarie City Council towards the end of April.

Then last week Powercoal removed Rathmines from the project.

Residents decided to hold the meeting regardless and were not reassured when Powercoal representative Mr Bob Clifton told them that he could not predict what would happen in the future.

He said after the meeting that while Powercoal would not be going in to mine the area during the 21-year life of the proposed Newstan extension project, the coal was there and there was a possibility that another colliery would seek to mine beneath Rathmines.

On Wednesday about 60 angry Awaba residents affected by the Newstan extension project also held a meeting with Powercoal representatives and will be form-

ing a committee to oppose the project under their area.

The secretary of the Rathmines Progress Association, Mr Bill McArthur, told last night's meeting that the original Newstan extension project involved mining under 1053 homes conservatively valued at \$160 million and involved about 3000 residents.

The community's lifestyle is at risk and the very fabric of our communities are at risk if they mine under the things that are most dear to us, he said.

Mr McArthur said it was difficult to get information on the number of claims to the Mines Subsidence Board, but after research, the group had found a number of major events reported.

These included:

1987: Unplanned subsidence at Chain Valley Bay, Lake Macquarie.

1987: Cataract River, a protected river disappeared with landowners suing BHP for \$2 million.

1990: Unplanned subsidence at Buff Point.

1991: Earth tremors at Murrumbidgee Point attributed to longwall mining.

1992: Unplanned subsidence at Gwandakun.

1992: Ellalong Action Group formed as a result of 42 homes damaged near longwall mining.

1992-1993: Longwalls 9 and 10 Bolton Point, road buckled, concrete gutters cracking in Woodrising area.

1992-1993: Parts of Murrumbidgee Point subside into Lake Macquarie.

1992-1993: Meeting at Fassifern School by 800 angry residents who had experienced damage to property and vibrations for about a year.

1996: Pelaw Main, soil collapse from an event 11 years ago.

1996: 7000 residents sign a petition over vibration problems and the objection to longwall mining.

T8448  
N.M.H.

Vac 9/03/96 (S4)

W. McArthur  
Secretary  
Rathmines Progress Association  
PO Box Rathmines  
NSW 2283

15 April 1998

Dear Sir/Madam,

Re: Authorisation 285 - Covering the Coal Point Area.

The Department received two letters from you on 20 March 1998 both dated 18 March 1998. Here is the information that you requested.

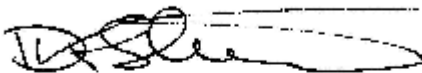
A 285 was renewed on 3 July 1995 until 26 November 1998. The Department holds Authorisation 285 so that it can evaluate coal resource potential and determine the appropriate allocation of the resources. There is no requirement for the Department to continue to explore or develop the resource.

Since the receipt of your letters Powercoal has decided to exclude the Rathmines area from the mining lease application (see attached diagram).

If Powercoal or any other mining company apply for a mining lease over any area outside the current mining lease application they will be required to produce an Environmental Impact statement.

If you have any further enquires please contact Darryl Stevenson, Geologist, at the Department's Singleton Office on Telephone (02) 65721899.

Yours Faithfully



Darryl Stevenson  
for Chief Coal Geologist



NEW DEPARTMENT OF MINERAL RESOURCES  
Level 1, 1 Civic Avenue  
PO Box 511, Singleton, NSW 2230, Australia  
INSPECTORATE: Phone (065) 72 1899 - Fax (065) 72 1261  
GEOLOGY: Phone (065) 72 4200 - Fax (065) 72 1203  
MINING TITLES: Phone (065) 72 4200 - Fax (065) 72 1203  
DX 7071

T: 13-1-98

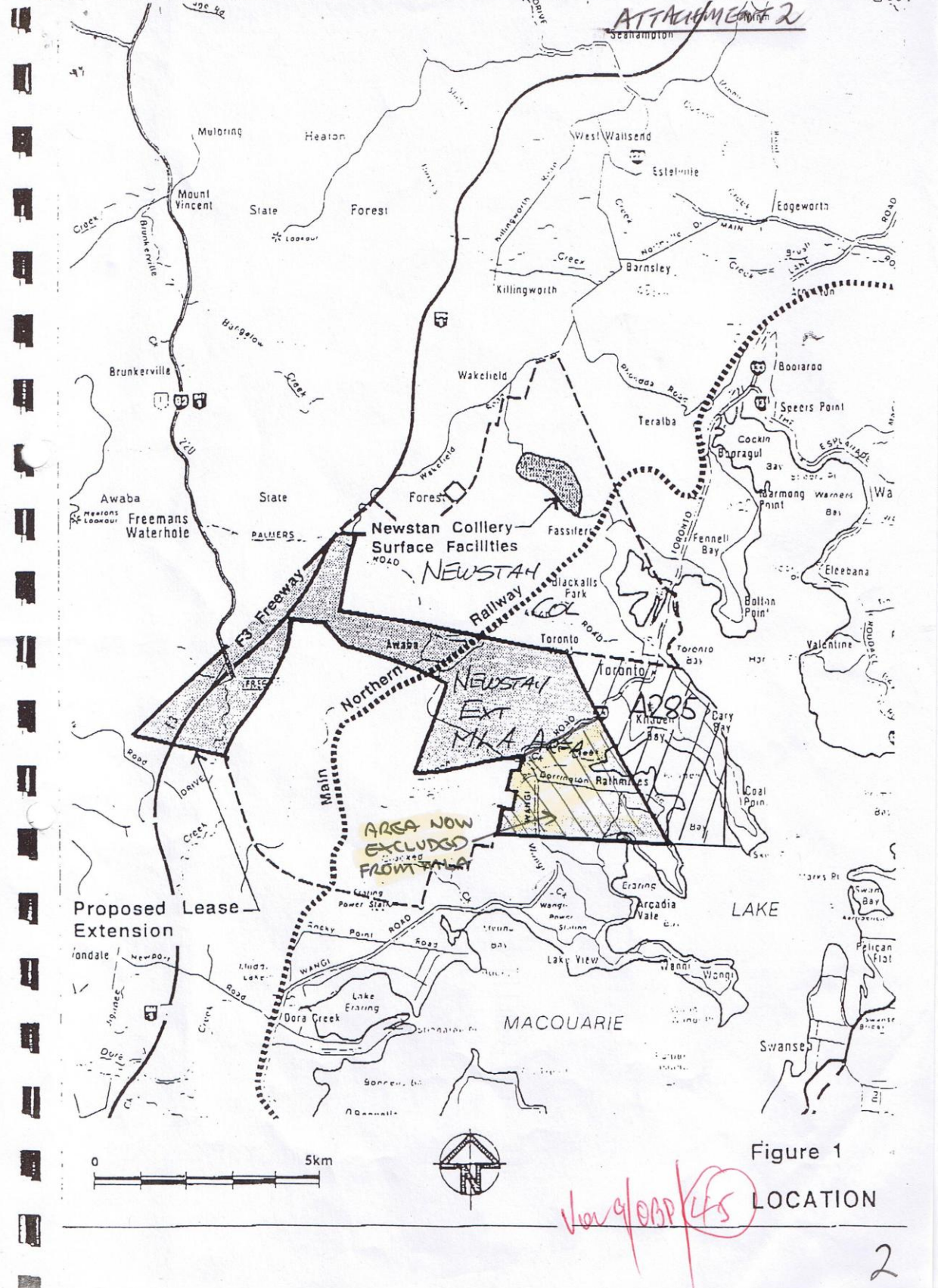
Vocacy/CRP/44

15/01 '98 THU 10:27 FAX 61 2 99018493

TITLES BRANCH

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ATTACHMENT 3

## Expansion approved despite subsidence concerns

# Sinking feeling

Newcastle Herald 24/1/2012



**DAMON  
CRONSHAW**

THE state government has approved an expansion of Centennial Coal's Myuna coalmine, amid concerns about subsidence of the lake bed.

The approval will allow Centennial to expand Myuna increase production from 2 million tonnes of coal a year to 4 million tonnes a year.

The Myuna mine runs mostly under Lake Macquarie from Coal Point and Myuna Bay to Nords Wharf and Morisset Peninsula.

A NSW Planning Department assessment said subsidence of the lake bed in "deeper areas of Lake Macquarie" would be up to 65 centimetres.

The Hunter-Central Rivers Catchment Management Authority said in a submission that "at

"generally result in minimal" environmental effects.

The department placed conditions on Centennial, which it said would ensure potential effects were "suitably mitigated or managed".

Centennial had committed to assessing the effects of subsidence on the lake bed and the life-forms that live there.

Centennial's assessment must be done before "secondary extraction" of coal occurred. This could lead to the company revising its mine plan to minimise effects in "critical areas", the state assessment said.

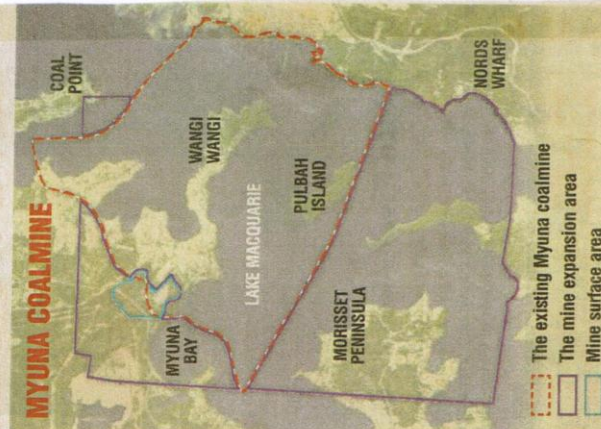
The assessment found the project "represents an appropriate continuation of an existing mine". It would provide jobs for 210

employees for up to 21 years, \$2 million capital investment, coal for electricity production at Eraring Power Station and "royalties and payroll taxes for the state government".

The *Newcastle Herald* reported yesterday that Centennial Coal was planning to expand its Newstan mine, in west Lake Macquarie.

Centennial said in a preliminary report it planned to double the capacity of the Newstan coal preparation plant and washery to 8 million tonnes year.

The company report said the mine expansion, called Newstan Lochiel, posed significant risks including subsidence, pollution of air, groundwater and Lf Creek, and social effects.



VOLUME 5 PHOTOS

PC VASLI





Centennial Newstan

ATTACHMENT 4



1 February 2012

Dear Resident

**Newstan Colliery – Extension of Mining Project**

Newstan Colliery (Newstan) is an existing underground coal mine located near Fassifern with surface activities including train loading, washery and waste handling facilities. Newstan has been operating in the area for over 125 years and produces coal for both domestic electricity generation and the export market.

In 2008, Newstan commenced an exploration drilling programme which has provided the basis for investigating opportunities to further continue underground coal mining and coal handling operations. These investigations are ongoing and include studies into any potential impacts on both the natural and man-made environment.

Newstan is proposing to mine beyond its current approved operations. Therefore it will be required to initially submit a briefing paper (an overview of the proposed project) to the NSW Department of Planning and Infrastructure who will then use the information from this document to determine what Newstan must include and address in an Environmental Impact Statement.

The Briefing Paper, when submitted, will be made available on both the Department of Planning and Infrastructure website ([www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)) and the Centennial Coal website ([www.centennialcoal.com.au](http://www.centennialcoal.com.au)). When completed (mid 2012) the Environmental Impact Statement will be submitted to the NSW Department of Planning and Infrastructure who will seek public comment prior to finalising the assessment process.

As a resident adjacent to any potential future mining activity, we would like to inform you that there are a range of studies being undertaken to assess the potential impacts an underground mine may have on creeks, groundwater, flora and fauna, Aboriginal and European heritage sites, air quality, noise amenity, greenhouse gas emissions, social impacts and impacts on all surface infrastructure.

We will keep you informed throughout the process and if you have any questions or concerns please contact our Newstan Colliery Community Information Line on 1800 247 662.

Yours sincerely

**Terry O'Brien**  
Mine Manager – Newstan Colliery

*As per letter to  
Major Nicholas*

Centennial Newstan Pty Ltd ABN 98 117 523 267

100 Miller Road  
Fassifern NSW 2743  
PO Box 1300  
Toronto NSW 2283 Australia

T 61 2 4956 0200  
F 61 2 4961 4700  
E [enquiries@centennialcoal.com.au](mailto:enquiries@centennialcoal.com.au)  
W [www.centennialcoal.com.au](http://www.centennialcoal.com.au)

PC 10/4



**Centennial Newstan**

3 May 2012

ATTACHMENT 5



Dear Resident

**Newstan Mine – Extension of Mining Project**

In February 2012, Centennial Newstan notified you that an application had been submitted to the NSW Department of Planning and Infrastructure for an extension of underground mining operations at the Newstan Mine. The application was accompanied by a Briefing Paper to provide the Department with an overview of the proposed project which is now available on both the NSW Department of Planning and Infrastructure website ([www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)) and the Centennial Coal website ([www.centennialcoal.com.au](http://www.centennialcoal.com.au)).

Following the submission of the application and Briefing Paper to the NSW Department of Planning and Infrastructure, the Newstan project team has been working to finalise the mine design for which it will be seeking approval for. For your information, a copy of the conceptual mine layout has been enclosed with this letter. Over the coming months, various assessments will be undertaken to determine the impacts of the proposed mining operations on both the environment and surrounding communities. The outcomes of these assessments may result in further changes to the mine plan prior to a detailed Environmental Impact Statement being prepared and submitted to the NSW Department of Planning and Infrastructure for assessment.

As a landowner within or adjacent to the proposed future extension of mining operations at the Newstan Mine, we will continue to keep you informed on the progress and outcomes of these assessments currently being undertaken. Updated information will also regularly be provided on the Centennial Coal website.

If you have any questions or concerns regarding the proposed extension of mining operations at the Newstan Mine, please contact the Newstan Mine Community Information Line on 1800 247 662.

Yours sincerely

Centennial Newstan Pty Limited

**Terry O'Brien**  
Mine Manager – Newstan Mine

Enclosed: Conceptual Mine Layout (NS2861)

Centennial Newstan Pty Ltd ABN 68 101 508 365

408 Miller Road  
Fossilview NSW 2285  
PO Box 1400  
Tarncliffe NSW 2285 Australia

T 61 2 4856 0200  
F 61 2 4856 4230  
E [oy1@centennialcoal.com.au](mailto:oy1@centennialcoal.com.au)  
W [www.centennialcoal.com.au](http://www.centennialcoal.com.au)

40



ATTACHMENT 5



39

ATTACHMENT 6

Mr. Ian Broadfoot  
Lake Macquarie City Council  
Box 1906, Hunter Region Mail Centre  
NSW 2310

24 August 1999



NSW DEPARTMENT OF MINERAL RESOURCES  
Joint Coal Board Bldg 1 Civic Avenue  
(P.O. Box 51), Singleton, NSW 2333, Australia  
Phone (045) 72 1899 - Fax (045) 72 1201  
CX 7071

Our Reference: L96/0523

Dear Ian

**Proposed Westlakes Leisure Centre  
Lot 90 DP 755207, Lot 313 DP 755207, and unreserved Crown land**

I refer to your verbal request, at the August DARZL Committee meeting, for the Departments assessment of the proposed leisure centre.

The subject land is situated within Authorisation 285 (A285) held by the NSW Department of Mineral Resources.

There are significant coal resources within the Young Wallsend / Yard seam underlying the subject land. The Young Wallsend / Yard seam is about 4 m thick at about 400 m depth of cover. The Authorisation is held by the Department for geological assessment prior to allocation of the area to private companies interested in carrying out detailed exploration leading to the mining of this coal resource.

As you are aware, at the August DARZL Committee meeting Powercoal Pty Ltd indicated that they are considering applying for the area to add to the Newstan Colliery Life Extension Project. The coal resources underlying the subject land, if allocated to Powercoal Pty Ltd or any other private company, are likely to be mined using the longwall mining method in order to maximise resource recovery.

On the basis that the proposed Westlakes Leisure Centre will prevent total extraction of the coal resources underlying the subject land, and therefore sterilise a portion of these resources, the Department of Mineral Resources objects to the proposal.

As discussed at the August DARZL Committee meeting, the Department would be happy to discuss alternative locations within the area that would have less impact on future coal mining activities.

If you require further information please contact the undersigned at the Departments Singleton office on Telephone (02) 65721899.

Yours Faithfully

A handwritten signature in dark ink, appearing to read "D. Stevenson".

Darryl Stevenson  
for Assistant Director Coal and Petroleum

SCANNED  
26 AUG 1999

1674582

DOC. No.	3	90	77	008
FILE No.				
REC'D	26 AUG 1999		LMMC	
REFER	IS 201 CP			
FILE WITH				

Tish 10/190

A circular stamp with a signature inside, located at the bottom right of the form.



ATTACHMENT 6

IB Ext 282  
Council Ref: 3/90/177/008

31 August 1999

Ms Sharon Rowarth  
Westlakes Olympic Pool Committee  
8 Dora Street  
AWABA NSW 2283



Dear Ms Rowarth

SUBJECT: SITE FOR PROPOSED WESTLAKES LEISURE CENTRE

I refer to Council's letter dated 5 July 1999 advising of Council's decision regarding the proposed site for the future Westlakes Leisure Centre and the proposed new Community Consultative Committee.

I also confirmed that Council had asked the Department of Land & Water Conservation to transfer the site to Council.

The Department sought comment on the proposal from other Government departments and agencies, and has advised as follows:

1. Roads & Traffic Authority - No initial objections, but reserves the right to comment further at DA stage.
2. EPA - Requirement that a series of investigations be undertaken (see attached).

The Department of Mineral Resources has written directly to Council notifying an objection to the development of a Leisure Centre on the site (see attached). The Department has however, offered to assist by assessing all other sites which have been considered by Council. This offer will be accepted.

I will arrange a meeting of the new Committee when Council has received the Department of Mineral Resources' assessment of the alternative sites.

Yours faithfully

IAN BROADFOOT  
ASSET & POLICY DEVELOPMENT MANAGER  
COMMUNITY PLANNING DEPARTMENT

Send a letter to a friend overseas for FREE. Internet and email services are now available FREE OF CHARGE at your local Lake Macquarie City Library

IBX12544

26  
Affiliated Sister Cities  
Hakodate, Japan  
Round Rock, Texas, USA  
Puebla, Mex. 200 and  
Friendship City Toluca, Mexico







*The attached paper submitted to James Wearne  
& James Marshall at a meeting/ forum held on 27/3/2012*

**Trip with James Wearne, James Marshall, Eric Maronese and Bill McArthur**

**27/03/2012**

**Meet Ken McPherson Team Leader - Kilaben Bay Land Care at Fire Station**

**Go to Rock bolting / Ferrocrete Area MR 217**

Cost something like \$50,000. Problem boulders crashing onto MR217 for years due to fragmented geology issues. Mt Waring 200ft high drops sea level over short distance.

Drainage to Kilaben Bay Wetland via Kilaben Creek

**Go to First Old Tip on MR217 near Centennial Coal Mine Boundary**

Take him to the land we were thinking of putting a leisure Centre in cooperation between Awaba Progress Association, Coal Point Progress Association and Rathmines Progress Association. Sixty thousand dollars raised to start the Leisure Centre. Finally donated to LMCC as Len Lazarus Pool (Toronto West (now LMCC owned) was built instead.

Issues: leach-ate, steep ridge issues, earth movement issues with mining.

Centennial coal handed map of this tip at meeting 8/03/2012

Garbage still protruding out ridge in some places. Now Crown land. 30-35 years ago.

Leach ate still present up in old tips to 50 years.

**Go to Roundabout MR217 & Dorrington Rd**

History: RPA had corner made into seagull crossing around 1998

August 2007 - G Piper 1st Petition 1600 signatures to Legislative assembly re roundabout to stop accidents. Not presented due to procedural error.

Meeting of community Rathmines Hall 17/11/2007, 5pm. Katrina Loffburg grand daughter of Mr. Neil Denmet who was tragically killed at roundabout May 2009.

2<sup>nd</sup> Petition through Greg Combet and Greg Piper. 5,000 signatures.

Federal black spot funding approval plus State & Federal funds.

Roundabout completed end 2009, cost \$4,000,000.00

**Go to Dorrington Rd opposite Second Disused Tip**

One of the two major roads leading from MR217 to Rathmines, Bayswater, Arcadia Vale & Fishing Point.

Issues: Long wall mining under the length of the whole road to Clydebank Rd.

Subsidence issues, commuter danger, long term public transport inconvenience

**Go to Second Old Tip off Dorrington Road**

Up into the area and look from the highest point.

Leach ate issues, drainage issues, subsidence issues. Loss off deep soaks.

Closed approx twenty years ago.

Refer to current Waste Facility refer \$40,000 LMCC fine and letter we wrote on 21/02/1999 and asking environmental question. What training have staff had??? In the reply letter all 9<sup>th</sup> March 1999 all staff will be trained. So until March 1999 anything could have been dumped in the tree tips. Staff didn't know.

Hunter Water have a fresh water line across the ridges which takes water to the Central Coast. Also there is a sewerage line taking water from Rathmines to Dora Creek. Eraring Power Station benefits from this water. One of these pipelines (not sure at this time, which one) had alignment problems and leaked a large amount of water. Significant sections had to be renewed

**Awaba Waste Facility**

Current Awaba Garbage Facility commissioned October 1986 - 32.5 hectares.

Currently 1.36 million tonnes and growing, is 40% full. In the process of extending the facility for 24 years and to 3,504,00 Cu Metres or 4,060,000 tonnes.

Garbage Tips clay banded soils could help hold mass in situ. Long walls driving material deeper into water table.

ATTACHMENT 7

(27)

**Go to Rathmines Primary 11am ??? 49751229**

Meet Ann Britt Librarian

Rathmines Primary School children being involved in naming of Hely creek.

The closeness of the school to the community. Show the propeller at the main office, in the concrete and a history study of the area which was done by Ann Britt, librarian some years ago who got a grant to do it. The children of the school have been participation in the Catalina Festival each year (now in fifth year) in various shapes and forms.

**Go to Buttaba Hills Estate**

Tell him about Hilton Gudgeon selling off the blocks south of Buttaba Hills Road.

Look through estate showing him steep topography to the west.

RPA reduced estate size due to Awaba soil one of the most erodible there is.

Give him photocopies of Progress letters, also of sediment traps.

**Go up the hill to Hadleigh Rd and look from the top.**

Take him to the permanent soaks at the bottom. If the natural water flow is interrupted wildlife bush/marine & flora will suffer as a result of lack permanent water.

Then go to the silt trap we had constructed and then around to the headwaters of Secret Bay. Photocopy of the high sediment article supplied to Centennial Coal at meeting on 8/03/2012. The colour of Secret Bay goes changes to a curtain of brown after rain and is very visible to properties which look down from above.

**Go to Hely Creek on Clydebank Road**

Show sewer pumping station and drain under road.

**Go to Hely Creek on Rosemary Row at pressure retention pond.**

Rathmines Primary School children being involved in naming the creek.

Retention pond was enlarged about four years ago by LMCC to relieve pressure in storm events. Show freshwater galaxias living there. Acor Appleyard (Centennial Contractors took photos of the fish in my presence on 13/03/2012. The galaxias have been killed twice and must come down from permanent soaks in the hills.

Walk to where it goes under the road (its original route) on Clydebank both sides of the road. Show lay backs to control water flow and extra extensive drainage put in when Catalina Estate was put in by developer David Gray approx 15 years ago.

**Go to stormwater outlets at the back of Catalina Estate**

Show party the view of the newly cleaned out (one year ago) creek to bedrock (8 meters road base removed after Hunter water main break which took Rosemary Row out for four days) after Hunter Water finished. Tell him the Galaxias native fish kill twelve months ago, then again three months later. Point out fish living in this area now. Tell him about the damage to homes along the back the creek, during the weather of the Pasher Bulker grounding some years ago. Hely Creek always runs clean.

Tell him about fresh water reticulation main breaks in Rosemary Row near Hely creek.

Take him up further to where the new work was done and Kriebworth Grove.

Take party to the pumping station retention pond at the back of Catalina Estate. A sanctuary for native birds, duck families. Can be cleaned by mechanical means. Hely creek always runs clean.

**Take party to Dorrington Road open stormwater drains put in by the RAAF.**

Show party hard stand area and underground waterway to drain into the lake.

Any siltation of this area will block underground drains.

**Take party to Handstand area**

Show small stormwater outlet which was previously a large tidal salt water creek and swamp. In this area on extreme weather events the fresh water from Hely Creek rises over the roadway, over the handstand area and flows into Lake Macquarie  
Catalina Tour numbers from 17/09/2009 to 31/03/2012 = 1670 People from all over New South Wales

Tell about Catalina Festival into our fifth year has become a major event in the City Of

ATTACHMENT 7

26



Lake Macquarie. Very strong affiliation with RAAF.

Any siltation from mining coming down Hely Creek will be highlighted at the Hard-stand area as it flows into Lake Macquarie.

**Take party to Catalina Point**

Demonstrate tap working from 1939-1940 hydrant

Tell him it is a recognised War Memorial run by Penny & Bob Furrer.

**Take party to RPMBC**

Show party historic displays.

Also painting of Attie Warne

State Heritage listed Seaplane Base

**Take party to the Skateboard Bowl**

Six core fathers raised the money, took over LMCC land, built the bowl, hired a contractor 11 tonne excavator and paid him on his RDO, whilst the sewer was going through. With five core fathers plus a lot of helpers dug the bowl for two years, hired specialists, where needed and presented it back to LMCC.

Designed by the skateboard riders in the district.

Cost of construction \$33,000 finished value \$125,000

Reference to standing in the middle of the Mexican hat with the lake backed up and salt water going into my work boots. Sediment coming down the creek will be spread far and wide.

**Take party to Secret Corner Road.**

Show him our old house and mention clay banded soils. Reference to soil reaction Geo Technical Engineer (\$500.00 cost the the household) as a standard precursor to argue soil reaction vs earthquake damage per K Gritten (local builder employed by Earthquake Disaster Centre Newcastle.

**Take party to Cnr. Secret Rd & Bourneville Rd** where new freshwater reticulation work was done.

**Take party to Home**

When moving into current home in Cheapside Street piers had to be repacked after building inspection after purchase due to clay banded soils. Now to be in subsidence area of Centennial Long wall ??????????

Photograph State Heritage listing certificate and anything else James Warne wishes from my tour notes. NB take any photos of Galaxias fish in garage. Photograph of Heritage listing etc.

Show fresh water main breaks from Hunter Water pamphlet. This is the 6<sup>th</sup> instance of a break two door up since June last year.

**Reference Eraring Power Station**

Main thrust bearing power sixteen 747 jet engines.

Is put into tolerance of +/- three thousands of an inch.

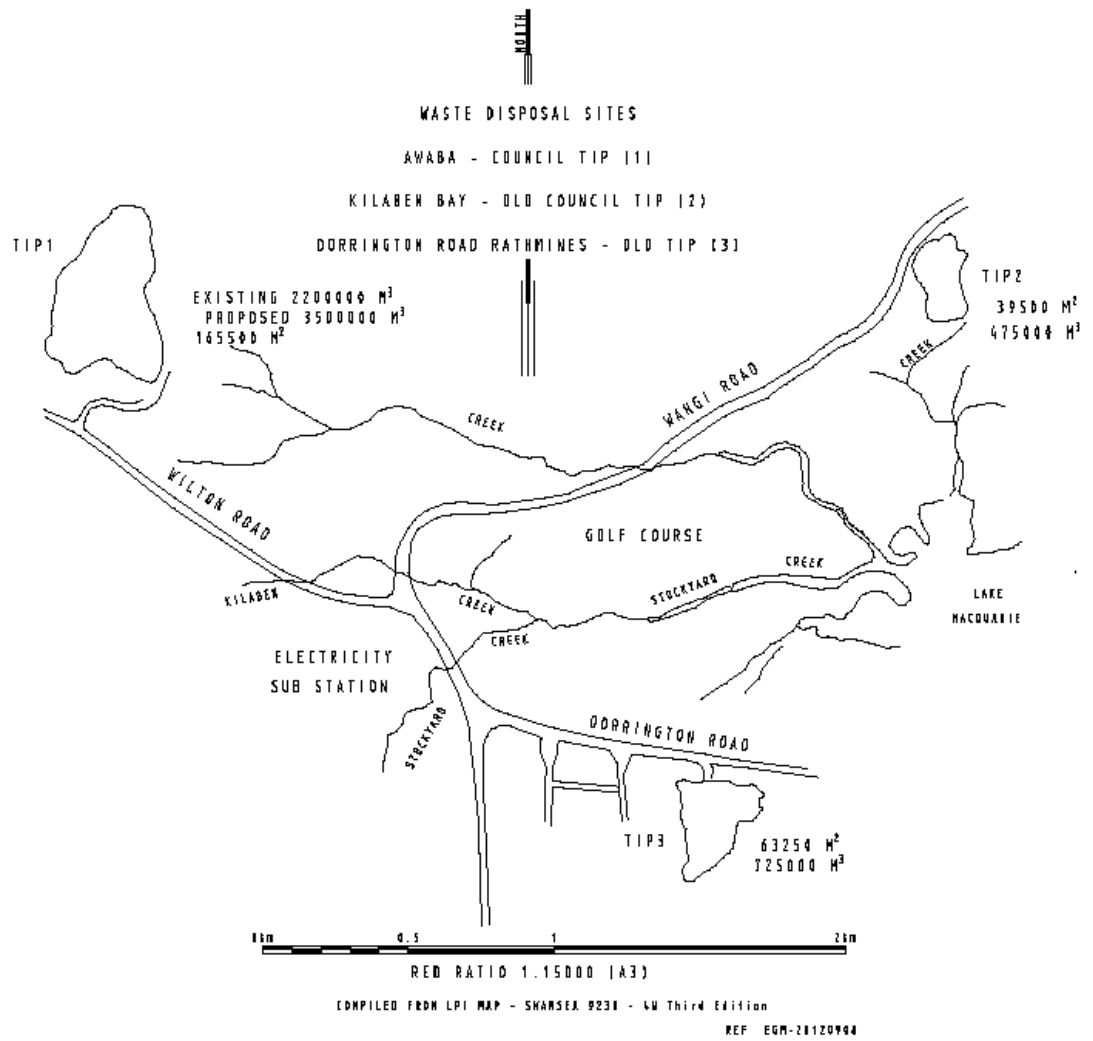
Toe drains in ash dam - must wear breathing apparatus. Two chemists killed years ago from CO2 gas.

Whiteheads lagoon selenium issues.

ATTACHMENT 7

25

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ATTACHMENT\_08

ATTACHMENT 9



Rx: 1406 Hunter Region  
Via: Cobar NSW 2810  
176-178 Main Road  
Scone NSW 2251  
13 2965 Newcast  
Telephone (02) 4921 0533  
Facsimile (02) 4958 7257  
Email: corp@lake-mac.nsw.gov.au

AP:SNB Ex: 477  
3/44/261/014

9 March 1999

The Secretary  
Rathmines Progress Association  
PO RATHMINES NSW 2283

Dear Sir/Madam

RE: LEACHATE LEAKAGE ANADA TIP

Thank you for your recent correspondence regarding the above-mentioned matter.

The following information serves as response to the questions raised in your correspondence.

1. Council currently employs four (4) staff who are based at the site.  
  
A number of other personnel are contracted to perform duties on an interim basis.
2. Council employs a Waste Sites Supervisor who is responsible for environmental auditing of the site. All staff associated with the site are to receive environmental awareness training.
3. Council regularly monitors the condition of adjacent watercourses and water management systems on the site.
4. Council has a Landfill Environmental Management Plan in place. This has been submitted to and approved by the Environmental Protection Authority.
5. In regard to the situation which resulted in the fine, the discharge of leachate was immediately stopped. The watercourse into which the leachate discharge was blocked and its contents drained to a leachate dam. The watercourse was then flushed to remove any contaminants. The flushing waters were also drained to the leachate dam.

SNL/261/615/210432

T 14/4/99

32  
Affiliated Sister Cities  
- worldwide -  
P.O. Box 100, Texas, USA  
Auckland, New Zealand  
Friendship City Aogasaki, Japan

ATTACHMENT 9

LMCC/2

Council has amended water control measures on site to prevent this situation occurring in the future.

If you require any further information in regard to this matter, please direct your enquiries to myself by phoning 49210477 during office hours.

Yours Faithfully



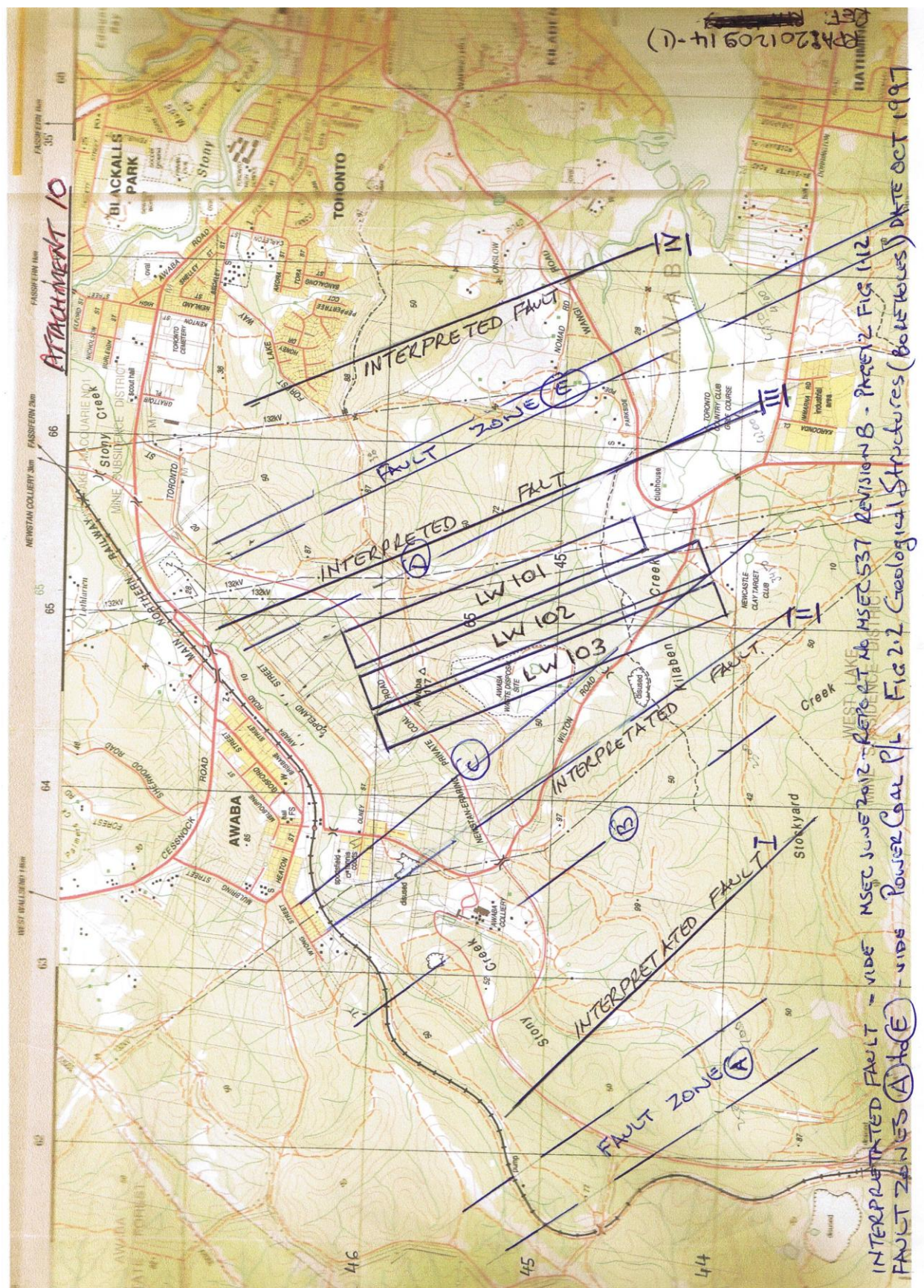
ADAM PIPER  
WASTE SITE SUPERVISOR  
WASTE & EMERGENCY SERVICES

23

FORMER 535/310A22

ATTACHMENT\_09 2/2







## Awaba Alternative Waste Treatment (AWT) Facility Environmental Impact Statement

### Community Forum Questionnaire

Community Forum, 24 May 2012

Committee Room, Lake Macquarie Council Administration Building, 125-138 Main Rd, Speers Point



Question 1: What do you think of LMCC's plans to build an Alternative Waste Treatment (AWT) Facility on the parcel of land adjacent to the current landfill site? Do you have alternative suggestions?

No alternative suggestion.  
An increase in the activity of the site is reasonable as long as they are within environmental legislation of Harbour Creek + Value Regulation (Kilaben Bay). The placement of landfill 10% and bay water 10% seems better than as possible subsidence of 0.8 metres making an increase into Kilaben Creek and

Question 2: What are your key concerns about the proposal?

Additional damage as was not envisaged when the waste facility was originally designed.  
Potential environmental damage to the people of nearby Kilaben Bay, residents on both sides of Kilaben Bay + special damage in a regional wetlands is a concern.

Please provide any additional comments you consider relevant:

How the EIS is produced a clearer picture  
more in detail.

*Bob Miller*  
24/5/12

ATTACHMENT 11

②

# Never again will Lake suffer too much love

NH 25/8/2014

Users will benefit, abusers will not pass go, writes Greg Piper.

WE all appreciate Lake Macquarie, whether we use it for boating, sailing, fishing or just as a backdrop to our rapidly growing city.

Following state government requirements, Lake Macquarie City Council has prepared a new Local Environmental Plan for all land and waterways in the city. As part of this we want to change the zoning of the lake from "11 Lakes and Waterway" to "W1 Natural Waterway" to acknowledge the lake's return to health over the past 20 years.

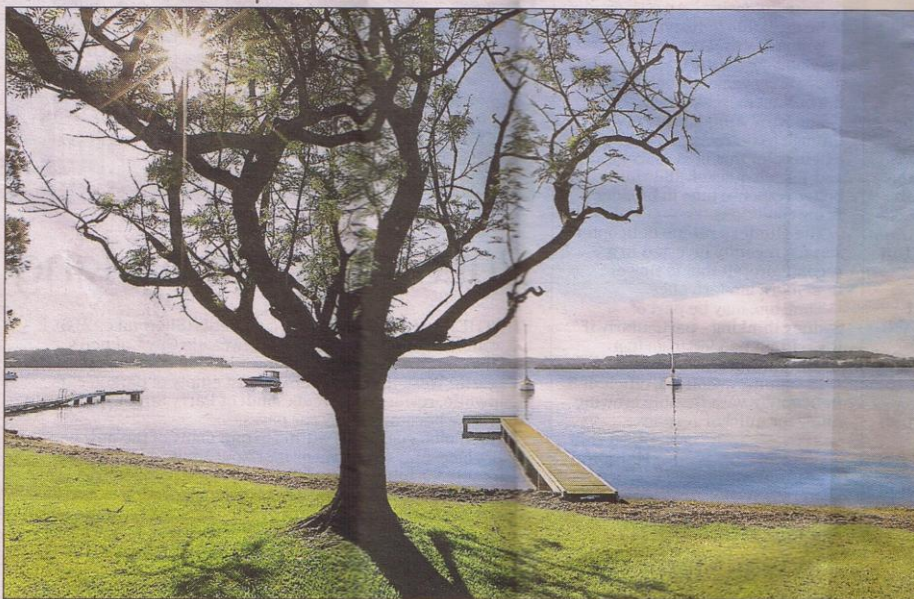
The proposal to make use of the W1 Natural Waterway zone has triggered some discussion and concern, mainly that the zoning will restrict people's ability to use the lake as they have in the past. Those fears are unfounded and, with the minor additions council is incorporating into the zone objectives, it is clear that the ability to use the lake will not change.

In 2005, a government biodiversity assessment of waterways between Newcastle and Shellharbour highlighted the lake as having the highest "irreplaceability" score, the highest area of significant shorebird locations, and the third-largest eagrass area in NSW.

This result points to the success achieved by the \$20 million of state and ratepayer money invested in restoring the lake over the past 20 years. We've won significant improvements in water quality and eagrass distribution and reversed the trend of foreshore areas becoming increasingly muddy and eroded.

This is why the draft Lake Macquarie Local Environmental Plan (LEP) 2012 proposes a zoning to ensure first and foremost that its ecological values are maintained, and that it supports the lake's value to the community at large. The draft LEP includes no changes to boating or jetty construction.

The NSW Department of Planning and Infrastructure's standard LEP template shows that the W1 Natural Waterways zone has three objectives. The first is to protect the ecological and scenic values of natural



**TREASURE:** The irreplaceable Lake Macquarie has been returned to health and is open to those who care for it.

waterways, the second is to prevent development that would have an adverse effect on the natural values of waterways in this zone, and the third is to provide for sustainable fishing industries and recreational fishing.

Council cannot change these objectives, though we have been allowed to add the further objective "to provide for the recreational use of Lake Macquarie and its waterways as an important environmental, social and economic asset".

Further reasons for choosing the W1 zone include the fact that the lake is closed to commercial fishing and the Lake Macquarie State Conservation Area covers Pulbah Island and parts of the foreshore.

It is an "off-the-rack" zoning from the LEP template, but it is the one most suitable. It will not alter the situation for jetties or moorings, while wharf and boating facilities will remain permissible with council consent. Recreation such as fishing, boating, and swimming are best served by maintaining the lake's high ecological value and the

**W1 zone aims to achieve this.**

Council supports the proposal because it would be irresponsible to do otherwise.

The W2 Recreational Waterways zone emphasises recreation and is appropriate for man-made waterways such as the Penrith Lakes Scheme and Lake Liddell. It has some overlap with W1, but it has a stronger emphasis on water-based recreation and related uses. The W1 zone emphasises the environmental values of the lake without changing or diminishing the usage of the waterway as it now exists. For a lake that was almost "loved to death" before being so successfully brought back to life, this seems eminently appropriate.

The lake's recent history makes the new zoning compelling. Since the public outcry about the lake's declining health in the 1980s much has been done to repair many decades of abuse and neglect.

A suite of studies and recommendations from the Estuary Processes Study, Estuary

Management Study and subsequent Estuary Management Plan, completed in the late 1990s, set the direction for policy changes and physical works implemented by what was known as the Lake Project Management Committee. These outcomes are still being put into action and we can all be proud of the progress that's been made.

As population and wealth grows in our city and our region, so will the demand and subsequent pressure on our lake. It seems wise to me that our zoning flags that we will never again neglect its environmental health as secondary to our other needs. The W1 zoning respects lake users, but not lake abusers.

The draft Local Environmental Plan 2012 will be publicly exhibited for a minimum of three months from September 24 and public comment will be invited.

**Greg Piper is the mayor of Lake Macquarie City Council.**

ATTACHMENT 12

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**Background History** The Association has had a long history in dealing with underground mining proposals in this area.

Our objections and concerns are not directed at the act of mining. They refer to the possible resulting environmental effects. These matters would include water pollution due to subsidence under the Awaba Tip and the Lake Catchment. There is also the concern that the two old disused tips have not been considered.

**Rathmines Progress Association (RPA) detailed  
response to LMCC Additions to Awaba waste  
Management Facility Environmental Assessment**

On a combined investigative tour on 27/03/2012 with Centennial Coal's Representatives, photo evidence was recorded, shown as Attachment 13, 13A and 13B

Photo 13 – at the NE base of the old unused tip at Kilaben Bay. This tip has not been sealed and as a result as is evident by the discolouration.

Photo 13A – easterly further downstream shows the same discolouration and also additional orange ooze in the still water.

Photo 13B – again easterly further downstream shows deeper still water pools. These show no apparent water life, however gas bubbles were noticed on the surface.

The Rathmines Progress Association has made a submission to Subsidence Management Plan (SMP) Extraction of Longwall Panels LW101 – 103 Mining Lease ML1452 Newstan Coal Mine on 24<sup>th</sup> September 2012. Due to the significant studies of the same area by Centennial Coal (CC) and Lake Macquarie City Council (LMCC). We believe that parts of that submission should be considered. It is important that the complete picture should be available to your Department for its guidance

*To this end a copy of our SMP submission dated 24<sup>th</sup> September 2012 is included.*

This Association has attended three meetings with LMCC regarding waste matters.

- 1) Many months ago at Morisset Country Club (Reference Round 2 in Cardno Table 4.1 page 41 of Environmental Assessment).
- 2) 24<sup>th</sup> May 2012, with Cardno at Council Chambers, the signatory completed a questionnaire (attach 11 in our SMP submission). It outlined our concerns of

environmental danger to Stockyard Creek, Longwalls 102 & 103, leachate into Kilaben Bay, aquifer damage. This environmental damage, in our opinion, poses a health and lifestyle threat to people enjoying the facilities of Kilaben Bay. A further concern is that part of this area is a protected wetland.

- 3) 10<sup>th</sup> October 2012 at Council Chambers, this meeting was a Community Information Session. The signatory presented a list of 10 questions which was accepted by your Planner, Christine Chapman (attachment 14). This was, we believe accepted as part of a submission. A copy accepted by Cardno was made available for their information. Our questions instigated an informal discussion amongst participants at this meeting. RPA, Council, Cardno and State Planning were involved.

#### Questions 1-3 (Attachment 14)

During this discussion, Cardno indicated that at no time were they made aware of the other two tips in the vicinity of Kilaben Bay. The bad condition of Kilaben Bay Tip was not known and there was not an awareness of the proposed undermining of Dorrington Rd Tip by Longwalls LW110 & LW111.

Therefore no subsidence diagrams appeared in the LMCC Environmental Assessment diagrams for LMCC private 3.7 km rising sewerage main. It is planned to carry tip leachate up to 2032. Estimated average mean discharge of 3875kL/month. About 1.1 km of this proposed main runs along Dorrington Road Rathmines. This part maybe effected by longwall mining subsidence.

#### Question 4

There was no disclosure of quantities of asbestos or weight, although it is understood that there is an asbestos register on site at Awaba Waste Facility and this should have been easy to furnish.

Questions 5 to 10 (incl) were not discussed on the night. They are self-explanatory, but we feel the information should be obtained to better assess the project .

#### Rathmines Progress Association input into LMCC Additions to Awaba Waste Management Facility Environmental Assessment

DGR Requirements General Requirements Key Issues.

- 1) No quantities of asbestos given, although it is understood a site register is maintained at the Awaba Site **NO INFORMATION SHOWN**
- 2) Potential impact on watercourses and ground water – two other discontinued tips not mentioned one in bad condition in Kilaben Bay. The other at Dorrington Road is planned to be undermined by LW 110 & LW111 (attach 5 in our SMP submission) Other references in reply to SMP document Pages 4 to 44(incl). **NOT ALL WASTE SITES CONSIDERED**

- 3) LMCC private rising sewer (leachate) Main running along Dorrington Rd. **No mention of possible undermining in final extraction process.** Subsidence issues not addressed (refer attachment 5 in our SMP submission)[dated 3/05/2012] & Cardno EA Vol 1 Figure 6.6 [dated 29/08/2012].

#### Further information

Hunter Water Corporation's (HWC) Sewer Main Break at Rathmines No 6 sewer rising main located at Stockyard Creek (off Dorrington Rd Rathmines). Questions asked of HWC (refer Attachment 15) and reply. (refer Attachment 16)

RPA letter to Hunter Water dated 30/03/2012 asked in part:

- 1) From to date of sewer main failure
- 2) Quantity of sewer water removed from Rathmines by environmental tanker during the break.
- 3) Was there a sewer spill into Kilaben Bay? Yes/No will do.

#### Reply

- 1) A member of the public reported the sewerage surcharge flowing into Stockyard Creek on 13/03/2012. Final repairs completed 22/03/2012.
- 2) No figure available however 8 to 12 tankers used day and night. These tankers were removing waste from both Rathmines No6 and Secret Bay Pumping Stations. A total of 25 pump Stations feed into Rathmines No6 .
- 3) YES

Further questions asked of HWC (refer Attachment 17) and reply.

One of our RPA member is a retired Metalurgist and suggested we put forward further questions. A ductile iron main should reasonably be expected to last around 100 years. The subject main failed in 20 years. Are there extreme engineering or soil chemistry conditions that were overlooked or not determined. We do not want Council's rising main to suffer the same fate.

RPA letter to Hunter Water dated 19/10/2012 asked:

- 1) What created the corrosion?
- 2) What kind of corrosion is it?
- 3) Did the corroded pipe have any inside lining fitted?
- 4) Is HWC confident there is no other corrosion present in the pipe line which could lead to another water breach.

We have not received a reply to date. However we are of the opinion that these matters require an answer before final determination is made.

#### Further concerns

- 1 Cardno table 6.48 Hazard control Measures – Gas accumulation is referred to however there are substantial coal gas releases underground when longwalling happens. Gas rises and if it gets to the surface through natural fault lines connecting with longwall stress fractures there could be a problem

by ignition or accumulation at the surface. Refer to faulting along LW103 and Awaba Waste Management Facility (attachment 10 in our SMP submission). Although extensive core drilling has been done by Centennial Coal our understanding is that these core drilling points were wide apart to test for coal ore body samples rather than faulting of geological structure interpretation.

- 2 Old Leachate Pond at Awaba Facility, its collection lines and new Leachate Treatment System. This Association is highly wary that a large mass of compacted garbage which has been in situ and increasing from 1986. The Awaba WMF is now approximately 2,200,000 cubic metres (approx.1,892,000 tonnes)(Ref page 17 LMCC Preliminary Environmental Assessment 29/07/2010). The waste comprises of many things, including hazardous materials, chemicals plus sharp objects. How can it subsided without damage to the old leachate pond and buried collection lines. We understand there will be a volume meter check of leachate at rising main entry and at exit. What if there is a fracture or breakage in the old leachate pond or buried collection lines? Any escaping leachate may simply disappear into a fault line or compression subsidence crack at bedrock and surface further down the catchment area or Kilaben or Stockyard Creeks.
- 3 Our impression is that the original Awaba Waste Management Facility was not designed to withstand the challenge of longwalling. Extensions have been done, now further extensions are required.
- 4 **Our position is favourable to the additions to Awaba Waste Treatment Facility . However our concurrence is subject to longwalling not proceeding within subsidence influence under this facility.**
- 5 This submission complete with it's attachments is presented for NSW Planning Guidance. We aim for the best outcome that can be achieved for the environment, Lake Macquarie and the many parties that are dependent on this Environmental Assessment.

Yours Faithfully,

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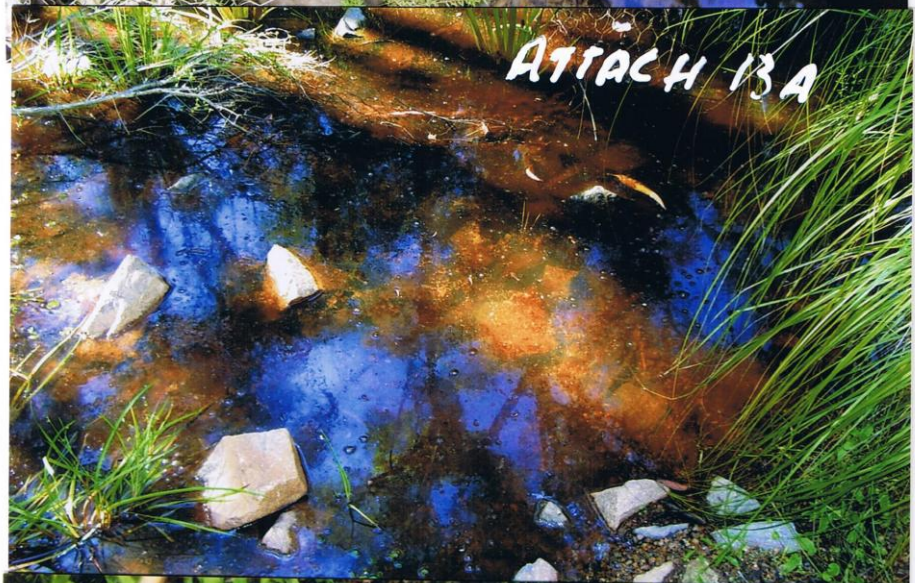
W McArthur

Acting Hon Secretary

26/10/2012

Attachments







ATTACHMENT 14

43 Cheapside Street  
Rathmines,

N.S.W. 2283

10<sup>th</sup> October 2012

Cardno(NSW/ACT)Pty Ltd

Level 9, The Forum,

203 Pacific Highway

St Leonards N.S.W 2065

Dear Sir/Ms

Drop-in Community Information Session Wednesday 10 October 2012 4pm to 8pm  
Councillors Workroom Council Administrative Building 126-138 Main Road, Speers  
Point

**Questions**

1. Why were other disused tips(Kilaben Bay & Dorrington Rd) present in the vicinity of Kilaben Bay not mentioned in the Environmental Assessment of Additions to Awaba Waste Management Facility?

The Rathmines Progress Association (RPA) understands that Kilaben Bay Tip (approx 475,000M. It was never capped properly and water continually leaches from the tip after rain. The only thing covering it is lantana vine and spots of morning glory vine. It has very steep batters (approx 1:1.5). The upper areas have been left in a disgraceful condition and dangerous state with sharp garbage and broken bottles sticking out all around the very steep batters. This site is now classified a Crown Land Reserve. At the base of the garbage mound is heavy dis-colouration, still pools in the upper section had an absence of the normal healthy pond e.g. mosquito wrigglers, water boatmen, tadpoles or frogs. They do not support animal life to the naked eye. We enquired of the head of *Landcare*, if the tea trees growing out of the still water would deter animal life and was told no. The dis-coloured area should be tested by the Environmental Protection Authority as a matter concerning public health. At lower the tidal interchange area there was proof of small fish and healthy movements in the water.



2. Dorrington Rd Tip (approx. 725,000<sub>3</sub>) which also drains into Kilaben Bay and is intended to be longwalled (LW110 & LW111) also. Please advise if this tip was capped when closed.
3. The RPA has had a number of meetings with Centennial coal regarding the Newstan Life Extension and Subsidence Management Plan Longwalls 101 to 103 going back to 8th March 2012 where Kilaben Bay and Dorrington Rd tips were mentioned and written issues papers left with them. It is very concerning that as LMCC staff/consultants have been in contact with Centennial Coal for around at least twelve months. Please advise if any of this information was received by you.
4. The EIS did not disclose asbestos disposed of at this facility. It is understood that all asbestos submitted to Awaba Waste Facility (AWMF) is required to be doubly wrapped and taped. It is also understood that there is a register kept of asbestos weight delivered, name and address of person or company bringing asbestos to the tip. Please supply total quantities for the last two years.
5. Please give timeline construction of proposed 2.5 km sewer pipeline from AWMF to Rathmines No.6 WWWS. i.e. before or after longwall 110 & 111 is completed.
6. It is the understanding of the RPA that in the event of an environmental catastrophe from leachate spill into the local creeks or Kilaben Bay whether from the AWMF and/or privately owned pipeline, the onus of proof is on Lake Macquarie City Council (LMCC) (us as ratepayers) to prove in the first instance that it was not LMCC's fault. Even though there has been longwalling under either LMCC asset. Is this correct.
7. It is understood that significant quantities of gas are released upon longwalling. Please advise if the LMCC AWMF methane gas capture and energy generation on site has any dangerous conflict with released gas from the longwall underneath.
8. Two of our members visited the information session held in LMCC Council Chambers on 24/05/2012. The attached Community Forum Questionnaire attached asked about environmental degradation of Stockyard Creek. To which there was not a follow up. In the Subsidence Management Plan from Centennial Coal there were issues of reference is made to Appendix 10 Surface Water Impact Assessment GHD Page 72. Almost the whole page is indicating higher than ANZECC trigger results for Lords, Stockyard and Kilaben Creeks for levels of aluminium, iron, chromium, copper, and zinc. Please advise if you were aware of this.
9. Please advise of the AWMF of final submission final public submission date to NSW Planning.

ATTACHMENT 14

10. Could you please advise your email as there may be more questions as the RPA examine AWMF Environmental Assessment?

Finally by the geographical location of the RPA, its members consider that we are stakeholders in this process.

Our members and communities, swim, fish, eat, sail, and generally enjoy Kilaben Bay and the broader waters of Lake Macquarie. We respectfully request to be included in the information streaming between Lake Macquarie City Council and Centennial Coal with reference to this Environmental Impact Assessment

Yours Faithfully,

W McArthur

Acting Secretary



ATTACHMENT 15

Postal Address:  
THE SECRETARY

43 Cheapside Street,  
Rathmines,  
N.S.W. 2283

Mr K Wood,  
The Managing Director,  
Hunter Water Corporation,  
P.O. Box 5171,  
HRMC,  
N.S.W. 2310

Hunter Water – Fresh Water Main Break 16 Hillcrest Avenue Rathmines & Sewer Main Break Off Dorrington Road Rathmines

I refer to the attached eight photos of the above fresh water main, which burst slightly before it was reported to your call centre at 11.15am on Friday 16<sup>th</sup> March 2012, refer incident no.379270.

Photo 1 – Main Burst 16 Hillcrest Avenue Rathmines

Photo 2 – Back Lane behind Cheapside Street Rathmines running between Hillcrest Ave & Dorrington Rd

Photo 3 – Cheapside Street Rathmines running towards Dorrington Road Rathmines

Photo 4 – Water ingress front yard 43 Cheapside Street Rathmines

Photo 5 – Water ingress front yard 43 Cheapside Street Rathmines

Photo 6 – Water ingress back courtyard 43 Cheapside Street Rathmines

Photo 7 – Water ingress side yard 43 Cheapside Street Rathmines

Photo 8 – Water ingress other side yard 43 Cheapside Street Rathmines

Two other properties namely 45 and 47 Cheapside Street were affected by water during this incident, besides the above.

This latest water ingress at 43 Cheapside Street Rathmines, is the third event in a very short period.

It is understood that this is the seventh attendance to this main since June last year.

This Association is aware that new freshwater pipe was laid in Rosemary Row, Oakwood Road and Part Clydebank Road Rathmines around March 2011. However this does not solve the constant breaks in Cheapside Street and flooding which has happened twice, in short regularity at the above properties.

Could you please give me the age of this main. Please note, I do not want average mean age.

Could you please explain the constant problem on this street.

\* On another matter, it is understood there was a major sewer main failure near the pumping station off Dorrington Road at the western end of Kilaben Bay. It is understood that there is a 750m sewer line along the shoreline to which it connects.

Veolia environmental tankers were evidenced at your property off Dorrington Road and also taking sewerage from the pumping station at Letchworth Parade Balmoral over a considerable period around 16<sup>th</sup> March 2012.

Could you please advise:

1. From to date of sewer main failure
2. Quantity of sewer water removed from Rathmines by environmental tanker during the break.
3. Was there a sewer spill into Kilaben Bay? Yes/ No. will do.

The Westlakes Sewerage system when laid around 1990/1991 circa, was a great improvement for Lake Macquarie and the residents living here. This Association is not looking to pick fault with Hunter Water but

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ATTACHMENT 15

would like the questions above answered as a matter of common courtesy.

Yours Faithfully,

*Jo d'Almeida*  
30/3/2012

*JS*



Hunter Water Corporation  
ABN 46 228 513 446  
Customer Enquiries 1300 657 657  
enquiries@hunterwater.com.au

PO Box 5171  
HRMC NSW 2310  
36 Honeysuckle Drive  
NEWCASTLE NSW 2300

20 April 2012

Ref: HW2011-485/25

The Secretary  
Rathmines Progress Association  
43 Cheapside St  
RATHMINES NSW 2283

ATTACHMENT 15

Dear Sir/Madam

**Rathmines Water and Sewer Main Failures**

Thank you for your letter to Managing Director dated 30 March 2012 regarding watermain breaks in Hillcrest Avenue and Cheapside St Rathmines and the recent break of our sewer rising main off Dorrington Road. Below is a detailed response to the questions the Association has raised

**Watermain Breaks**

Regarding the recent watermain breaks in Cheapside St (note: this main supplies 16 Hillcrest Ave), the Association has requested information about the age of the watermain, the recent watermain construction south of this area and the frequent breaks in Cheapside St. The main appears to have been constructed in three sections, presumably as the area progressively developed. At the southern end of Cheapside Street the main was constructed in 1950, the middle section in 1960 and the northern section in 1967. It is noted that the later constructed mains have been more susceptible to breaks. The watermain in Cheapside Street is still well within its expected service life.

The water supply to the Rathmines area is from the Toronto 2 reservoir located at Mount Waring Rd, Toronto. Due to the topography in the area the lower properties such as those in Hillcrest Ave and Cheapside St would experience excessively high pressure if supplied unregulated from Toronto 2 reservoir. Therefore Hunter Water operates a pressure reducing valve to reduce the pressure on the mains in these areas to moderate levels. Without this pressure reducing arrangements, the mains would be subject to higher pressure and would most likely experience a higher frequency of breaks. The recent construction works to the south of the subject area was to replace the lead-in watermain and pressure reducing valve that supplies to Hillcrest Ave and surrounding area. The new assets were constructed to improve the reliability of supply to the general area and are to the benefit of customers in Hillcrest Ave and the surrounding area. It is noted that the new pressure reducing valve has pressure sensors on both sides of the valve, which will raise an alarm in Hunter Water's monitoring system to indicate a problem with the valve or a watermain break in the area, hence allowing Hunter Water to respond more efficiently to such events.

A number of leaks have occurred on the main which have been repaired with a clamp and without interrupting the water supply. However significant breaks occurred on the 15 June 2011 and 16 March 2012. On both of these occasions, issues occurred at the pressure reducing valve which let unregulated pressure through to the lower areas and resulted in pressure in the mains more than twice the regulated pressure. This higher pressure

www.hunterwater.com.au

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essentially found weaknesses in the system and caused a significant break with high pressure water gushing out of the main. Hunter Water have investigated these breaks and believe that measures are now in place to avoid similar occurrences.

Based on the historical breaks of the main in Cheapside St, this main does not currently qualify for replacement. However, Hunter Water continually monitors the performance of such mains and has a process in place which lead to the eventual replacement of the main when it has reached the end of its serviceable life.

The watermain in Cheapside Street is still within its expected service life, however Hunter Water will monitor its performance and replace the main if deemed appropriate. The recent construction works to the south of the area are to the benefit of customers in Hillcrest Ave by providing new lead-in infrastructure to improve the reliability of supply to the general area.

#### **Sewer Rising Main Break**

Regarding the recent sewer rising main breaks off Dorrington Rd, the Association has requested information about Hunter Water's response and was sewage discharged to Kilaben Bay.

A member of the public notified Hunter Water on Tuesday, 13 March at 8:19am of a sewer surcharge, flowing into Stockyard Creek. Hunter Water field staff arrived on site approximately one hour later. A failure had occurred on the Rathmines No. 6 sewer rising main (600mm diameter ductile iron main laid in 1992) located off Dorrington Road, just before the rising main crosses under Stockyard Creek. The rising main receives pumped sewage flows from the Rathmines 6 wastewater pumping station, which is a critical asset of Hunter Water receiving pumped sewage flows from some 25 pump stations in Rathmines, Fishing Point, Wangi, Kilaben Bay and Coal Point.

The break occurred in water charged ground beside Stockyard Creek, making access to the site difficult. A temporary access track had to be constructed before works could commence. Additionally, before commencing repairs, both groundwater and the sewer in the rising main needed to be dewatered. It is noted that the rising main is approximately 3m deep in poor ground conditions due to the fact that the rising main goes under the creek. A temporary repair of the rising main, using a stainless steel clamp, was completed on the evening of 16 March 2012. A permanent repair was subsequently completed on 22 March 2012, involving installing a new section of pipe.

Hunter Water had no other option than to operate tankers day and night to intercept the sewage flows at the WWPS, until the temporary repair was completed and during the period that the permanent repair was being affected. The volume of sewage tankered was not measured however up to 8 to 12 tankers were used at any one time. It is noted that the section of failed pipe showed signs of localised corrosion, and has been sent for metallurgical assessment to better understand the failure mechanism.

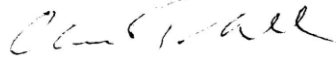
As mentioned above, sewage overflow did reach Stockyard Creek adjacent to the location of the sewer rising main break. Hunter Water implemented the tankering arrangements to stop the continuation of the overflow to the creek until the pipe could be repaired. On a daily basis, Hunter Water's environmental officers completed visual assessments and took samples at up to 8 locations within Stockyard Creek and Kilaben Bay. Nutrients from the overflow were found to be largely contained to Stockyard Creek and where being consumed by the natural environment. It is noted that at no time was any marine life observed to be in distress, nor did sample results indicate the need to erect no swimming signs in Kilaben Bay.

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ATTACHMENT 15

I trust that the above information addresses the questions raised by the Association, however should you have any further queries please do not hesitate to contact Mr Glen Robinson, Relieving Manager Network Operations on (02) 4979 9489.

Yours Sincerely



Chris Turnbull  
Chief Operations Officer

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# Rathmines

PROGRESS ASSOCIATION



Postal Address:  
THE SECRETARY

43 Cheapside Street,  
Rathmines,  
N.S.W. 2283

ATTACHMENT 17

Mr G Robinson,  
Relieving Manager Network Operations,  
Hunter Water Corporation,  
P.O Box 5171,  
HRMC NSW 2310  
Your ref HW2011-485/25

Dear Sir,

Rathmines Water and Sewerage Main Failures

In regards to the reference above and copy attached.

Could you please advise:

1. What created the corrosion ?
2. What kind of corrosion is it ?
3. Did the corroded pipe have any inside lining fitted?
4. Is Hunter Water Corporation confident there is no other corrosion present in the pipeline which could lead another water breach.

Yours Faithfully,

W McArthur

19/10/2012 ✓

Attach,