

# Williamtown Sand Syndicate (WSS) Cabbage Tree Road Sand Quarry Community Consultative Committee Meeting

3<sup>rd</sup> September 2020

9:00-9:55

Green House, Pacific Dunes  
Golf Course

<b>Meeting Number:</b>	4 <sup>th</sup> Meeting	<b>Type of meeting:</b>	General
<b>Chairperson:</b>	John Turner - JT	<b>Note taker:</b>	Eliza Altmann
<b>Attendees:</b>	Darren Williams (WSS) – DW Paul Bourne (WSS / Newcastle Sand) – PB Jonathan Berry (Wedgetail Consultants) – JB John Simpson (Hunter Water Representative) - JS Wayne Sampson (Resident) – WS Shirley Davis (Resident) – SD Keiron Rochester (Resident) - KR		
<b>Apologies:</b>	Barry Davis (Resident) – BD		
<b>Observers:</b>	None		
<b>Meeting Open:</b>	9:00am		

## Minutes

<b>Agenda item: 1</b>	<b>Apologies</b>	<b>Presenter:</b>	John Turner
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### Discussion:

Apologies from Barry Davis (BD)

Janet Meyn no longer works at Port Stephens Council. A new delegate has not been appointed as yet.

<b>Agenda item: 2</b>	<b>Declaration of Pecuniary Interest</b>	<b>Presenter:</b>	NA
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### Discussion:

John Turner (Chairperson) – Paid for service by WSS.

Wayne Sampson (Resident) – Deed with WSS.

Jonathan Berry (Wedgetail Project Consulting) – Consultant employed by WSS. – UPDATED

John Simpson (Hunter Water Representative)

Barry Davis (Resident) – Nil.

Shirley Davis (Resident) – Nil.

Keiron Rochester (Resident) – Nil.

Darren Williams (WSS) – Quarry owner.

Paul Bourne (WSS / Newcastle Sand) – Quarry employee.

**Agenda item: 3 Minutes to be adopted**

**Presenter:** John Turner

**Discussion:**

Minutes from the last meeting were noted.

Minutes moved by WS. Minutes seconded by JB. All Agree.

Actions from Previous Minutes

- Example of information presented at similar CCC meetings to be provided - JT
- WSS to provide monitoring data prior to or present it at the next meeting – PB/JB
- Committee supported motion for Company request RMS review traffic hierarchy with respect to problems observed in the constructed intersection, specifically around the removal of concrete median separating shoulder and bike lane to improve safety for residents turning right.
- Residents provide a letter/ email on their concerns regarding the intersection to be included with RMS review request – WS / KR / SD.
- Newsletter 9 to be delivered – WSS.
- Records in graph form or similar as per examples from other CCC meetings to be provided to committee for next meeting - WSS
- Training opportunities for committee members – JT
- Site inspection agreed prior to next visit, subject to operational restrictions if applicable – PB

**Agenda item: 4 Business Arising from Previous Minutes**

**Presenter:** JT

- Response to issues raised or provision of additional information requested;

JT - Consideration has been made regarding community training. Considering other committees that I have chaired and the matters they have dealt with which in most cases had more complexity with the matters considered by this committee and considering that those committees did not have training I do not believe training is required.

JT – Are we aware of any action by the RMS in regard to the traffic island?

JB – Not that I am aware off.

JB and others – There has been some discussions regarding the change of the speed limit on Cabbage Tree Road by the RMS from 90kph to 80kph

**Agenda item: 5 Correspondence**

**Presenter:** John Turner

- No correspondence

**Agenda item: 6 Proponents reports & overview of activities, including; Presenter:** Jonathan Berry

- Progress of the project
- Monitoring & environmental performances
- Community complaints & responses to these complaints
- Information provided to the community and any feedback

**Community Complaints & Responses to these complaints**

**Traffic Island**

JB – In regard to the traffic island complaints. There has been some progress with the speed limit being reduced. Traffic island still requires some correspondence from the community to be passed onto RMS.

General discussion occurred about the safety aspects of the traffic island and it's construction and that it was an RMS requirement

#### **Hard copy of Minutes**

JB – Hard copies of the previous meetings have been put in SD's mailbox.

SD – Yes, received.

#### **Air Braking**

JB – Signs have been put up.

SD – It was really bad. The ones (trucks) that were doing it had red around the top.

#### **Monitoring & environmental performances**

JB – DPIE (Department of Planning Industry & Environment) have requested clarification on some aspects of the annual review. They require clarification on boundaries, this information has been submitted. DPIE also requested another well be drilled due to ground water levels being so low. This has now been installed and there is water back in the well. EPL Annual Return is due end of September.

JT – Any questions?

KR – Does this review go up on the website?

JB – Yes. The updated documents will be loaded on the website.

#### **Progress of the project / Activities for the period**

##### **JB – Sand mine opened 18/5/2020**

JB – Continue to refine site operations and complete construction of the assets like stockpiles and refining the sprinkler system running around the batters to suppress dust.

SD – Is that from town water or bore water?

JB – Town water. Not allowed to use bore water.

Concerns were expressed by SD and WS on using town water. DW advised that the use town water was a requirement because there was a concern by quarry neighbours that if the quarry used bore water it might interfere with the ground water levels in the area

SD – Expressed concerns about dust when trucks come out of the quarry driveway. (Note further discussion on this topic occurs in the air monitoring section of these minutes)

JB – Offset areas, are continuing to be secured. All areas around the quarry space will be set aside as offset areas. This is underway, signs will go up, fencing will happen and the company will be required to do weed maintenance and pest management with a whole range of actions required. KR asked for a copy of the offset areas. JB advised that some offset areas are in negotiation but once they had been secured a copy could be provided

SD – Raised concerns about long grass at on the road reserve

JB – Pre-clearing survey was undertaken for the next stage, nest boxes installed in trees, the area was inspected for heritage and surveyed for radiation, and nothing was found in those areas. Clearing was undertaken under supervision of an ecologist. Sand is continued to be extracted with sufficient operational area to safely screen, stockpile and load trucks. Some sand is screened to remove roots and rocks. Currently selling glass sand, amber sand for concrete and a landscape and fill sand. Averaged less than 12% of monthly haulage allowance. Busiest period was 70% of daily haulage allowance. Weighbridge system is working well, it regulates the truck movements. It does not allow a truck to leave the quarry with a ticket unless they have had less than the allocated number of trucks for that hour. This system is installed and operates automatically.

JT – Any questions?

JS – About the landscape sand, for clarification does this include the topsoil from the site, is it stockpiled and used for rehabilitation of the site?

DW – The landscape sand is the band of darker sand (coffee rock) under the topsoil.

JB – Present main focus is to move the quarry further north and get a sealed road through to the northern area.

There hasn't been any weekend haulage. Quarry is permitted to haul on Saturdays but it hasn't happened at the moment. Busiest day has been under 70%.

JT – Any questions?

JS – Glass sand, it is at the top of the profile, some is screened and some is loaded into trucks. Is the glass sand screened at all?

PB – Holcim will take the white sand straight off the face but due to the amount of roots, we have been screening it.

JS – So the white sand at the top has a higher proportion of root material which is useful for rehabilitation process for wind erosion and stabilization. If it is screened and retained on site that is a good thing.

PB – At the moment it is put aside in a designated area and checked for artifacts.

DW – Once it is checked for artifacts it is put back into our rehab material.

## Environmental Monitoring

### Water

JB – There is continuous logging of groundwater across the site on a monthly basis, and all results are on the website. Links have been listed in the provided document. Bore hole 4 data has been provided as an example (page 13), this bore hole isn't far away from the intersection. Basically, the quarry must stay 0.7m above the maximum predicted level. The ground water levels help ensure that the modelling that was originally done was correct.

KR – It's pretty hard to read those water quality results. There are some levels that someone says are preferred levels. What happens when the water levels go over that?

JB – The process is to look at the range of levels, ensure they are correct and see if the quarry has impacted these levels or not. Changes may also be due to rainfall after a dryer period.

KR – Have you had any instances where it has gone over these levels? Have you had any investigations?

JB – The levels are all quite low and there are no sites directly relating to quarrying activities.

JS – Exceedances relating to the quarry operations or not are triggers and need to be followed strictly. There was a PFAS detection on the eastern boundary.

JB – Yes, there was a surface water and groundwater one detected at the northern part of the site. As a part of the annual review they have requested to discuss with the EPA whether there is reason to change any of their boundaries in relation to the PFAS. This is for the EPA to determine.

KR – What goes to the DPIE and what goes to the EPA?

JB – It all goes to the DPIE.

### Air Monitoring

JB – There are two real time monitors that produce a result every 15 minutes that measure matter smaller than PM10. And two high voltage samplers that sample every six days. These types of samplers are standard for a coal mine, for a quarry they have a system that is well ahead of other quarries that I am familiar with. PM10 levels are not to exceed a cumulative annual average of 25 and a contribution over 24hr average of 50.

SD – Noted that sand and dust from the quarry was entering her property and Mrs Rochester's property and causing distress particularly when the trucks are leaving the quarry and questioned whether the air monitors were in the correct positions.

JB – Advised of the process to install and or relocate the monitors and that they require an open site to work. He advised that a monitor has been installed across the road from the quarry in what is considered to be the best position to obtain reading

WS – Noted he didn't want the monitor in his front yard, he wanted it across the road or on the other side of his block, but it couldn't be put there due to the trees that may affect the readings

JB – Confirmed that the monitor was put on that boundary because it was a clear space, and it can't be put in a space where it is obstructed by trees. He noted that it couldn't be in Mrs Rochester's front yard due to the hedge and it couldn't be in the front yard of SD's property due to the gravel driveway. There is a large range of parameters that need to be considered when installing monitors.

SD- reconfirmed her concerns about level of dust and sand swirling about her property and Mrs Rochester's property when trucks are leaving the quarry site

JB – PB and JB will look into these concerns. He noted that it is worth having a look at this on a regular basis and seeing what the cause is.

KR – Asked if there was a wash out bay on site?

PB – Advised there is a hose out bay inside the quarry adjacent to the weighbridge. Truck drivers are required under the drivers' code of conduct to wash out their trucks before they come to site. He advised the quarry certainly does not encourage drivers to wash out on site.

KR – Advised he was more worried about the under carriage dust, not the quarry activities.

DW –We are looking at the possibility of installing a wheel wash bay, it is on our list to be investigated..

JB – (Continued going through air monitoring results on page 15). Dust levels high due to bushfires.

KR – What does 50 ug/m3 per cubic meter look like?

JB – You can't actually see it.

KR – The stuff you can see is the coarse stuff. Is that measured by any of the monitoring?

JB – The unit at Wayne's (WS) place measures the stuff you can see, its measures Total Suspended Particulates.

KR – We don't have high volume air sampling data on this sheet?

JB – Data available through the link provided (page 16).

JT – Any further questions?

JB (Pages 17 to 23 of the presentation)

Photo 1 – Near map as of 24<sup>th</sup> June 2020; shows the stockpiles, processing plant and topsoil stockpile for future re-use.

Photo 2 – Site entrance looking to the south; oversized material from processing stockpile, balance of surplus construction material and temporary batter stabilization.

KR - You can see the sand over the road, so that's where its blowing from.

SD – Why have so many trees been removed?

JB – Its tricky, the footprint is smaller, and you need to take it down the to the right level the quarry needs to be set up at. Batters can't be too steep either. That's why we had to clear that space to get the road to where it is.

SD – What is a batter?

JB – A batter is a hill or slope that has been cut.

Photo 3 – Weighbridge looking to the north; Traffic lights to allow truck drivers when they can or can't enter the weighbridge.

Photo 4 – Office, carpark and shed;

Photo 5 – Plant & equipment shelter

Photo 6 – Weighbridge looking south

SD –There is a bit of sand on the ground? What sand is that?

JB – It's a mix of sands.

SD – Does that come into my place and I breath it in?

JB – It's no different to being the at the beach.

Photo 7 – Stage 1 looking to the south; white (raw) stockpile, Landscape sand stockpile, concrete sand processed stockpile, processing plant and truck loading area.

KR – Are those glass guys still getting sand?

PB – Yes.

KR – Is it a long-term contract?

PB – Yes, about a 4-5,000t p/m supply.

Photo 8 – Recently cleared stage 1A & stage 1 raw stockpiles, looking the south west.

Photo 9 – recently cleared stage 1A & 2, looking to the south east; stockpiled trees for future rehabilitation use.

SD –Asked why there has not been a site inspection yet

JT- Advised an inspection could not be held because of the Covid 19 situation. He advised that it was intended to have one before this meeting but it couldn't be held due to regulations

PB- Advised that a mines inspector did an air borne contaminate and Covid 19 full site audit and one of the recommendations was not to have any sales people or anyone coming to the site that was unnecessary to the operation of the site. It's not just the quarry site, it applies to industry in general

### Conclusions:

Key actions from the above discussions summarized below:

Action items	Person responsible	Deadline
✓ Residents to provide a handwritten letter or email on their concerns regarding the intersection to be included with RMS review request.	Residents - KR / WS /SD	After speed signs are erected.
✓ WSS to look into the causes of the dust swirling up behind the trucks when exiting the quarry.	JB / PB	For next meeting

### Agenda item: 7 Other Agenda Items

**Presenter:** John Turner

### Discussion:

JT – There were no other agenda items received

### Agenda item: 8 General Business

**Presenter:** John Turner

### Discussion:

KR – Can we get the presentation a week earlier to the meeting?

DW- We prefer to hand it out at the meeting and then present to it.

KR- If we have further questions on this, can you answer them?

JT- Would prefer questions are kept to next meeting unless urgent, which can be directed to WSS.

JT – SD any general business?

SD – Asked why Mrs Rochester could not come to the meeting as an observer noting that she had come to previous meetings?

JT – Explained that Mrs Rochester can request to come as an observer however no request had been received. If Mrs Rochester sought to come as an observer she would need the approval to attain observer status from the committee. He further noted that KR was representing Mrs Rochester.

SD – Raised concerns about an observer at the previous meeting (Murray Towndrow). JT advised he had written to the committee about Mr Towndrow's attendance and the committee approved of his attendance as an observer.

KR – Can the meeting be an 8am start?

JT – No, we have public authorities like Council and Hunter Water here. 9am fits.

JT – If there is nothing more the meeting is closed.

Action items	Person responsible	Deadline
✓		

**Agenda item: 9    Next Meeting**

**Presenter:**    John Turner

**Discussion:**

JT. Next meeting to be advised.

**Action items**

**Person responsible**

**Deadline**

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***Other Information***

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- Minutes to be provided as draft in the next week.
- Committee members have one week to provide feedback on the minutes to the Chairperson.
- Within two weeks of receiving feedback the minutes will be finalized and distributed to members and placed on the website.

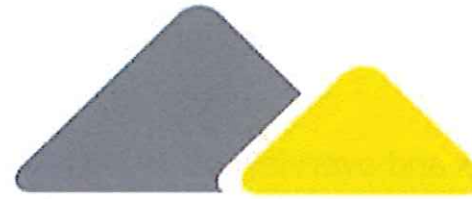
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***Meeting Close:***

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9:55 am





# NEWCASTLE **SAND**

Community Consultative Committee Update

Project update for the period 1 May 2020 to 20 August 2020

03 September 2020



## Meeting Agenda for the Cabbage Tree Road Sand Quarry Community Consultative Committee.

Thursday 3rd September, 2020, 9.00am

Meeting Room, Pacific Dunes Golf Club Medowie

### Agenda Items:

- ▶ 1) Apologies
- ▶ 2) Declaration of pecuniary or other interests
- ▶ 3) Correspondence
- ▶ 5) Proponents reports and overview of activities, including:
  - ▶ \* progress of the project
  - ▶ \* monitoring and environmental performance
  - ▶ \* community complaints and response to these complaints
  - ▶ \* information provided to the community and any feedback
- ▶ 6) Other agenda items
- ▶ 7) General business
- ▶ 8) Next meeting

# Actions from previous minutes

- ▶ Progress on the RMS approach regarding traffic island / cycleway protection concrete?
- ▶ More comprehensive project information to presented at next meeting - this presentation.
- ▶ Site inspection - mine's inspector advised it is not accepted at this stage due to COVID.

# Community Complaints since May 2020

- ▶ Four (4) complaints received since 1 May 2020:
  - ▶ 2 in relation to traffic island (matter currently outstanding and in progress - would benefit from letters or emails from residents stating concerns).
  - ▶ 1 requesting hard copies of meeting minutes
    - ▶ Minutes printed and delivered.
    - ▶ Complaint Closed.
  - ▶ 1 regarding noise from air brakes.
    - ▶ Rang freight control company regarding complaint and requested drivers to be informed not to use engine braking.
    - ▶ Posted sign on weighbridge reinforcing requirement not to use engine braking.
    - ▶ Complaint Closed.



# Regulatory Correspondence

- ▶ DPIE have requested clarification on aspects of the Annual Report, these are currently underway.
- ▶ DPIE have requested clarification on boundaries of extraction.
  - ▶ Information has been submitted
- ▶ DPIE have requested an additional bore be drilled owing to one bore not being deep enough to sample water during dry periods.
  - ▶ New well has been installed
- ▶ The EPL Annual Return is due to be submitted in September 2020

# Key Activities Completed During this Period

- ▶ Continuing to refine and complete construction related aspects (e.g. batter rehabilitation, stockpile management and stabilisation).
- ▶ Commenced haulage of sand as an operational quarry on 18 May 2020.
- ▶ Continued the process of securing the Offsite Offset areas, which are in addition to the areas onsite that will be offset as a Stewardship site in perpetuity.
- ▶ Undertook pre-clearing survey for next stages of the quarry, pre-clearing includes:
  - ▶ Hollow bearing tree survey and erection of nest boxes in surrounding area proposed for offset.
  - ▶ Inspection of area of Aboriginal Heritage.
  - ▶ Survey of the area for radiation (in case of buried monzonite by RZM).
- ▶ Clearing is then completed while being supervised by an ecologist to assist relocation of fauna.
- ▶ Refinement of sprinkler system to minimise dust levels.

# Key Activities Completed During this Period

- ▶ Continued progressive extraction of sand.
- ▶ Main focus of operations has been to ensure sufficient operational area to safely and efficiently screen, stockpile, extract sand and load trucks.
- ▶ Some sand is screened to remove rocks and roots, other sand is loaded directly to trucks.
- ▶ Currently selling white, amber (concrete), Landscape and fill sand from the quarry.
- ▶ Haulage (also see later slides):
  - ▶ Averaged less than 12% of monthly haulage allowance.
  - ▶ Busiest in period was almost 70% of daily haulage allowance.
- ▶ Weighbridge system is working well in helping regulating maximum haulage rates - system will not give driver a ticket unless under haulage rate.



# Key Activities in the Next Period

- ▶ Continued progressive extraction of sand.
- ▶ Main focus of operations has been to ensure sufficient operational area to safely and efficiently screen, stockpile, extract sand and load trucks.
- ▶ Some sand is screened to remove rocks and roots, other sand is loaded directly to trucks.
- ▶ Next construction works will be for the next section of the central spine haulage road through to the northern resource area.
- ▶ Continue to sell white, amber and fill sand from the quarry.



# Monitoring - Trucks - May 2020

Monthly Summary of Traffic Movements (as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
18-May	1	116	0.9%
19-May	1	117	0.9%
25-May	4	118	3.4%
<b>Total trucks this month</b>	<b>6</b>		
<b>Approved maximum for month*</b>		<b>1340</b>	<b>0.4%</b>
<p><b>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</b></p> <ul style="list-style-type: none"> <li>- 6 trucks per hour from 6am to 7am Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 6pm Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 4pm on Saturday</li> <li>- No haulage on Public Holidays</li> </ul>			
<p><b>The weighbridge and ticketing system is routinely calibrated and managed by an accredited external business to ensure the sale and transport of sand from the quarry is consistent with approved haulage limits and operational times.</b></p>			

# Monitoring - Trucks - June 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
2-Jun	35	116	30.2%
3-Jun	34	116	29.3%
4-Jun	30	116	25.9%
15-Jun	63	116	54.3%
16-Jun	81	116	69.8%
19-Jun	1	116	0.9%
22-Jun	2	116	1.7%
23-Jun	43	116	37.1%
24-Jun	1	116	0.9%
25-Jun	1	116	0.9%
26-Jun	17	116	14.7%
29-Jun	41	116	35.3%
30-Jun	44	116	37.9%
<b>Total trucks this month</b>	<b>393</b>		
<b>Approved maximum for month*</b>		<b>2796</b>	<b>14.1%</b>
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</p> <ul style="list-style-type: none"> <li>- 6 trucks per hour from 6am to 7am Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 6pm Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 4pm on Saturday</li> <li>- No haulage on Public Holidays</li> </ul>			
<p>The weighbridge and ticketing system is routinely calibrated and managed by an accredited external business to ensure the sale and transport of sand from the quarry is consistent with approved haulage limits and operational times.</p>			



# Monitoring - Trucks - July 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Jul	47	116	40.5%
2-Jul	53	116	45.7%
3-Jul	30	116	25.9%
6-Jul	59	116	50.9%
7-Jul	70	116	60.3%
9-Jul	3	116	2.6%
17-Jul	1	116	0.9%
22-Jul	1	116	0.9%
23-Jul	1	116	0.9%
24-Jul	1	116	0.9%
29-Jul	2	116	1.7%
30-Jul	5	116	4.3%
31-Jul	10	116	8.6%
<b>Total trucks this month</b>	<b>283</b>		
<b>Approved maximum for month*</b>		<b>3028</b>	<b>9.3%</b>
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</p> <ul style="list-style-type: none"> <li>- 6 trucks per hour from 6am to 7am Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 6pm Monday to Friday.</li> <li>- 10 trucks per hour from 7am to 4pm on Saturday</li> <li>- No haulage on Public Holidays</li> </ul>			
<p>The weighbridge and ticketing system is routinely calibrated and managed by an accredited external business to ensure the sale and transport of sand from the quarry is consistent with approved haulage limits and operational times.</p>			

# Environmental Monitoring - Water

- ▶ Continuous logging of groundwater depth data at several wells across site.
- ▶ Groundwater and surface water sampled on monthly basis, results available on the website  
<https://www.newcastlesand.com.au/monitoring-results/>.

May 2020

[https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS\\_May-20\\_Quarterly-Water-Monitoing-Event\\_final.pdf](https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS_May-20_Quarterly-Water-Monitoing-Event_final.pdf)

June 2020

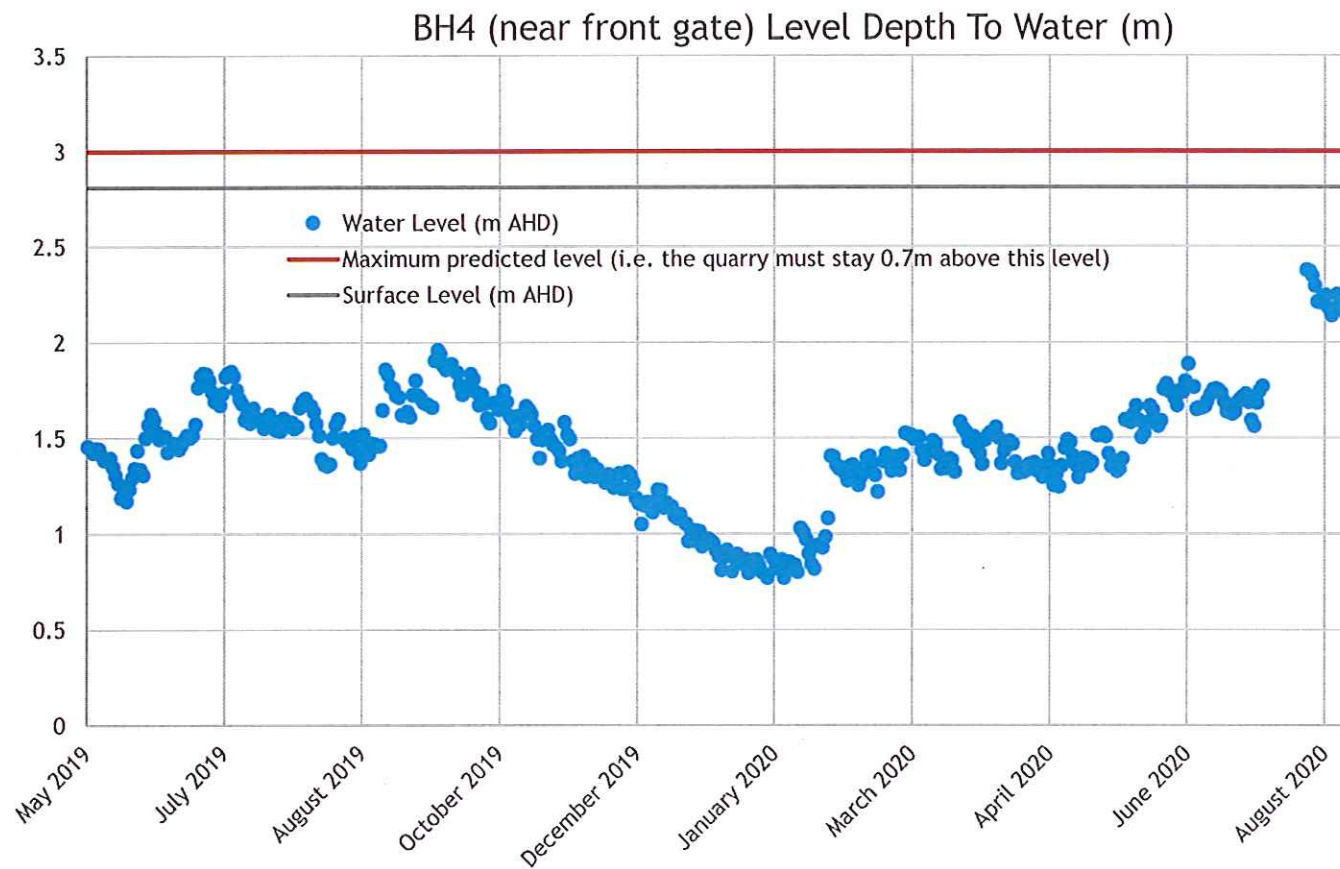
[https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS\\_Jun-20\\_Monthly-Water-Monitoing-Event\\_final.pdf](https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS_Jun-20_Monthly-Water-Monitoing-Event_final.pdf)

July 2020

[https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS\\_Jul-20\\_Monthly-Water-Monitoing-Event.pdf](https://www.newcastlesand.com.au/wp-content/uploads/2020/08/WSS_Jul-20_Monthly-Water-Monitoing-Event.pdf)



# Environmental Monitoring - Water Levels



# Environmental Monitoring - Air

- ▶ Network includes two Beta Attenuation Monitors (BAMs) that measure real-time particulate matter smaller than 10 micron ( $PM_{10}$ ).
- ▶ Two High Volume Air Sampler (HVAS) one measuring  $PM_{10}$  and one measuring total suspended particulates (TSP), these run for 24 hours every six days.
- ▶ Quarry must implement all reasonable and feasible avoidance and mitigation measures so particulate emissions from quarry do not cause exceedance of:
  - ▶  $PM_{10}$  annual average  $25 \mu\text{g}/\text{m}^3$  cumulative.
  - ▶ Quarry  $PM_{10}$  contribution over 24 hour average  $50 \mu\text{g}/\text{m}^3$ .

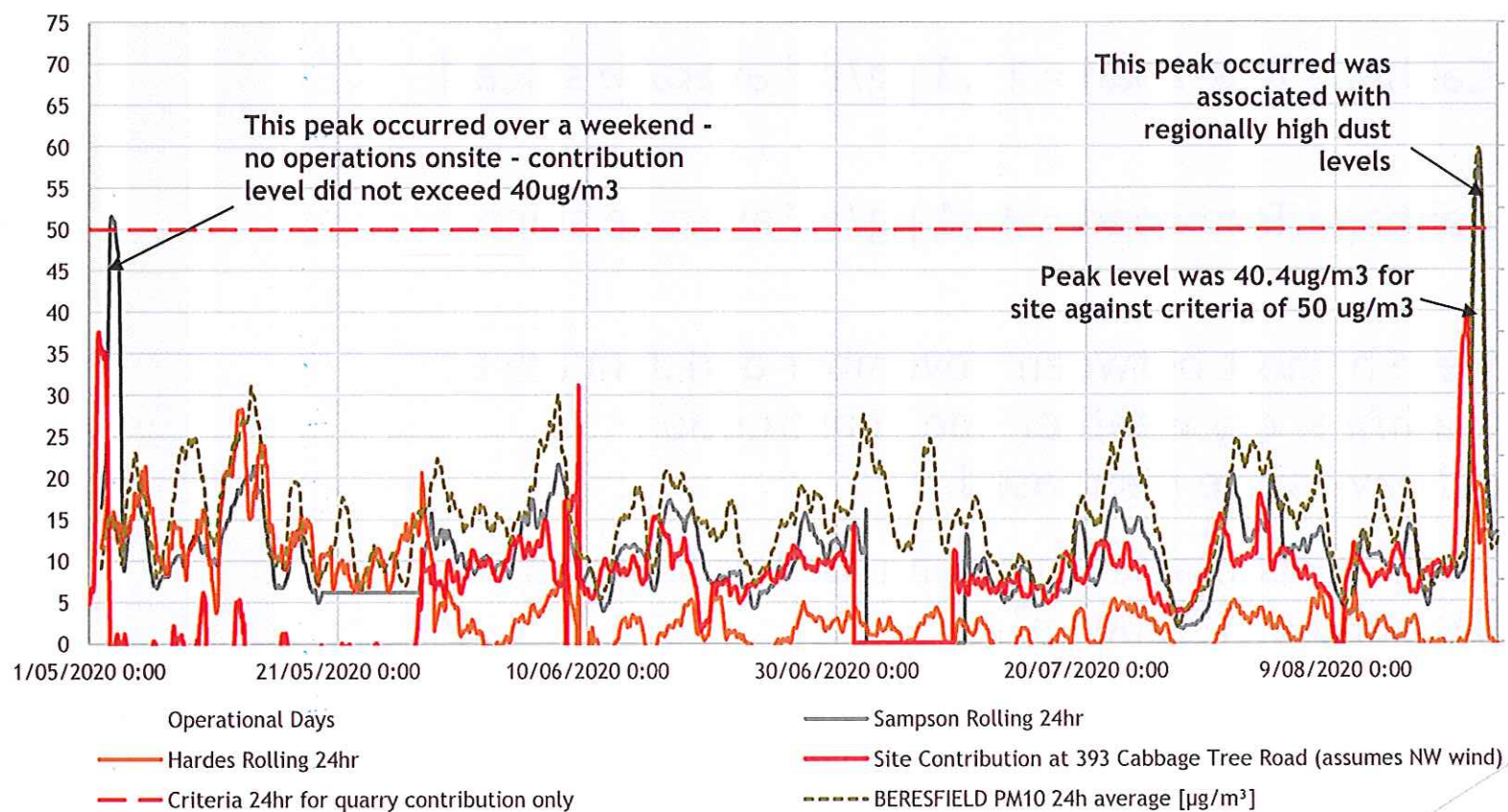
# Environmental Monitoring - Air

- ▶ BAM at 393 Cabbage Tree Road =  $11.3 \mu\text{g}/\text{m}^3$  average since 1 May 2020.
- ▶ BAM at 458 Cabbage Tree Road =  $4.51 \mu\text{g}/\text{m}^3$  average since 1 May 2020.
- ▶ Dust levels were highest between November and January at the time of bushfire, dry weather and construction activities, and have since decreased.
- ▶ Air quality model in assessment used an assumed annual average background of  $19.4 \mu\text{g}/\text{m}^3$ .
- ▶ Data summarised online at:  
<https://www.newcastlesand.com.au/air-quality/>



# Environmental Monitoring - Air

Cabbage Tree Road Air Quality 1 May to 22 August 2020





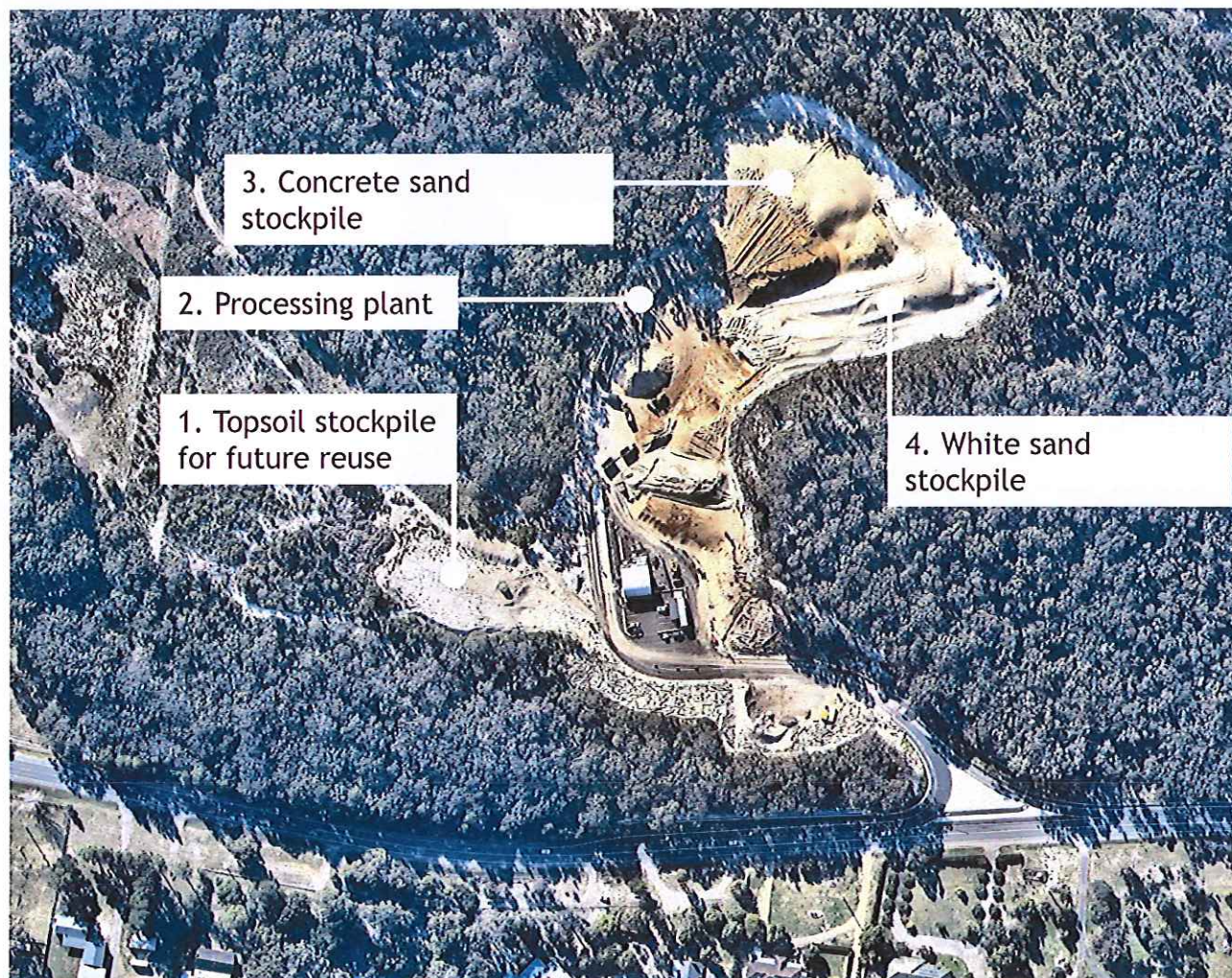


Photo 1 - Nearmap as of 24<sup>th</sup> June 2020



# The site in August 2020

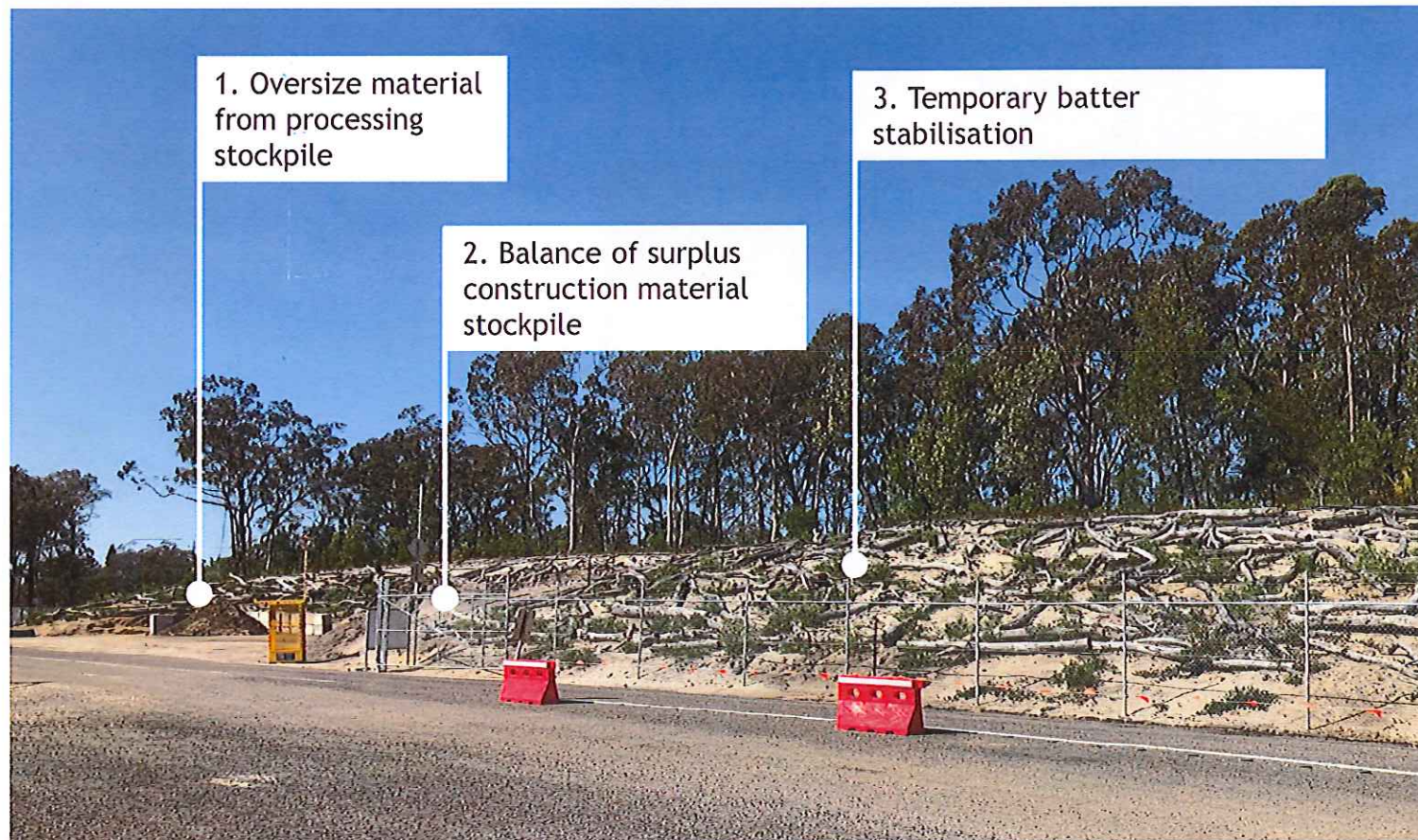


Photo 2 - Site entrance looking to the south east



# The site in August 2020



Photo 3 - Weighbridge looking to the north



Photo 4 - Office, carpark and shed

# The site in August 2020



Photo 5 - Plant & equipment shelter



Photo 6 - Weighbridge looking south



# The site in August 2020

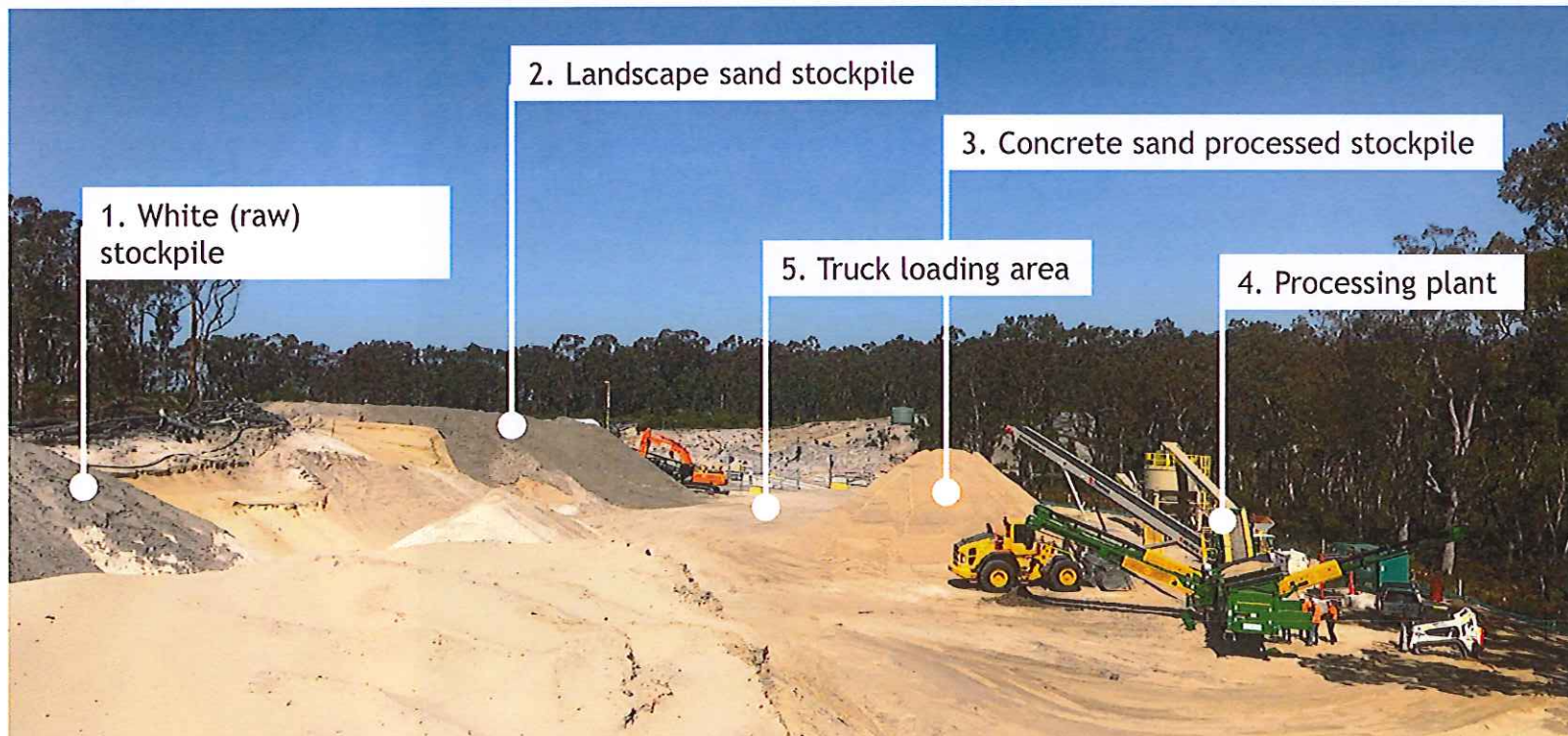


Photo 7 - Stage 1 looking to south



# The site in August 2020



Photo 8 - Recently cleared Stage 1A & Stage 1 raw stockpiles, looking to the south west



# The site in August 2020



Photo 9 - Recently cleared Stage 1A & 2, looking to the south east

# Questions?

# More Information

- ▶ [www.newcastlesand.com.au](http://www.newcastlesand.com.au)
- ▶ Quarry Manager - Paul Bourne - 0402 648 079



