

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

02 December 2021

9:05-10:30

Mercure Newcastle Airport

Meeting Number:	6 th Meeting	Type of meeting:	General
Chairperson:	John Turner - JT	Note taker:	Jonathan Berry
Attendees:	Sam Harvey (Port Stephens Council Representative) Wayne Sampson (Resident) – WS Barry Davis (Resident) – BD Shirley Davis (Resident) – SD Stephen Kuehn (Resident) – SK Greg Callaghan (Resident) – GC Paul Hardes (Resident) – PH John Simpson (Hunter Water Representative) – JS Darren Williams (WSS) – DW Jonathan Berry (Wedgetail Consultants) – JB		
Apologies:	Shane Burton (WSS / Newcastle Sand) – SB, Peter West (Resident) – PW		
Observers:	None		
Meeting Open:	9:05am		

Minutes

Agenda item: 1	Apologies	Presenter:	John Turner
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Discussion:

Shane Burton (WSS / Newcastle Sand) – SB, Peter West (Resident) – PW

Agenda item: 2	Declaration of Pecuniary Interest	Presenter:	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.
John Simpson (Hunter Water Representative)
Barry Davis (Resident) – Nil.
Shirley Davis (Resident) – Nil.
Greg Callaghan (Resident) – Deed with WSS
Paul Hardes (Resident) – Deed with WSS
Stephen Kuehn (Resident) – Deed with WSS
Darren Williams (WSS) – Quarry owner.

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 GC. All Agree.

Agenda item: 4 Business Arising from Previous Minutes

Presenter: JT

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

Actions from Previous Minutes

- WSS to look into wild dogs.

JB – Quarry looked into cage traps, before purchase identified control program was occurring on neighbouring HWC and SCA lands. Cage traps use suspended, cameras appear to show reduced dog activity onsite.

JS – Confirmed HWC and NPWS had conducted trapping on adjoining lands following concerns raised at the previous meeting, noted the following:

- Noted NPWS caught 2-3 dogs with 1 destroyed.
- Rabbit shooting by HWC near Grahamstown Dam / Medowie area. Lots of rabbits controlled.
- Deer control being investigated.

JT – Letter tabled from Keiron Rochester dated 30 November 2021

- Key aspects of letter relate to:
 - *“Sand blowing out of the site into the air;*
 - *Sand being dragged out of the site by trucks and depositing on the public road;*
 - *Sand blowing out of the trucks into the air as they leave the site.”*

JB – The quarry currently uses the following controls:

- Water cart.
- Contract road sweeper.
- Onsite skid steer is registered for use in road, however, it can be a dusty process in sweeping. It has in recent days been identified that the operation of this is substantially improved when using during wet conditions.
- The installation of a wheel wash is being investigated, likely to be placed before the weighbridge now that there is more room to install it.
- Amount of sand being tracked out should reduce as length of bitumen inside the site increases in length as operations and extraction move north.

BD – Raised observations from 14 May where truck had no tarp done up and did at Williamstown and has observed a landscaping truck with the door not sealed and was loosing sand onto the road.

SD – House covered in sand / dust.

BD – Have observed westerly wind blowing sand down the road.

BD – Noted that perhaps all the existing sand on the road side could be removed using wheelbarrow.

GC – Noted a blower might be worthwhile.

JB – Agreed that removal of sand from the road side may be of benefit in reducing dust.

SD – Which people drive the car with the Newcastle Sand Logo, has been seen turning right into the quarry several times.

DW – This is quarry manager.

BD – Showed some photos with evidence of truck wheel marks from heavy vehicles turning right into the quarry.

DW – Reiterated the need for future observations to be phoned, texted or emailed as soon as possible to ensure actions can be taken with the trucks responsible.

DW – Noted that unrelated trucks have been observed doing illegal u-turns in quarry entrance. These are police matters, the quarry site commences at the quarry gate, the outside is a public road.

WS – Questioned the exit speeds of trucks leaving the quarry.

DW – Explained that there were RMS requirements for trucks leaving the quarry to ensure they would merge at appropriate speeds for the traffic on Cabbage Tree Road.

Agenda item: 5 Correspondence

Presenter: John Turner

- See presentation and below.

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

JB – Gave presentation of slides.

WS – Does the Wash Plant still use town water?

DW – Yes

Modification 3 proposal slide

JS – Has concerns about diesel in the sand beds and controls required.

JS – Has electrical trailing cables been investigated in preference of diesel generator?

SK – Noted during his working career at BHP the cables can be very painful and fail regularly.

JS – Would like Quarry to look at the cost / benefits of trailing cables rather than the diesel.

JS – Noted the need to address refueling of equipment, how this is done and how the diesel is stored safely.

Independent Audit slide

JS – Disappointed about 31 non-compliances, noted some were harsh, but others may have been under-rated.

Water related slides

JB – Noted that copper levels had also been reported to be elevated at BH4, but this appeared to be seasonal, or related to water levels with the levels peaking in winter when water levels are typically higher and reducing during summer.

JS – Confirmed the presence of copper that was observed to have an isolated peak at BH4 was unusual.

JS – Noted the sand beds are almost full.

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:

JT – Is there any general business?

SH – No Council business.

WS – Question about where water drained to from wash plant.

JB – Water drains back to a lined drain and sump and is recirculated.

BD – On 28 April SD sent email to JT about the minutes and Keiron's registration being rejected. Is unhappy about the process with Keiron, and was not happy with the response to the email from JT, claiming it was aggressive and unnecessary.

JT – Disputed the email was aggressive, noted it was just factual, but apologised for any upset it may have caused.

SD – Noted Keiron now lives at 397 Cabbage Tree Road.

SD – Wanted to know what was in the sand, is it dangerous?

JB – Explained the sand was likely similar to the beach, some beaches are like this sand, others have more shell material. This sand also has some silt. The likely highest risk aspect of the sand is silica and this is routinely focused on by the mines department where quarry monitoring occurs onsite within the quarry working area to ensure the silica levels are below the safe regulatory level. The expectation is that if the levels around workers are safe onsite then the levels at the neighbouring land owners should also ok.

SK – No business.

GC – asked about the use of shakers onsite to help reduce sand.

DW – noted the quarry had installed shakers, however these shakes were causing concern for truck drivers, and at the time were installed at the weighbridge due to limited space. Noted that they may be useful in the bed of the wheel wash and/or in a location where empty vehicles did not need to use them (to reduce noise).

PH – Had observed more noise of recent time from the quarry.

DW – Noted he expected this was likely due to the additional preparation works in Sector 3 and levels should reduce when these works are completed.

JS – No business.

DW – No business.

JB. No business.

Action items	Person responsible	Deadline
✓ Continue to implement the additional controls to keep sand off the DW acceleration lane and access road to minimise dust.		
✓ Consider how to remove any surplus sand from the road side (noting RMS considerations).	DW	

Agenda item: 9 Next Meeting 15th March 2022

Presenter: John Turner

Discussion:

JT – The meeting is now closed, the next meeting to be advised for March.

Action items	Person responsible	Deadline
None.		

Other Information

- 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.

Meeting Close:

10:30 am



NEWCASTLE **SAND**

Community Consultative Committee Update

Project update for the period **3 September 2020 to April 2021**

09 April 2021

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

Wednesday 14th April 2021 at 9.00am

Agenda Items:

- ▶ 1) Apologies and welcome to new members
- ▶ 2) Declaration of pecuniary or other interests
- ▶ 3) Minutes to be adopted
- ▶ 4) Business arising from previous minutes - response to issues raised or provision of additional information requested
- ▶ 5) Correspondence
- ▶ 6) 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
- ▶ 7) Other agenda items
- ▶ 8) General business
- ▶ 9) Next meeting

Actions from previous minutes

3 September 2020

- ▶ Residents to provide a handwritten letter or email on their concerns regarding the intersection to be included with RMS review request
 - ▶ No letters received from residents to pass through, understood there has been some correspondence with the local member.
 - ▶ Liaised with TfNSW on multiple occasions who confirmed the intersection was constructed as per TfNSW specifications and has passed required safety audits. TfNSW have not identified any issues with the design, justification for an amendment or made any request to Newcastle Sand to amend the intersection.
- ▶ WSS to look into the causes of the dust swirling up behind the trucks when exiting the quarry.
 - ▶ More frequent sweeping of bitumen surface now undertaken, provisional registration of site machinery to undertake task, more stabilisation of batters adjacent to the road.

Community Complaints since 3 September 2020

- ▶ Community complaints register available at:
<https://www.newcastlesand.com.au/complaints-register/>
- ▶ Three (3) complaints received since 3 September 2020:
 - ▶ Two in relation to trucks arriving before 6am.
 - ▶ One in relation to a 4wd vehicle making a right hand turn into the site.
- ▶ One entry in the register in addition to the three above is a file note by Newcastle Sand in relation to a further early truck arrival. This is included to demonstrate proactive approach to avoiding early truck arrivals.
- ▶ Our Drivers Code of Conduct has been reiterated to truck drivers and contractors in relation to the correct method and time to access the site.
- ▶ The Code of Conduct now includes a penalty barring the collection of sand by that driver for 24 hours if they arrive to site prior to 6am.

Regulatory Correspondence

- ▶ Annual Review has been submitted for 2020, DPIE do not want this released publicly until they have checked the document - will be available on the website when they do.
- ▶ DPIE correspondence received following a DPIE investigation into possible shortcomings that occurred in the clearing process during construction. Operational practices have been improved.
- ▶ Various correspondence with DPIE relating to trucks turning up at the gate prior to 6am. Newcastle Sand working hard to educate the drivers and have disciplinary action in the Traffic management plan. No trucks have been loaded or weighed at the site prior to 6am.
- ▶ Traffic Management Plan has been updated and approved by DPIE, key changes were around contact details and penalties for drivers arriving before 6am.
- ▶ The SWMP has been submitted for review by DPIE, and will require further changes to support the recent modification.

Changes to the Consent

- ▶ Modification 2 (Mod 2) to the consent was sort in late 2020 and approved in early 2021 to install a wash plant onsite to use instead of the approved air separator.
 - ▶ The modification has negligible environmental impacts.
 - ▶ In most cases likely to have benefits through improved air quality, lower noise levels (compared to air separator) and better sequencing of resources (i.e. less double handling).
 - ▶ Recovered fines will be blended with landscape sand or applied to batters and rehabilitation areas.
 - ▶ Water use may increase slightly, however, total water use for the site will remain within levels approved by the EIS.
 - ▶ Additional bitumen sealing may be undertaken of the northern haul road to minimise water use and maintain levels within approved levels.
 - ▶ Expect to have wash plant operational in late May 2021.

Changes to the Consent

- ▶ We are currently seeking an extension to the timing required for securing of onsite and offsite offsets on account of managing cashflow and difficulties in securing the correct offsets due to changing legislation.
 - ▶ Additional field work on the onsite offset has been completed in March 2021 due to changes in legislation.
 - ▶ Given the \$250,000 bond currently held and protection of the onsite offset areas there is no environmental impact of the change.
 - ▶ Additional weed management of the onsite offset has been proposed to account for delays in the long term management actions starting for the offset.
 - ▶ This is currently under consideration.
- ▶ Other management plans will be reviewed and updated in the coming period.

Key activities completed during this period

- ▶ Continuing to refine and complete construction related aspects (e.g. batter rehabilitation, stockpile management and stabilisation).
- ▶ Completed hydro-mulching and application of geotextile to steeper batters to improve revegetation and reduce wind blown sand.
- ▶ Undertook pre-clearing surveys for Sector 3 and first portion of Sector 7 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).

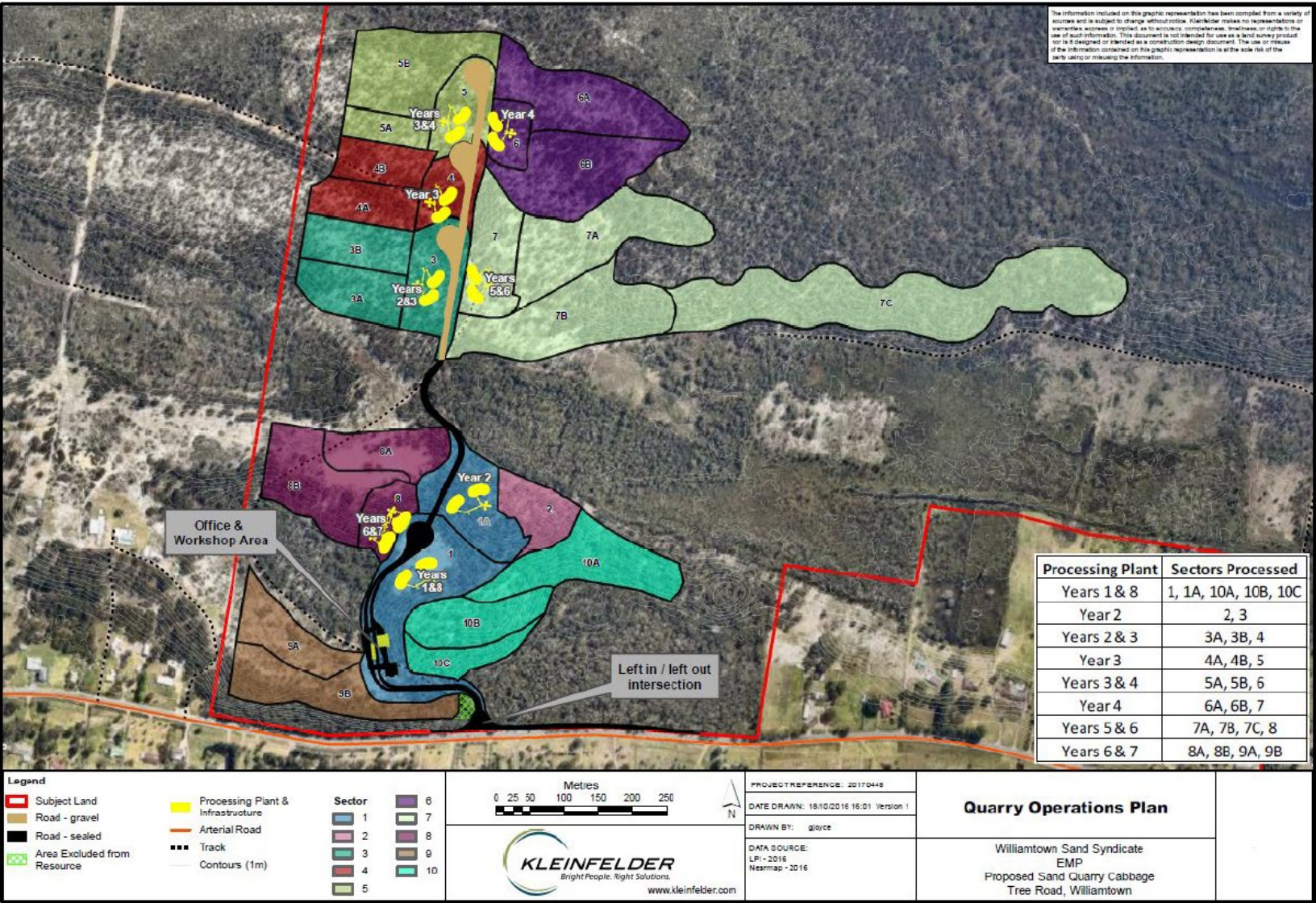
Key activities completed during this period

- ▶ Continuing to refine and complete construction related aspects (e.g. batter rehabilitation, stockpile management and stabilisation).
- ▶ Completed hydro-mulching and application of geotextile to steeper batters to improve revegetation and reduce wind blown sand.
- ▶ Undertook pre-clearing surveys for Sectors 3, 3A, 4 and first portion of Sector 7 of the quarry.
- ▶ Pre-clearing includes:
 - ▶ Inspection of area of Aboriginal Heritage.
 - ▶ Inspection for hollows and weeds.
 - ▶ Survey of the area for radiation (in case of buried monzonite by RZM).
 - ▶ Installation of the frog exclusion / sediment fence around perimeter of works area.
 - ▶ Nocturnal survey the night before the clearing campaign.

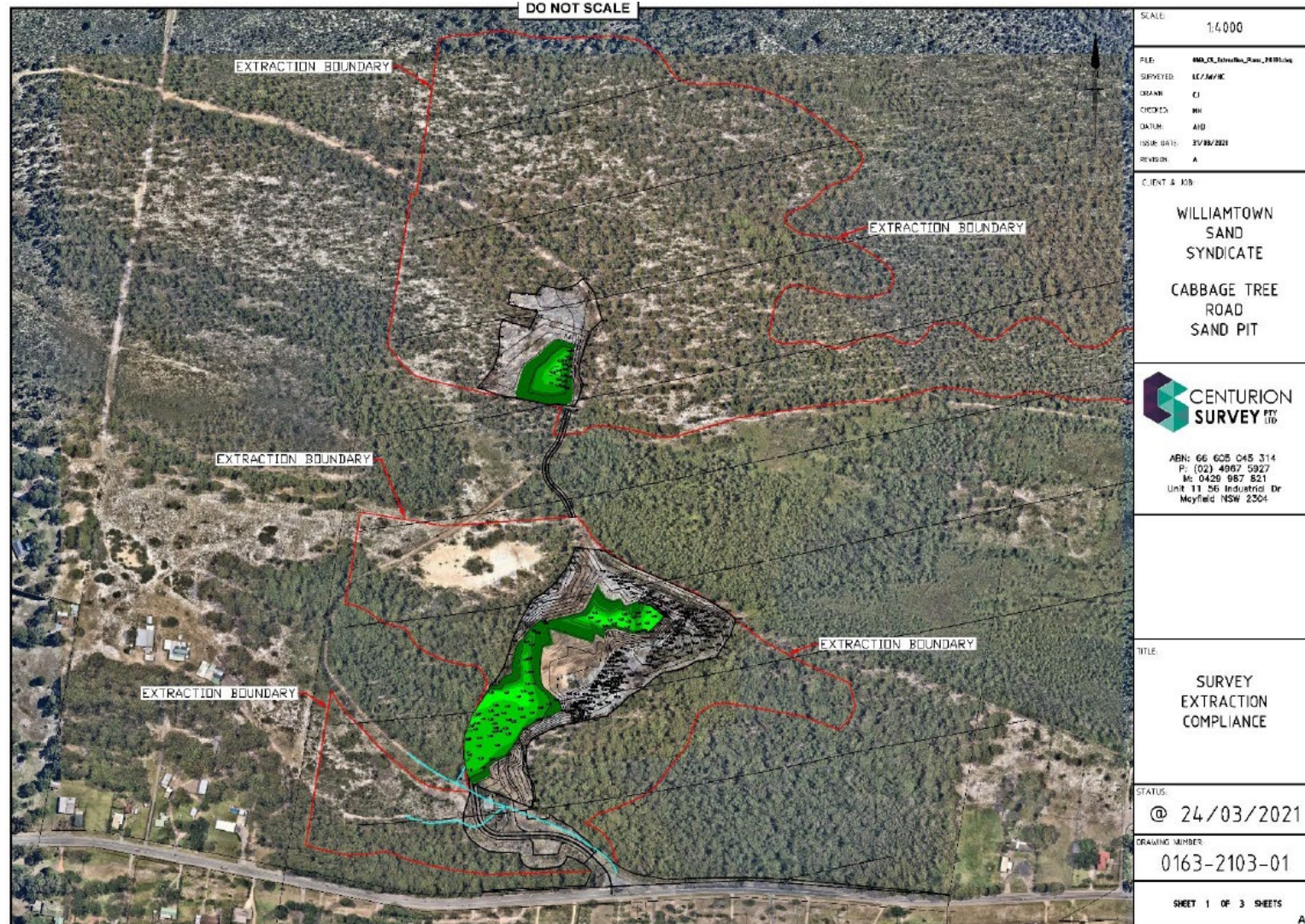
Key activities completed during this period

- ▶ Clearing occurred with Sector 3 and a portion of Sector 7, clearing includes:
 - ▶ Removal of non-hollow bearing trees first.
 - ▶ Leaving hollows to stand for two nights then soft felling of the tree.
 - ▶ Clearing is under the supervision of a licenced ecologist.
- ▶ Until the wash plant is operational, a key focus of the quarry is ensuring the production of the right sand to meet demands. Key demand is in relation to the concrete sand and to a lesser extent the white glass sand.
- ▶ Concrete sand must have silt levels maintained, while white glass sand has multiple requirements on size, composition and iron content, it is largely restricted to the upper layer of the sand resource.
- ▶ Wash plant will improve use of the natural resource by ensuring white glass sand is used where ever feasible for glass rather than blending to meet concrete sand.

Key activities completed during this period



Key activities completed during this period



Key Activities Completed During this Period

- ▶ Have currently installed 184 nest boxes within the offset area, this is 109 nest boxes in advance of the 75 hollows removed during clearing activities to date.



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 since the last meeting (also see later slides):
 - ▶ Averaged approximately 25% of monthly haulage allowance.
 - ▶ Busiest day occurred in November at 69% of daily haulage allowance.
 - ▶ Busiest month was February 2021 at 36.6% of monthly haulage allowance.
- ▶ Weighbridge system is working well in helping regulating maximum haulage rates - system will not give driver a ticket unless under haulage rate.

Monitoring - Trucks August 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
3-Aug	12	116	10.3%
4-Aug	11	116	9.5%
5-Aug	7	116	6.0%
6-Aug	10	116	8.6%
7-Aug	8	116	6.9%
10-Aug	1	116	0.9%
11-Aug	9	116	7.8%
12-Aug	6	116	5.2%
13-Aug	34	116	29.3%
14-Aug	16	116	13.8%
17-Aug	20	116	17.2%
18-Aug	25	116	21.6%
19-Aug	18	116	15.5%
20-Aug	22	116	19.0%
21-Aug	5	116	4.3%
24-Aug	42	116	36.2%
25-Aug	41	116	35.3%
26-Aug	21	116	18.1%
27-Aug	8	116	6.9%
28-Aug	5	116	4.3%
31-Aug	7	116	6.0%
Total trucks this month	328		
Approved maximum for month*		2886	11.4%
<p><i>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</i></p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
<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 September 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Sep	34	116	29.3%
2-Sep	13	116	11.2%
3-Sep	17	116	14.7%
4-Sep	4	116	3.4%
7-Sep	11	116	9.5%
8-Sep	11	116	9.5%
9-Sep	8	116	6.9%
10-Sep	6	116	5.2%
11-Sep	16	116	13.8%
14-Sep	22	116	19.0%
15-Sep	41	116	35.3%
16-Sep	35	116	30.2%
17-Sep	22	116	19.0%
18-Sep	18	116	15.5%
21-Sep	8	116	6.9%
22-Sep	13	116	11.2%
23-Sep	14	116	12.1%
24-Sep	5	116	4.3%
25-Sep	17	116	14.7%
28-Sep	45	116	38.8%
29-Sep	22	116	19.0%
30-Sep	10	116	8.6%
Total trucks this month	392		
Approved maximum for month*		2912	13.5%
<p><i>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</i></p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
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Monitoring - Trucks October 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Oct	10	116	8.6%
2-Oct	12	116	10.3%
6-Oct	8	116	6.9%
7-Oct	26	116	22.4%
8-Oct	44	116	37.9%
9-Oct	20	116	17.2%
12-Oct	21	116	18.1%
13-Oct	34	116	29.3%
14-Oct	39	116	33.6%
15-Oct	36	116	31.0%
16-Oct	33	116	28.4%
19-Oct	37	116	31.9%
20-Oct	29	116	25.0%
21-Oct	27	116	23.3%
22-Oct	23	116	19.8%
23-Oct	36	116	31.0%
24-Oct	8	90	8.9%
26-Oct	7	116	6.0%
27-Oct	14	116	12.1%
28-Oct	16	116	13.8%
29-Oct	13	116	11.2%
30-Oct	25	116	21.6%
Total trucks this month	518		
Approved maximum for month*		2886	17.9%
<p><i>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</i></p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
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Monitoring - Trucks November 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
2-Nov	19	116	16.4%
3-Nov	13	116	11.2%
4-Nov	25	116	21.6%
5-Nov	13	116	11.2%
6-Nov	28	116	24.1%
9-Nov	23	116	19.8%
10-Nov	38	116	32.8%
11-Nov	43	116	37.1%
12-Nov	51	116	44.0%
13-Nov	77	116	66.4%
14-Nov	3	90	3.3%
16-Nov	59	116	50.9%
17-Nov	80	116	69.0%
18-Nov	44	116	37.9%
19-Nov	64	116	55.2%
20-Nov	65	116	56.0%
23-Nov	37	116	31.9%
24-Nov	44	116	37.9%
25-Nov	68	116	58.6%
26-Nov	43	116	37.1%
27-Nov	55	116	47.4%
28-Nov	3	90	3.3%
30-Nov	57	116	49.1%
Total trucks this month	952		
Approved maximum for month*		2796	34.0%
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
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Monitoring - Trucks December 2020

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Dec	55	116	47.4%
2-Dec	75	116	64.7%
3-Dec	55	116	47.4%
4-Dec	59	116	50.9%
5-Dec	3	90	3.3%
7-Dec	51	116	44.0%
8-Dec	62	116	53.4%
9-Dec	48	116	41.4%
10-Dec	58	116	50.0%
11-Dec	57	116	49.1%
12-Dec	4	90	4.4%
14-Dec	56	116	48.3%
15-Dec	62	116	53.4%
16-Dec	35	116	30.2%
17-Dec	36	116	31.0%
18-Dec	42	116	36.2%
21-Dec	28	116	24.1%
22-Dec	36	116	31.0%
23-Dec	17	116	14.7%
24-Dec	4	116	3.4%
Total trucks this month	843		
Approved maximum for month*		2706	31.2%
<i>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</i> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays.			
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.			

Monitoring - Trucks January 2021

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_ 6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
4-Jan	6	116	5.2%
5-Jan	6	116	5.2%
6-Jan	12	116	10.3%
7-Jan	26	116	22.4%
8-Jan	23	116	19.8%
11-Jan	47	116	40.5%
12-Jan	24	116	20.7%
13-Jan	22	116	19.0%
14-Jan	34	116	29.3%
15-Jan	36	116	31.0%
16-Jan	12	90	13.3%
18-Jan	69	116	59.5%
19-Jan	72	116	62.1%
20-Jan	59	116	50.9%
21-Jan	55	116	47.4%
22-Jan	44	116	37.9%
23-Jan	5	90	5.6%
25-Jan	16	116	13.8%
27-Jan	35	116	30.2%
28-Jan	21	116	18.1%
29-Jan	22	116	19.0%
30-Jan	3	90	3.3%
Total trucks this month	649		
Approved maximum for month*		2886	22.5%
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_ 6125:</p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
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Monitoring - Trucks February 2021

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Feb	35	116	30.2%
2-Feb	21	116	18.1%
3-Feb	22	116	19.0%
4-Feb	26	116	22.4%
5-Feb	26	116	22.4%
6-Feb	4	90	4.4%
8-Feb	40	116	34.5%
9-Feb	43	116	37.1%
10-Feb	46	116	39.7%
11-Feb	38	116	32.8%
12-Feb	48	116	41.4%
13-Feb	12	90	13.3%
15-Feb	75	116	64.7%
16-Feb	74	116	63.8%
17-Feb	50	116	43.1%
18-Feb	25	116	21.6%
19-Feb	35	116	30.2%
20-Feb	1	90	1.1%
22-Feb	78	116	67.2%
23-Feb	77	116	66.4%
24-Feb	63	116	54.3%
25-Feb	86	116	74.1%
26-Feb	49	116	42.2%
27-Feb	7	90	7.8%
Total trucks this month	981		
Approved maximum for month*		2680	36.6%
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
<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

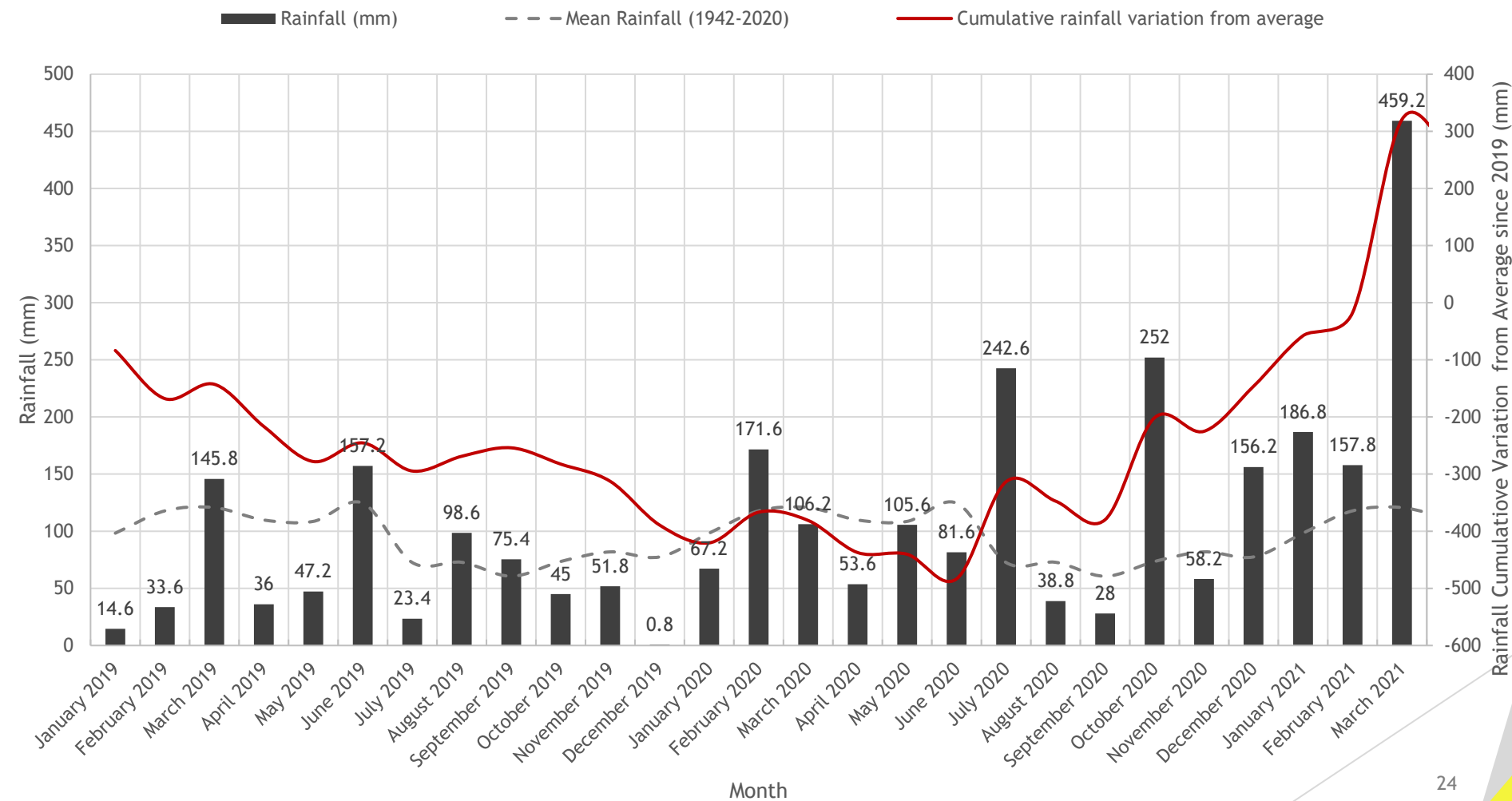
March 2021

Monthly Summary of Traffic Movements			
(as per Condition 26 of Consent SSD_6125)			
Date	Total	Approved Maximum*	Percentage of Approved Movements
1-Mar	34	116	29.3%
2-Mar	34	116	29.3%
3-Mar	34	116	29.3%
4-Mar	33	116	28.4%
5-Mar	45	116	38.8%
6-Mar	6	90	6.7%
8-Mar	41	116	35.3%
9-Mar	40	116	34.5%
10-Mar	34	116	29.3%
11-Mar	42	116	36.2%
12-Mar	42	116	36.2%
13-Mar	7	90	7.8%
15-Mar	35	116	30.2%
16-Mar	28	116	24.1%
17-Mar	31	116	26.7%
18-Mar	16	116	13.8%
19-Mar	11	116	9.5%
22-Mar	3	116	2.6%
24-Mar	17	116	14.7%
25-Mar	29	116	25.0%
26-Mar	37	116	31.9%
27-Mar	12	90	13.3%
29-Mar	34	116	29.3%
30-Mar	32	116	27.6%
31-Mar	63	116	54.3%
Total trucks this month	740		
Approved maximum for month*		3028	24.4%
<p>* Maximum approved haulage as per Condition 23 of Consent SSD_6125:</p> <ul style="list-style-type: none"> - 6 trucks per hour from 6am to 7am Monday to Friday. - 10 trucks per hour from 7am to 6pm Monday to Friday. - 10 trucks per hour from 7am to 4pm on Saturday. - No haulage on Public Holidays. 			
<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>			

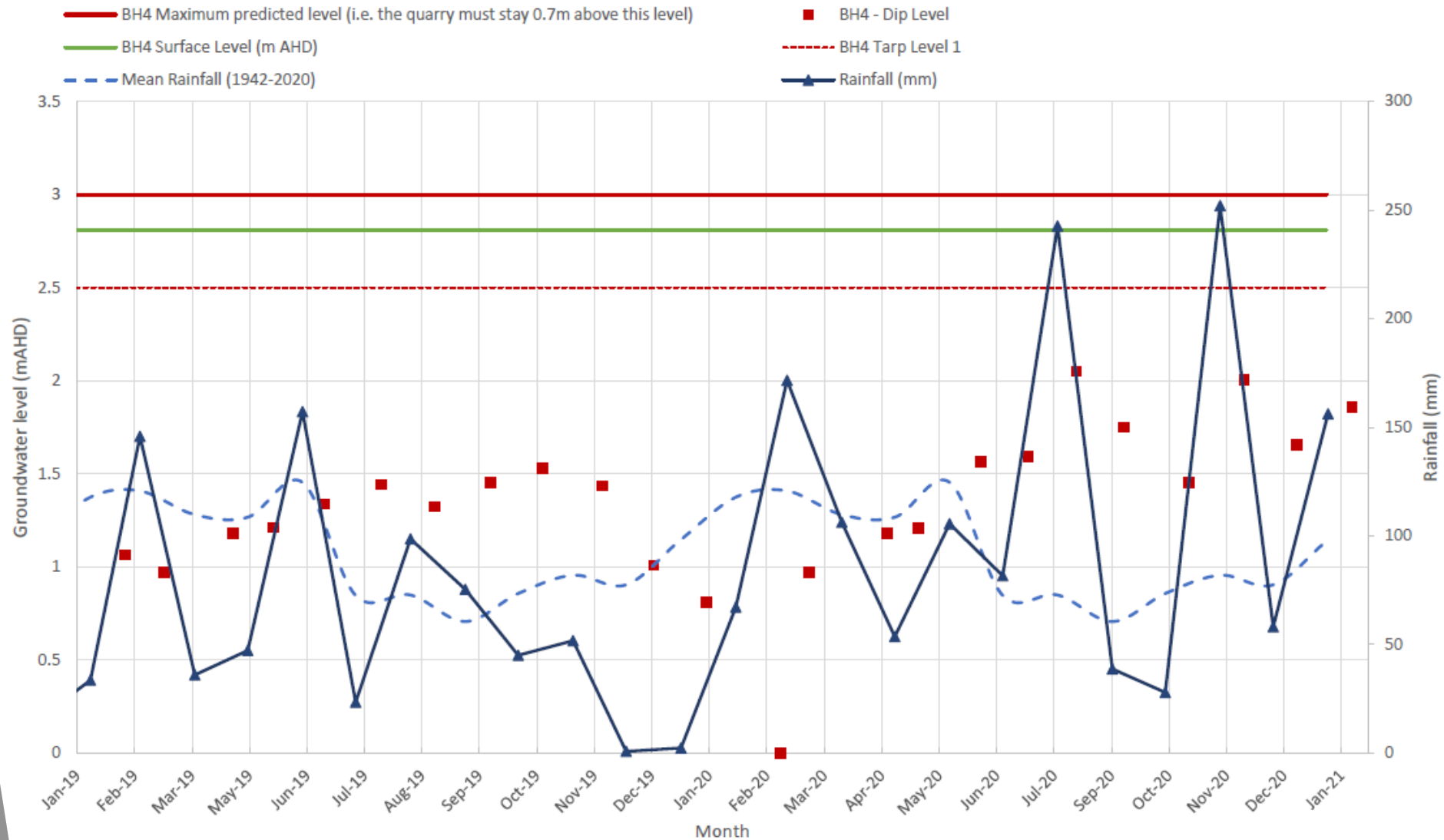
Environmental Monitoring - Water

- ▶ 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/>.
- ▶ Recent rainfall has returned the rainfall deficit starting in 2019.
 - ▶ 2019 rainfall was reached 389mm behind average at end of December 2019
 - ▶ 2020 rainfall reached a peak deficit of 483mm in June 2020, 146mm behind at the end of December 2020.
 - ▶ By end of March 2021, rainfall was 321mm ahead of average since January 2019.
- ▶ Changing groundwater levels on account of rainfall has created more variation in water quality than in baseline data collected during 2019.
- ▶ Kleinfelder concluded in their annual review for 2020 that there is no identifiable trend in the data as a result of the quarry and that variation is most likely due to rainfall.
- ▶ PFAS has had isolated spikes in SW1 (near road) and more consistently at SW4 (channel at eastern edge of site), levels remain below drinking water criteria and appear to vary in response to rainfall.

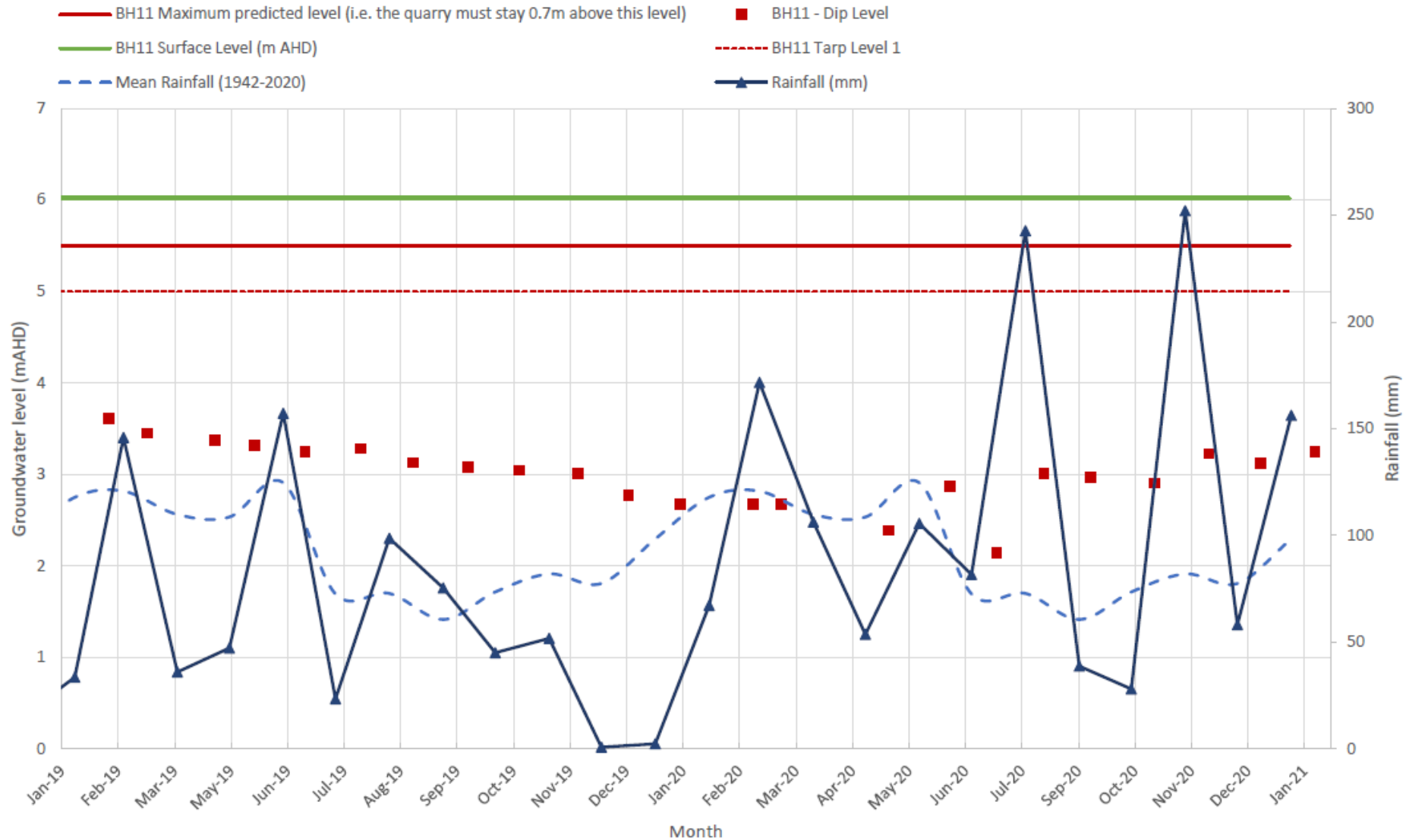
Environmental Monitoring - Water



Environmental Monitoring - Water Levels



Environmental Monitoring - Water Levels



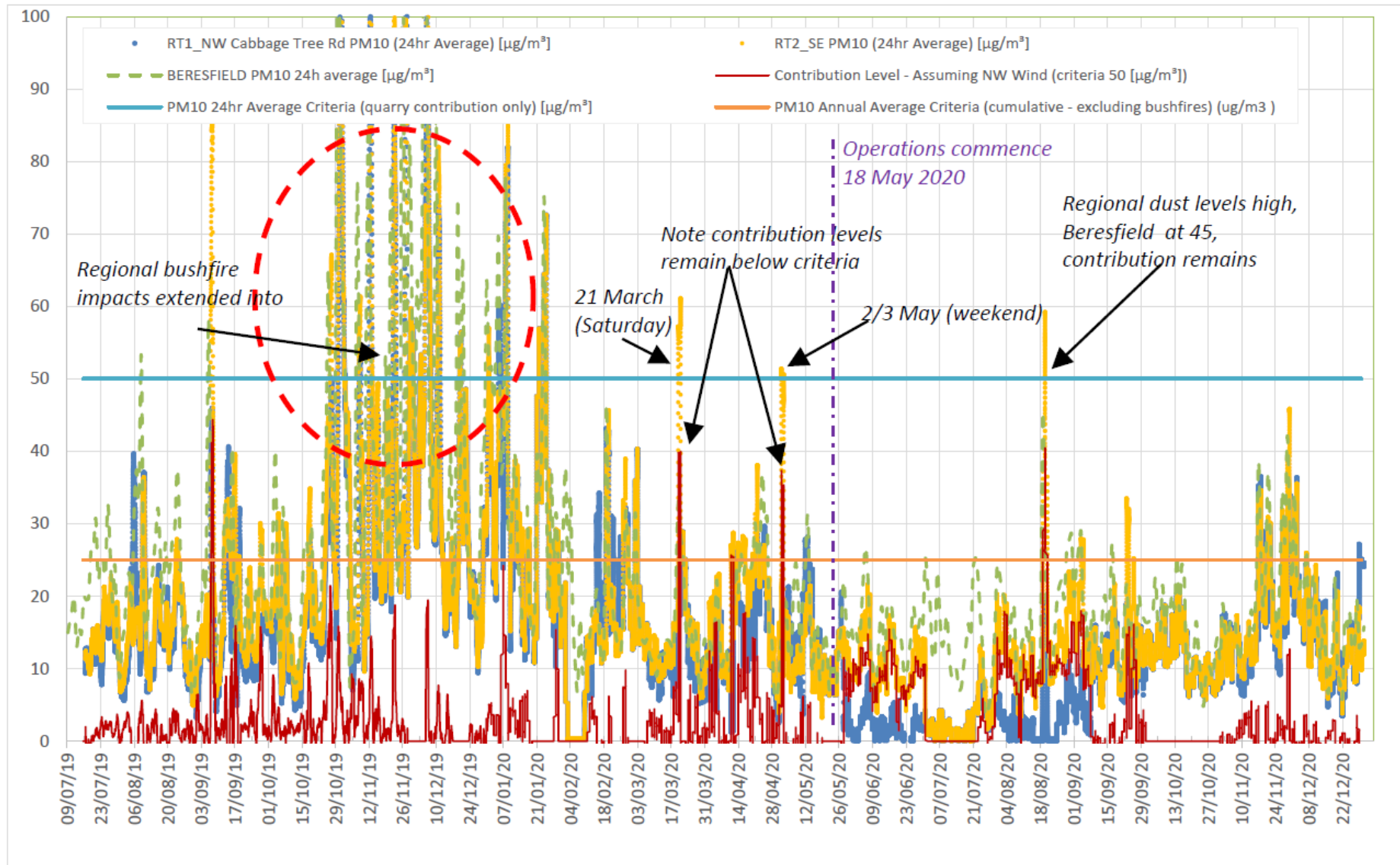
Environmental Monitoring - Air

- ▶ Network includes two Beta Attenuation Monitors (BAMs) that measure real-time particulate matter smaller than 10 micron (PM10).
 - ▶ These record average value every 15 minutes continuously.
- ▶ Two High Volume Air Sampler (HVAS) one measuring PM10 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:
 - ▶ PM10 annual average $25 \mu\text{g}/\text{m}^3$ cumulative.
 - ▶ Quarry PM10 contribution over 24 hour average $50 \mu\text{g}/\text{m}^3$.

Environmental Monitoring - Air

- ▶ PM10 levels measured with HVAS at 350 Cabbage Tree Road for 2020 reached $16.3 \mu\text{g}/\text{m}^3$ against $25 \mu\text{g}/\text{m}^3$ criteria.
- ▶ PM10 measured with BAM at 393 Cabbage Tree Road for 2020 reached $15 \mu\text{g}/\text{m}^3$ against $25 \mu\text{g}/\text{m}^3$ criteria.
- ▶ PM10 measured with BAM at 453 Cabbage Tree Road for 2020 reached $12.2 \mu\text{g}/\text{m}^3$ against $25 \mu\text{g}/\text{m}^3$ criteria.
- ▶ TSP levels measured with HVAS at 393 Cabbage Tree Road for 2020 reached $42.0 \mu\text{g}/\text{m}^3$ against $90 \mu\text{g}/\text{m}^3$ criteria.
- ▶ Outside of bushfire effects that ended at start of 2020, the highest dust levels in 2020 were on weekends in March and May, and in August as would be expected due to regional dust levels increasing, current high rainfall keeping dust levels low.
- ▶ Long term issues recently resolved with monitors, identified a leaky switch/junction box (reason for intermittent errors). Monitors recently calibrated by TES.
- ▶ 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 (BAM) - 2020



The site from September 2020 to March 2021



Surplus topsoil stockpiled during construction regenerating well

The site from September 2020 to March 2021



Frog fence installed around Sector 3 and 4

The site from September 2020 to March 2021



Extraction occurring within Sector 1A / 2 - this shows the process of pushing off coffee rock to access amber sand for concrete - the wash plant will minimise this type of rehandling

The site from September 2020 to March 2021



Hydromulch being applied to the batter on the entry road

The site from September 2020 to March 2021



Hydromulch and jute matting applied to the batter adjacent to the office

The site from September 2020 to March 2021



Truck loading area looking through Sector 1 to Sector 2

Wild Dog Footprints and Camera Records



Wild dog footprints have been observed onsite along with recorded images from monitoring cameras - trapping / control program to be investigated

Questions?

More Information

- ▶ www.newcastlesand.com.au
- ▶ Quarry Manager - Shane Burton - 0402 648 079