Subject:FW: Cadia Dust Management Update No 10Date:Tuesday, 2 February 2021 at 2:49:57 pm Australian Eastern Daylight TimeFrom:Matthew Armstrong <Matthew.Armstrong@newcrest.com.au>Attachments:Cadia Project Update _ Dust Management No 10.pdf, image001.jpg

Dear Cadia District Community Member, Please find attached a project update on Dust Management at Cadia for January.

As always, if you have any questions on this matter or another matter relating to Cadia please feel free to give me a call or send an email.

Regards

Matt

Matt Armstrong Superintendent - Social Performance Cadia Valley Operations Newcrest Mining Limited – Miner of Choice™ 1460 Cadia Road Orange NSW 2800 Mob: 0456 003 888 E: matthew.armstrong@newcrest.com.au



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Cadia Project Update No. 10

27 January 2021

Project:

Treatment of the Northern Tailings Storage Facility (NTSF) and Southern Tailings Storage Facility (STSF), often referred to as 'Tailings Dams', with dust suppressant products to prevent dust liftoff resulting in dust fallout on neighbouring properties.

Key Updates:

- Monitoring of the completed application of the hydro-mulch dust suppressant product on the NTSF is continuing. The product continues to perform well.
- Erizon will commence applying the hydro-mulch dust suppressant product on the STSF in February, weather pending.
- Cadia's Panther continues to treat areas of the STSF with the polymer dust suppressant product to maintain integrity of the coverage and will gradually step back from full-time operations on the STSF as Erizon's hydro-mulch coverage takes over.
- The aerial campaign to apply the polymer dust suppressant product to the NTSF and STSF decant areas due to commence late January weather and equipment pending. .
- Cadia did not receive any dust lift-off complaints from November 2020 through to late January 2021. However, Cadia received two complaints on 26 January 2021 about dust . lift-off from the NTSF. Details on this event are presented below.

Background:

Since early 2020, Cadia and its contractor partner Erizon have been managing the on-going application of dust suppressant on the NTSF and STSF to prevent dust lift-off.

More detailed background information is contained in Cadia's previous updates on this project.

Latest Project Activities:

NTSF

Full coverage of the NTSF surface, excluding the decant area (wet area where water drains to), with the hydro-mulch product was completed in early November 2020. Cadia and Erizon have now transitioned to 'monitoring and maintenance' to ensure the on-going integrity of the coverage.



STSF

Erizon will commence work on the STSF in February 2021 and will use both of its tractor rigs that were designed and built specifically to operate on our TSFs. Coverage is expected to take approximately 21 weeks, however, the completion date will be dependent on the number of wet days experienced.

Cadia's Panther has continued to apply the polymer dust suppressant product on the STSF, covering 76Ha over the last month.



Figures 1. Tracking map of the Panther on the STSF.

Dust lift-off Complaint

Cadia did not have any dust lift-off complaints from November 2020 through to late January 2021. However, Cadia received two complaints on 26 January 2021 about dust lift-off from the NTSF. The cause of the dust lift-off was investigated and found to be a result of water scouring that had removed the protective hydro-mulch layer on a section of the NTSF surface along the eastern flank. The area had been identified, assessed and scheduled for re-treatment a few days earlier. The assessment indicated that the risk of dust lift-off from the area would remain low for a number of days, allowing the team to prioritise other areas. However, the area dried much quicker than anticipated, resulting in dust lift-off. Cadia's monitoring and assessment process



has been updated to incorporate the learnings from this event to mitigate the risk of future dust lift-off events.

While the dust lift-off event is very disappointing Cadia is confident that it doesn't indicate a performance issue with the hydro-mulch product itself.

Decant Areas on the NTSF and STSF

To guard against potential dust lift-off from the decant areas, Cadia will commence a 14-day aerial campaign to apply the polymer dust suppressant product. Cadia is using the services of local contractor for the campaign, with the operation based at the air strip on Cadia's neighbouring Tunbridge Wells property.

Monitoring and Assessment

Ongoing assessment of the dust suppressant coverage is now a part of Cadia's standard monitoring operations. On the NTSF the monitoring program is being used to confirm that the hydro-mulch is performing as expected, and on the STSF to identify areas that may require retreatment with the polymer dust suppressant product as an interim measure until the hydro-mulch can be applied.

Next Update:

The next update on Tailings Dam Dust Management will be issued in mid-February 2021.

Previous Updates:

Cadia's previous updates are available on the Cadia Valley Website (<u>http://www.cadiavalley.com.au</u>) and by email or post on request.

Future Key Activities and Dates

Milestone	Date	Status
Commence hydro-mulch dust suppressant coverage on the STSF.	February 2021	Scheduled
Commence dust suppressant coverage on the decant areas of the TSFs,	Late January 2021	Scheduled



Contact:

If you have questions or would like to meet and discuss this project information please contact Matt Armstrong on 0456 003 888 or <u>matthew.armstrong@newcrest.com.au.</u>

Yours Sincerely

Aaron Brannigan General Manager – Cadia Valley Operations Subject: RE: Sunday Dust

Date: Monday, 27 April 2020 at 9:40:20 am Australian Eastern Standard Time

From: Matthew Armstrong

To: Hilde Gerathy

Hi John,

The dust on Sunday wasn't good, I can only apologise.

Thanks for the photo, I've included it in my report. I've logged a complaint based on your email and I received two additional complaints on the day.

I will work with the Surface Operations team that manage the Tailings Storage Facilities to prepare a formal response to your questions, as requested below.

Thanks

Matt

From: Hilde Gerathy <jhgerathy@gmail.com> Sent: Monday, 27 April 2020 7:22 AM To: Annie and Garry Haines <gads1553@hotmail.com>; Gem Green <gemmgreen@gmail.com>; Gillian and Alwyn Roweth <roweth@wpastoralco.com>; Jann Harries <Jann@minebiz.com.au>; Matthew Armstrong <Matthew.Armstrong@newcrest.com.au>; Patina Schneider <rosepark101@hotmail.com>; vanessa_moss@hotmail.com Subject: Fwd: Sunday Dust

Hi Matt

I am still composing the Notes of our teleconferences with both you and Cadia's hydrologist Nic last week.

However, with gold worth over Aud \$2,700 / oz I think it is about time you and Nic have a better look at flooding both tailings dams, as I have suggested. I, like others have photographs of both dams billowing clouds of dust all over the area east yesterday, despite the continuing but failing efforts by Erizon and Cadia's Panther.

Cadia needs to work out how to turn both the Northern and Southern tailings dams back into water retaining dams as they were before the embankment problem.

I have indicated there is little opposition to the proposed lifts on the South , which has been ongoing for some time as advised by Peter Sharpe and witnessed by the public , however , with Cadia's inability to suppress dust that is destroying the whole amenity of our community and potentially our health , the prospect of a 40m lift on the North , given it's beginnings , is looking for Cadia forlorn.

I would request Cadia provide a formal response to my request to re introduce full water cover to both dams.

Community legal proceedings against EPA for mandatory injunctive relief against Cadia cannot be far off .

Regards John Gerathy Errowanbang



Tuesday, February 2, 2021 at 7:21:32 AM Australian Eastern Daylight Time

Subject: Cadia Project Update: Tailings Dam Dust Management

Date: Thursday, 16 April 2020 at 3:49:51 pm Australian Eastern Standard Time

From: Jane Chung <jane.chung@newcrest.com.au>

To: Hilde Gerathy <jhgerathy@gmail.com>

Attachments: Image_20200416_014417_226.jpeg, Image_20200416_014417_227.jpeg, 20200416 Cadia Project Update _ Dust Management - FINAL.pdf

Good afternoon Cadia District,

As request by our community members we are commencing to provide regular updates regarding our Dust Management Program.

Attached is the first update that we will be providing on a monthly basis.

If you have questions or would like to meet and discuss this project information please contact Matt Armstrong on 0456 003 888 or <u>matthew.armstrong@newcrest.com.au</u>.

Aaron Brannigan Acting General Manager – CVO Newcrest Mining Limited – Miner of Choice™ 1460 Cadia Road, Orange NSW 2800 Australia



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16 April 2020

Project:

Treatment of the Northern Tailings Storage Facility (NTSF) and Southern Tailings Storage Facility (STSF), often referred to as 'Tailings Dams', with dust suppression products to prevent dust lift-off resulting in dust fallout on neighbouring properties.

Key Updates:

- Cadia has contracted Erizon on a multi-year contract to manage dust suppression on the site's northern tailings storage facilities (NTSF).
- Erizon will commence their program of applying and maintaining its hydro-mulch dust suppression product across the surface of the NTSF by late April 2020.
- Cadia will self-manage dust suppression on the STSF, using the Panther to spray a combination of Erizons' Suppress X and Rainstorm Gluon RM600 dust suppression products. This will be ongoing until the next lift design is approved and we can re-commence tailings deposition.
- Erizon has designed and fabricated a specialised low ground pressure trailer to mount their hydro-mulch application tank and nozzles (like a water cannon) to allow the application of the hydro-mulch product across the interior surface of the NTSF (except on the decant area that is under water).
- Erizon's mobilisation to site has been delayed by COVID19 related travel restriction.
- Erizon are expected to be fully mobilised by April 23rd. Cadia has already taken delivery of two semi-trailers worth of bales of hydro-mulch, one telehandler and site office.
- Erizon will take approximately 3-4 months to fully re-coat the NTSF.
- Areas of the NTSF that were treated during Cadia's summer campaign to treat all of the NTSF and STSF have partially degraded. Cadia is using on site equipment to reapply a dust suppression product to manage dust prior to the re-commencement of work by Erizon.
- The site equipment is currently working 24/7 to apply dust suppression products.

Background:

The Northern Tailings Storage Facility (NTSF) slump in March 2018 led to the cessation of tailings deposition into the NTSF. Since this time, the tailings surface has dried and become more susceptible to dust lift off.

In October 2019, Cadia ceased depositing any tailings on the STSF as it is nearing current capacity, and as a water saving initiative during the drought. Recommencing tailings deposition on the STSF is subject to the next dam lift design approval and construction, which is still pending. The STSF is planned to require ongoing dust management conducted by Newcrest until deposition is recommenced.



Project Activities:

Cadia has undertaken several intensive campaigns to treat the NTSF with dust suppressant products since mid-2018. Both aircraft and ground vehicles have been utilised during these campaigns. Cadia has a low-pressure ground-based machine (Prinoth Panther) in use to apply dust suppression products on the NTSF and STSF surfaces that are identified as causing dust lift-off.

Several dust suppressant products that Cadia initially used did not perform well and degraded unexpectedly and quickly. As a result of this in mid-2019 Cadia brought to site two companies that specialise in dust management on mining sites, including tailings dams. These two companies trialed several different products.



Figure 1. initial trial and exclusion areas. Blue indicates decant pond level. For the areas shown the Rainstorm product is Gluon RM600 and Erizon product is Hydromulch.

Erizon was identified as Cadia's preferred dust management contractor and its wood fibre hydromulch as the best performing product.



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Figure 2.Hydromulch trial 26/09/19. Germination success for rye grass blend. Note the fibre is intact and forming a consistent cover.



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Figure 3.Hydromulch trial 16/08/19. The Hydromulch falls into the holes left behind from the Panther tracks.

Recognising that the 2019/20 summer was going to see a continuation of the drought, Cadia proactively initiated a campaign to treat the entire NTSF and STSF surfaces with a combination of polymer type products (Gluon RM 600 and SuppressX) that could be applied both by land based and aerial applications. This campaign led to the successful management of dust over the summer.

This was in line with the following EPA commitments

- Full coverage of the NTSF by dust suppression products will be completed by Thursday 8 • November 2019.
 - This was achieved on 5 November with an additional 59ha to apply dust suppression due to water saving initiatives during the drought. The slump was not originally in scope but was also treated with aerial application.
- The decision on the preferred dust suppression product for ongoing application will be finalised by Friday 29 November 2019.
 - Preferred supplier was selected on 10 October2019
- Cadia will execute the contract with the contractor to provide the ongoing dust suppression services by Friday 30 January 2020.
 - contract was executed on 6 December 2019 0





Figure 4.Initial plan & sequence for STSF dust suppression application, Aerial and Panther.





Figure 5. 3/1/2020 STSF looking back towards the NTSF wall (slump on the left) the day after aerial campaign suspended





Figure 6. Reviewed and updated trial areas to achieve full coverage of NTSF.





Figure 7. Current application areas & associate products

In March 2020, Cadia experienced a number of a high wind days shortly after a number of rainy days which resulted in number of dust events. It is believed that the rain over these days was sufficient to degrade the dust suppressant product on the NTSF surface that had been treated first, as part of the campaign in mid-2019. The Panther has been mobilised to apply dust suppression products to these areas until Erizon apply hydromulch.

The Panther will be utilised on an ongoing basis to apply a dust suppressant product to appropriately manage dust lift off events. To be able to react in a timely manner Newcrest are carrying stock to be able to mobilise and cover the order lead time for additional product.



In Summary - Future Key Activities and Dates

Milestone	Date 22 April	
Erizon Mobilise to site		
Commencement of Hydromulch application	24 April	
Panther to commence re-application to STSF	May 2020	
Completion of Hydromulch application	August 2020	

Contact:

If you have questions or would like to meet and discuss this project information please contact Matt Armstrong on 0456 003 888 or <u>matthew.armstrong@newcrest.com.au</u>

Yours Sincerely Aaron Brannigan Acting General Manager