

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

14th April 2021

8:59-9:58

Mercure Newcastle Airport

Meeting Number:	5 th Meeting	Type of meeting:	General
Chairperson:	John Turner - JT	Note taker:	Eliza Altmann
Attendees:	Darren Williams (WSS) – DW Shane Burton (WSS / Newcastle Sand) – SB Jonathan Berry (Wedgetail Consultants) – JB Wayne Sampson (Resident) – WS Shirley Davis (Resident) – SD Paul Hardes (Resident) – PH Peter West (Resident) – PW Stephen Kuehn (Resident) – SK Greg Callaghan (Resident) – GC John Simpson (Hunter Water Representative) – JS		
Apologies:	Barry Davis (Resident) – BD Tim Crosdale (Port Stephens Council Representative) – TC (arrived after the meeting finished)		
Observers:	None		
Meeting Open:	8:59am		

Minutes

Agenda item: 1	Apologies	Presenter:	John Turner
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Discussion:

Apologies from Barry Davis.

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
Peter West (Resident) – Deed with WSS

Stephen Kuehn (Resident) – Deed with WSS

Darren Williams (WSS) – Quarry owner.

Shane Burton (WSS) – 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 DW. 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

- Residents to provide a handwritten letter or email on their concerns regarding the intersection to be included with RMS review request.

JB - No letters received by the company from residents to pass through Understood there has been some correspondence with the local member.

JB – Newcastle Sand has liaised with TfNSW on multiple occasions who confirmed the intersection was constructed as per TfNSW specifications and has passed safety audits required by TfNSW. TfNSW have not identified any issues with the design to justify, an amendment or made any request to Newcastle Sand to amend the intersection.

JT- It's not the sand quarry's remit to change a road. It is a public road under the control of TfNSW

- WSS to look into causes of dust swirling when trucks leave the quarry.

JB – More frequent sweeping of the bitumen surface now undertaken, provisional registration of site machinery to undertake task, more stabilization of batters adjacent to the road.

Agenda item: 5 Correspondence

Presenter: John Turner

- Material for the presentation of the company's activities was distributed prior to the meeting.

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

JB – Three (3) complaints received since September 2020. Two in relation to trucks arriving before 6am and one in relation to a 4WD making a right-hand turn into the site. The truck drivers have been followed up on, the code of conduct reiterated to the truck drivers and contractors in relation to the correct time and way to enter the site and we notified the Department of Planning, Industry and Environment (DPIE).

SK – These trucks are on a public road. There are signs along the road showing no stopping areas. If the trucks get there early it's a matter for the police, not the sand quarry.

DW – The drivers that did arrive early were spoken to and an email was sent to all contractors and haulage companies. Signs have been erected in the quarry. We are doing what is required in our Traffic Management Plan. The DPIE are aware of what we have done and are happy with our response.

SB – Possible early arrivals are monitored every day. If the driver has been previously inducted and breaches the rules the driver will be told not to come back. If it's a new driver that hasn't been to site before, they are read the riot act, told to park up until it is the appropriate time to load them.

SD- There was a truck before 6.00am yesterday.

SB- There could not have been. I was at the plant at 5.30am and there was no early truck.

Regulatory Correspondence

JB - DPIE correspondence received following a DPIE investigation into possible shortcomings that occurred in the clearing process during construction. Operational practices have been improved. Traffic Management Plan has been updated and approved by the DPIE. Key changes were around contact details and penalties for drivers arriving before 6am. The SWMP has been submitted and will require further changes to support the recent modification.

JB- Annual review has been submitted for 2020. DPIE do not want this released publicly until they have checked the document. Once approved it will be made available on the web site.

JS - it seems to be an unusual process that the DPIE would want to check the annual review before its released. Why is this?

JB – Were not sure why. We did want to make it public but were told not to.

JS – I was wondering whether it was because this was a relatively new operation, they wanted to do a check on the adequacy of the report. Forever and up until this point, the process was for the company to prepare the report of its compliance over the past 12 months and distributes it the identified stakeholders and posts it on the website.

JB – The process last year was, we put it in, then in about June received comments back, edited the comments, it wasn't until September/October that they accepted these.

DW – We will advise everyone when it is available publicly.

Changes to the Consent

JB – Modification 2 to the consent was sought 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 such as lowering the air quality as the sand will be wetter, the noise levels will be lower than the air separator and better sequencing of the resource like less double handling. The air separator would have dumped the fine silts, organics, and clays onto the ground as a dry powder, whereas this way it recovers as a slurry and blended with the landscape sand to be applied to the batters and rehabilitation areas. Water use will increase but will remain within levels approved by the EIS. Additional bitumen sealing may be undertaken of the northern haul road to minimize water use and maintain levels within approved levels. Wash plant is expected to be operational in late May 2021.

WS – Are you using tap water?

JB – Yes, it was an early warning from the DPIE that a move to site groundwater would be more complicated. We can try but we expect it will be a long-drawn-out process.

SD- I believe the bore water is poisonous

JB – Also, we are currently seeking an extension to the timing required for securing of onsite and offsite offsets on account of managing cash flow and difficulties in securing the correct offsets due to legislation. Additional field works has been completed. WSS currently have a \$250,000 bond held and protection of the onsite offset areas occurs through quarry management practices, 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.

SD – What's an offset mean?

DW – When you look at the quarry site, there is an area we mine and there is any area that we don't touch. So, we have to do all of the ecological tests on the area and secure that area under a biodiversity agreement and hand the credits over to the department.

JT – Its land that is set aside to compensate for the land used by the quarry. That land becomes protected.

SD – Which areas is that going to be?

DW – It's all the areas that won't be mined. About 130-140 hectares.

Progress of the project / Activities for the period (key activities)

JB – Continuing to refine and complete the construction of the batter rehabilitation and stockpile management. Completed hydro-mulching and application of geotextile to steppers batters to improve re-vegetation and reduce windblown sand. Pre-clearing surveys have been undertaken for Sector 3 and the first portion of Sector 7. This involves hollow bearing tree survey, erection of nest boxes, inspection of area of Aboriginal Heritage, radiation survey, erection of frog fencing and nocturnal survey the night before the clearing campaign.

JS – What's the frog fence for?

DW – We must build a fence, so frogs don't enter the sand mine.

JB – Clearing occurred with Sector 3 and a portion of Sector 7; this includes removal of non-hollow bearing trees under the supervision of a licensed ecologist. 184 nest boxes have been installed. The company has chosen to put up all the nest boxes in advance of future clearing.

JB- Until the wash plant is operational the key focus of the quarry is ensuring the production of the right sand to meet the demands which is Concrete Sand.

JS – Is there a wash plant set up?

DW - No, a few pieces have arrived. The rest should arrive in about 6 weeks.

JB – Surface water management plan is to be updated and approved prior to the setup of the wash plant.

SK – Do you recycle that water?

DW – Yes. The only water we will lose is the moisture in the sand and when we pull out the silts. But they will be re-used for the rehabilitation.

JB- The quarry continues the progressive extraction of sand. Some sand is screened to remove rocks and roots, other sand is loaded directly into trucks. Currently selling White, Concrete, Landscape and Fill Sand.

JB- Since the last meeting, the average haulage was approximately 25% of the monthly haulage allowance. Busiest day was in November 2020 at 69% and busiest month was February 2021 at 36.6% of the monthly haulage allowance. Weighbridge system is working well, it helps regulate maximum haulage rates. We are allowed 6 trucks out between 6-7am and 10 trucks per hours from 7am to 6pm Monday to Friday.

Monitoring & environmental performances

Water Monitoring

JB – Continuous logging on groundwater depth across the site. Groundwater and surface water is sampled monthly. Results are available on the website. By the end of March 2021, rainfall was 321mm ahead of average since January 2019.

JB- Kleinfelder finished their annual review for 2020. PFAS has isolated spikes in SW1 (near the road) and more consistently in SW4 (eastern edge of the site). Levels remain below drinking water criteria and appear to vary in response to rainfall.

JS – When is the monitoring done each and have you got any information from March?

JB – I don't have the data from Kleinfelder for March yet. Usually done around the middle of the month.

Air Monitoring

JB – Network includes two Beta Attenuation Monitors (BAMs) that measure real time particulate matter smaller than 10 micron (PM10), these record every 15 minutes continuously. Two High Volume Air Samplers (HVAS) one measuring PM10 and one measuring total suspended particulates (TSP). These run for 24hrs every 6 days. The quarry has reasonable measures in place to avoid and mitigate the concentrations for air quality. Monthly data is published on the. Monitors were recently calibrated by TES and all monthly data is published on the website.

The site from September 2020 to March 2021

JB – (Goes through slides to show pictures of the quarry)

- Surplus topsoil stockpiled during construction regenerating well.
- Frog fencing installed around Sector 3 and 4.
- 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 minimize this type of rehandling.

- Hydra-mulching being applied to the batter on the entry road.

JS – Was there seed in the hydra-mulch?

DW – Yes, native seeds and signed off by Kleinfelder.

SB – With all the rain, the seed has started to germinate.

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

JS – Are you sure they are wild?

SB – We're pretty sure they are wild as we have seen an image of 3 dogs in a pack together.

DW – We aim to trap them and have them scanned for a microchip.

Information provided to the community and any feedback

JT – I understand a newsletter was distributed in February.

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:

WS – I would like to ensure something is done about the wild dog issue.

SD – Last Saturday or the Saturday before, the green open light was still on at nighttime.

DW – We've had a new solar panel put in as it was playing up. The electrician has come back to re-adjust it.

SD – What are the new site manager's details?

DW – This is Shane (SB). He has the same phone number that Paul had.

JT – The next meeting will be in about 3 months.

SD – I would like to get a hard copy of the meeting minutes.

Action items	Person responsible	Deadline
✓ WSS to start an investigation into the wild dogs	JB	

Agenda item: 9 Next Meeting

Presenter: John Turner

Discussion:

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

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:

9:58 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).

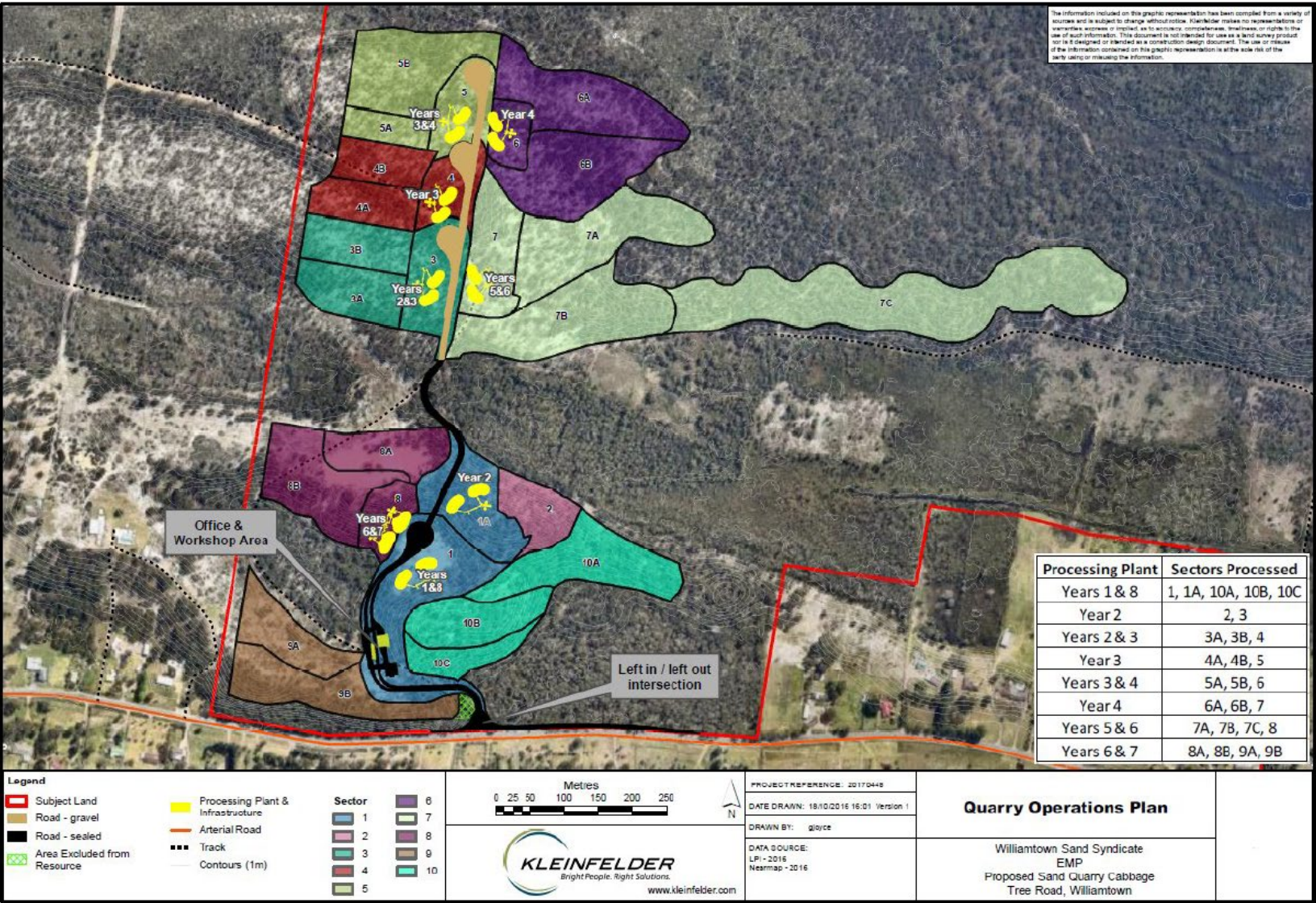
Key activities completed during this period

- ▶ 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.

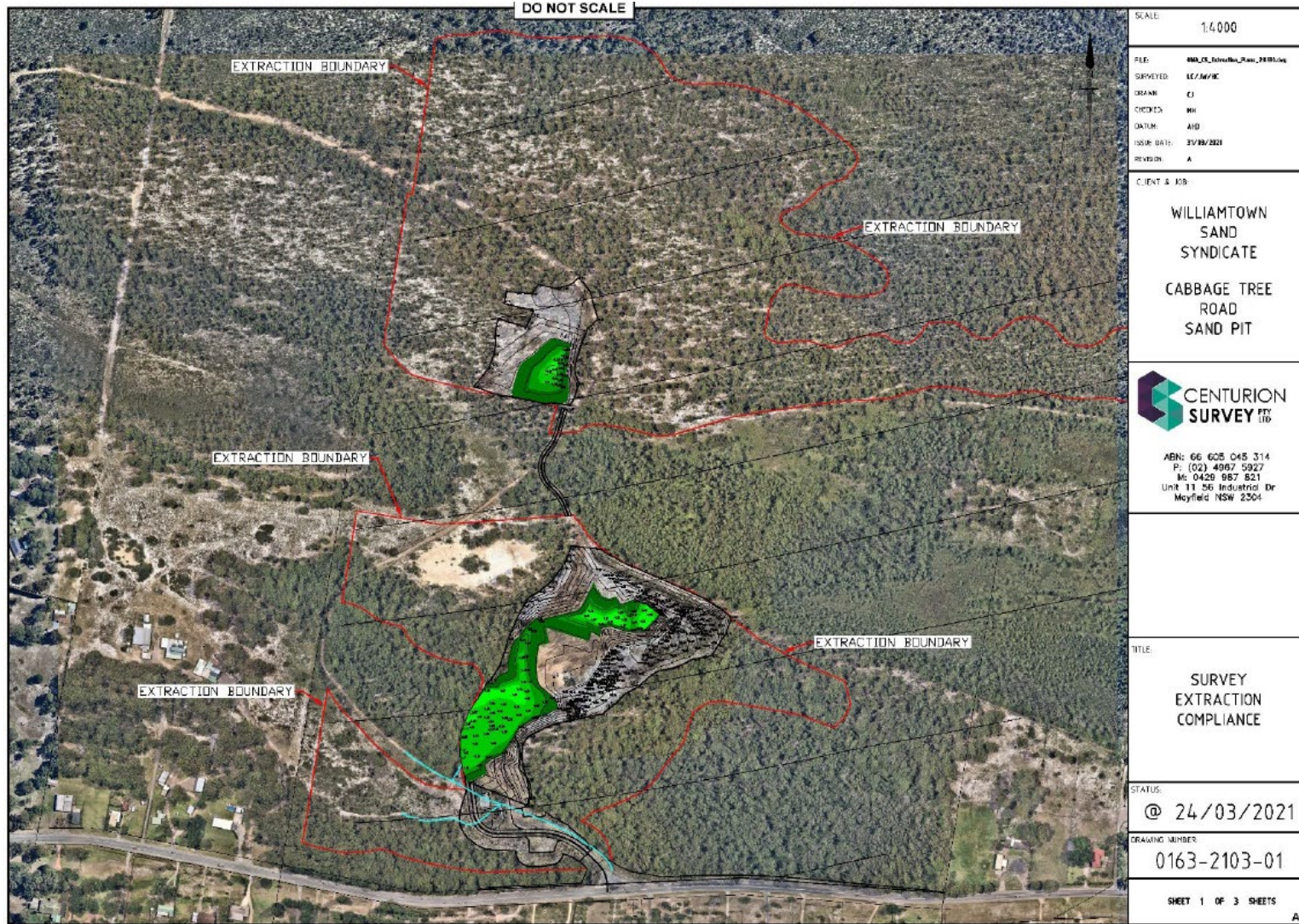
Key activities completed during this period

- ▶ 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. 			
<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 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. 			
<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 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><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 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. 			
<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 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

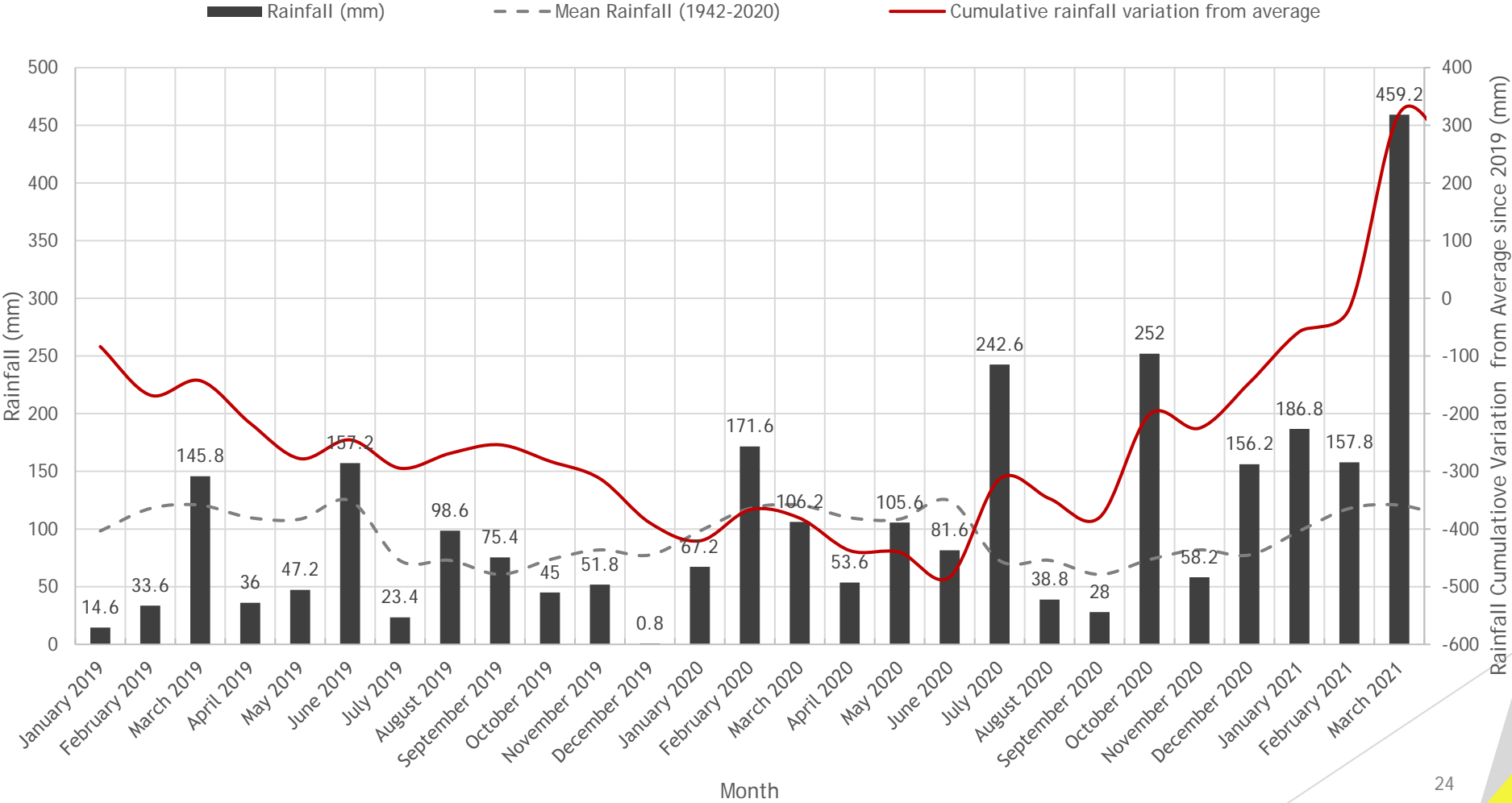
March 2021

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>			

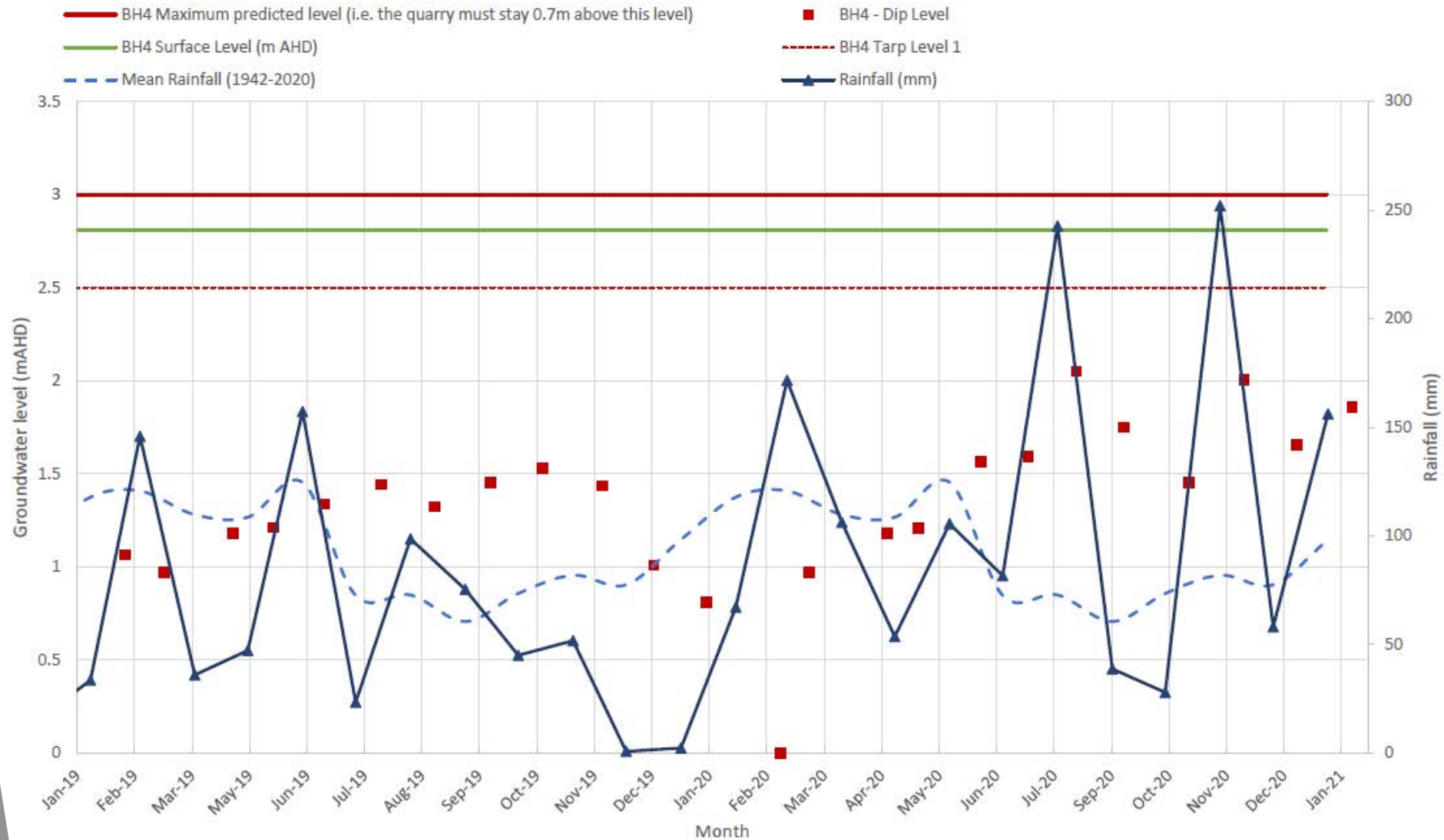
Environmental Monitoring - Water

- ▶ 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.

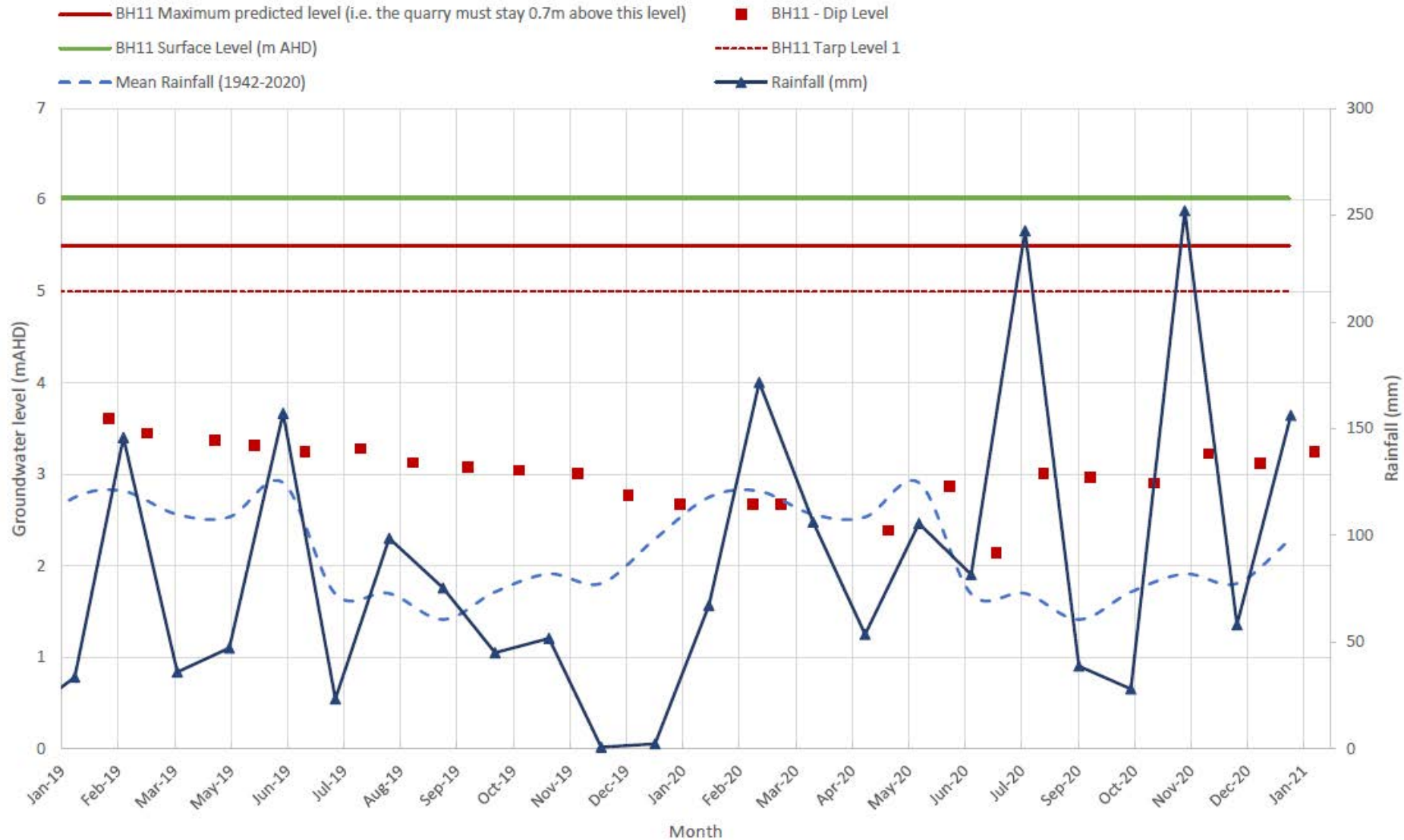
Environmental Monitoring - Water



Environmental Monitoring – Water Levels



Environmental Monitoring – Water Levels



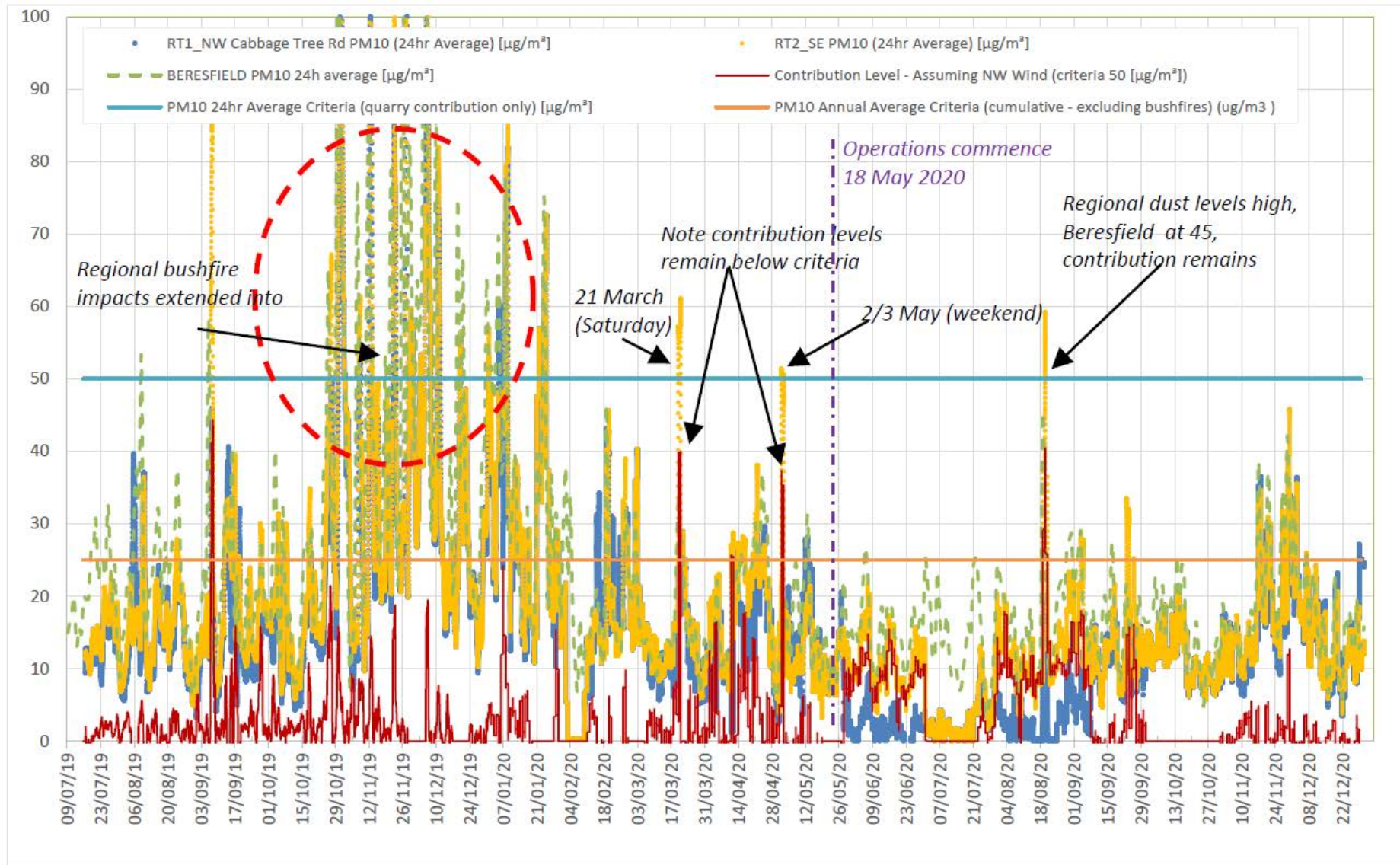
Environmental Monitoring - Air

- ▶ 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