

File note of meeting/discussion

☐ Meeting X Telephone

Date: 15 February 2012

Time: 10.00am

Between: Craig Cattell (Mining Engineer, Golding Contractors, Kogan Creek Mine)

And: Ruth Brown (Project Manager) of DERM, SW Region office

Subject: Recent discharges from Kogan Creek Coal Mine

Following notification by email from Kogan Creek Coal Mine on 7 February that discharge was occurring from Dam 7, I rang Craig Cattell to determine if the discharge was still occurring.

Craig said that Kogan Creek Mine started discharging from Dam 7 into Kogan Creek last Tuesday 7 February and continued discharging until Friday evening 10 February. This discharge is in compliance with their EA and is not related to any flooding issues. They stopped discharging on Friday evening and had no further discharge through the weekend or Monday. They started discharging again yesterday afternoon (14 February) and plan to continue discharging through to Friday afternoon 17 February given the water quality remains below release limits. Discharge will stop again for the weekend and may continue next week, depending on water levels in the dam.

Pumping was on and off a bit last week due to the water testing results but approximately 40ML was released last week from Tuesday to Friday. Approximately 7ML has been discharged this week since yesterday.

Brown Ruth

From: Mckay Adrian
Sent: Tuesday, 6 March 2012 9:11 AM
To: Brown Ruth
Cc: Moran Martin; Free David; De Weys Jason
Subject: FW: Kogan Creek GW and SW monitoring review

Attachments: Kogan Creek Power Station and Kogan Mine Groundwater Monitoring Review.doc; 111019_KCPS__Mine_Groundwater_and_Surface_Water_Monitoring_Review_Final.pdf; MIN100878709.pdf; DA_IPDE00173405A11.pdf; 20070608 current amalgamated permit.doc



Kogan Creek Power
Station and ...

Hi Ruth,

Pls find endorsed comments from Jason regarding the GW monitoring review. Pls get back to Jason if you have any further questions.

For future requests could you send them to myself pls and I will endeavour to provide a response

Regards
Adrian McKay
Principal Project Officer
Queensland Department of Environment & Resource Management
Toowoomba

Ph: 07 4529 1341
M - Personal information
Fax: 07 4529 1554

203 Tor St
PO Box 318
Toowoomba Qld 4350

'We never know the worth of water till the well is dry' - 18th Century English Proverb

From: Free David
Sent: Monday, 20 February 2012 1:57 PM
To: De Weys Jason; Moran Martin
Cc: Mckay Adrian
Subject: FW: Kogan Creek GW and SW monitoring review

Martin

Can you look at the surface water story in the EMS and the Monitoring Review and provide comments to Adrian please.

Jason

Please review the groundwater components of the attached docs and forward comments to Adrian with cc to me.

Thanks

David Free

A/Chief Hydrogeologist

Coal Seam Gas Activities

Ph: 07 45291275 Mob: [REDACTED] - Personal information Fax: 07 45291554

Email David.Free@derm.qld.gov.au

From: Brown Ruth
Sent: Friday, 17 February 2012 11:59 AM
To: Free David
Subject: Kogan Creek GW and SW monitoring review

Hi David,

We recently received a report from CS Energy's consultants Environmental Management Strategies regarding Kogan Creek Power Station and Mine Groundwater and Surface Water Monitoring Review. The report is a requirement of their development approval and environmental authority and basically suggests changes to the DAs and EA surface water and ground water monitoring conditions as a result of the review.

I have read through the report and the amendments seem to make good sense to me but then I'm not a water scientist. My manager Sarah Horton suggested you might be able to have a look at the report and provide any comments and expert advice, particularly as you have done some work with nearby Wilkie Creek project.

I have attached a copy of the report and the three licences associated with Kogan Creek - the mine's EA, the power station's DA and the DA for the ash disposal.

If you have the time to have a look at the report and provide any comments, it would be greatly appreciated.

Thanks. Ruth



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e_Groundwater_...

Ruth Brown



MIN100878709.pdf
(1 MB)

Principal Envir

nmental Officer



DA_IPDE00173405
A11.pdf (1 MB)

Environmental Se

vices, South West Region



20070608 current
amalgamated p...

Depar ment of Environment & Resource Management

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EHP RTI DL Release

Kogan Creek Power Station and Kogan Mine Groundwater Monitoring Review

Background

CS Energy has provided a review of their groundwater monitoring program and protocols for Kogan Creek Power Stations and Kogan mine. Their Amalgamated Permit (ENCD00281405) allows for the frequency of monitoring to be revised after initial results of the first 36 months have been assessed by the administering authority.

Summary of recommendations for EA and DA amendments made by CS Energy

1. Remove monitoring bores MB3, MB5 and MB8 and replace with bores KC1273, KC1276, KC1277 and KC 1278
2. Quarterly sampling for groundwater level
3. Six monthly sampling for chemical parameters: pH, EC, Na⁺, Cl⁻, SO₄
4. Aquifer background groundwater quality trigger levels be included as distinct to bore specific trigger levels. Alternatively estimated trigger values established for groundwater aquifer types based on existing monitoring results should be provided to DERM for approval. It is noted that the current trigger requirement is + / - 10% of established background value. A minus 10% value for chemical parameters is not contamination, therefore a requirement for minus 10% should be removed
5. Modify Schedule C Tables 3 and 4 in IPDE00173405a11 and EA MIM800345805 respectively to record standing water level (SWL) in metres instead of centimetres.

Response to recommendations made by CS Energy

Change Requested	Justification	DERM response
✓ Remove monitoring bores MB3, MB5 and MB8 and replace with bores KC1273 (WCM), KC1276 (WCM), KC1277 (Condamine Alluvium) and KC 1278 (Condamine Alluvium)	MB3 (14m deep) Bore dry when drilled, still dry MB5 (14.5m deep) Bore, not enough water to collect regular samples (only 3 samples in 3 years) MB8 (14m deep) Bore dry when drilled, still dry	Request is appropriate
✓ Quarterly sampling for groundwater level	Aligns requirements of permits for mine and power station	Request is appropriate

✓ Six monthly sampling for chemical parameters: pH, EC, Na ⁺ , Cl ⁻ , SO ₄	Low risk of groundwater contamination	Request is appropriate
<p>Aquifer background groundwater quality trigger levels be included as distinct to bore specific trigger levels.</p> <p>Alternatively estimated trigger values established for groundwater aquifer types based on existing monitoring results should be provided to DERM for approval. It is noted that the current trigger requirement is + / - 10% of established background value. A minus 10% value for chemical parameters is not contamination, therefore a requirement for minus 10% should be removed</p>	<p>Insufficient data collected to establish a statistically valid range of background data. Mean levels of monitoring parameters can vary significantly (>10%) from bore to bore depending on aquifer type.</p>	<p>Discrete aquifer background quality trigger values are appropriate (e.g. separate trigger values for Kogan Creek Alluvium, Condamine Alluvium and Sedimentary Strata bores)</p> <p>A minus 10% value for chemical parameters COULD be contamination- as the report points out “a decrease in salinity (in groundwater) could be observed as less saline seepage water displaces/mixes with more saline natural groundwater”</p>
<p>Modify Schedule C Tables 3 and 4 in IPDE00173405a11 and EA MIM800345805 respectively to record standing water level (SWL) in metres instead of centimetres</p>		<p>Request is appropriate. Measurements should be taken to 2 decimal places</p>

Brown Ruth

From: Brown Ruth
Sent: Wednesday, 22 February 2012 9:06 AM
To: Free David
Subject: RE: Kogan Creek GW and SW monitoring review

Hi David,

There is no timeframe to meet regarding a comment but would appreciate a response as soon as practicable. CS Energy hasn't put in an application to amend their environmental authority or development approval yet. We would like to meet with them prior to the application being lodged to discuss the proposed amendments but to do this we need to have any advice from experts such as yourself.

Thanks for making time to review this document.

Ruth

Ruth Brown
Principal Environmental Officer
Environmental Services, South West Region
Department of Environment & Resource Management
PO Box 731
Toowoomba QLD 4350
Ph: (07) 4699 4304
Fax: (07) 4699 4399

From: Free David
Sent: Tuesday, 21 February 2012 9:19 AM
To: Brown Ruth
Subject: RE: Kogan Creek GW and SW monitoring review

Ruth

Have some people looking at this. Is there a timeline to meet for a comment?

Cheers

David Free

A/Chief Hydrogeologist
Coal Seam Gas Activities
Ph: 07 45291275 Mob: 07 45291554
Email David.Free@derm.qld.gov.au

From: Brown Ruth
Sent: Friday, 17 February 2012 11:59 AM
To: Free David
Subject: Kogan Creek GW and SW monitoring review

Hi David,

We recently received a report from CS Energy's consultants Environmental Management Strategies regarding Kogan Creek Power Station and Mine Groundwater and Surface Water Monitoring Review. The report is a requirement of their development approval and environmental authority and basically suggests changes to the DAs and EA surface water and ground water monitoring conditions as a result of the review.

I have read through the report and the amendments seem to make good sense to me but then I'm not a water scientist. My manager Sarah Horton suggested you might be able to have a look at the report and provide any comments and expert advice, particularly as you have done some work with nearby Wilkie Creek project.

I have attached a copy of the report and the three licences associated with Kogan Creek - the mine's EA, the

power station's DA and the DA for the ash disposal.

If you have the time to have a look at the report and provide any comments, it would be greatly appreciated.

Thanks. Ruth

<< File: 111019_KCPS_Mine_Groundwater_and_Surface_Water_Monitoring_Review_Final.pdf
>> << File: MIN100878709.pdf >> << File: DA_IPDE00173405A11.pdf >> << File: 20070608 current
amalgamated permit.doc >>

Ruth Brown
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Brown Ruth

From: Brown Ruth
Sent: Friday, 9 March 2012 12:35 PM
To: 'Craig Cattell'
Subject: RE: Kogan Creek - Discharge from Dam 2

Hi Craig,

Condition C1-2 of your environmental authority states that "Contaminants must not be directly or indirectly released from any source on the mine to any waters at any location other than at the locations listed in (i) below:

- (i) to waters of Eastern Branch Creek or Kogan Creek at the point(s) defined in the Water Management Plan."

The Water Management Plan states there are 3 authorised discharge points. "Releases can occur from Dam 7 – Southern EBC, Dam 8 – Northern EBC and the ROM Pond."

So to be in compliance with your EA you would need to go with option 2 as this option still ensures discharge is from the authorised discharge point.

Whichever option you go with, you will need to ensure that the quality of the release water complies with the limits stated in condition C2-1 of your EA and that the level of electrical conductivity within the receiving waters will not exceed 950 µs/cm at any time 200m downstream from the discharge point.

Ruth

Ruth Brown
 Principal Environmental Officer
 Environmental Services, South West Region
 Department of Environment & Resource Management
 PO Box 731
 Toowoomba QLD 4350
 Ph: (07) 4699 4304
 Fax: (07) 4699 4399

From: Craig Cattell [mailto:Craig.Cattell@golding.com.au]
Sent: Friday, 9 March 2012 10:28 AM
To: Brown Ruth
Cc: Colin Smith; Kelly McFarlane
Subject: Kogan Creek - Discharge from Dam 2

Hi Ruth,

As discussed briefly on the phone this morning. We are wanting to discharge some water from Dam 2, and we would normally do this by setting up a Legra highwall pump on the ROM pad and run the water around to the ROM pond, and then discharge through Discharge Point 3. However the ROM is too high in EC to discharge and is already getting near the reporting level, so we don't want to put any additional water in to it. Also the Legra pump is currently being used to dewater the pit, so we would need to use our skid mounted pump which has much lower suction capability (so we would need to locate this on the wall of Dam2).

Without utilising the Legra highwall pump and the ROM pond, I can see 2 possible alternate methods of

discharging from Dam 2.

1) Locate a syphon over the Northern wall of Dam 2, and the water flows along an existing drain on the North of the ROM Pad, through a culvert under Smiths Rd, down an existing gully and into Kogan Creek at a point which is approx 200m downstream from the point that it would enter if discharged through Discharge Pt 3. Advantages are that it only requires a short length of pipe (approx 50m), doesn't require a pump so it doesn't burn diesel, and we don't need to create a service truck access (access is only available via the OPAC). The existing drain has sediment and erosion controls

2) Setup a pump pad at the North-Eastern corner of Dam 2, and run a pipe along the toe of the OPAC western wall, then along the southern side of the ROM pad and ROM pond, to discharge point 3. This requires a lot of setup work, with approx 1.2km of pipe, as well as a pad for the pump, and an access for the service truck.

Obviously we would prefer to discharge using option 1 if possible, but it isn't a critical situation where we need to discharge immediately, so if it will require a TEP or if it is a major issue, then we can do option 2 or delay discharging.

Cheers,

CRAIG CATTELL
Mining Engineer | Golding Contractors
Kogan Creek Mine
Smiths rd via Banana Bridge rd
Chinchilla, QLD 4413
Phone 07 4665 2177 | Fax 07 4665 2100
Mobile - Personal information
Email craig.cattell@golding.com.au

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Brown Ruth

From: MCNICOL John [jmcnicol@csenergy.com.au]
Sent: Thursday, 5 April 2012 4:29 PM
To: Brown Ruth
Cc: MORTIMER Tim; BODDICE Janice; HARTIGAN Roger
Subject: Groundwater Monitoring Bore MB10 - over 2 m SWL in past year

Ruth,

ash disposal DA.

In accordance with Development Approval IPDE00173405A11, Condition (C3-1) & Mining Lease MIM800345805, Condition (C6-1), we wish to advise that monitoring bore MB10 which taps into the Alluvials east of the Initial Ash Disposal Area, has recorded a change in standing water level of 2.14 m between March 2011-March 2012. The actual readings are noted below:

	28.03.11	29.04.11	31.05.11	30.06.11	27.07.11	23.08.11
MB10 Standing Water Level (m)	17.98	17.79	18.89	18.95	18.95	18.98

Maximum SWL (m) for the period	19.93
Minimum SWL (m) for the period	17.79
Difference (m)	2.14

*unable to access due to wet condition of ground

** no sampling possible due to theft of sampling gear from Contractor's premises

The water level in the Initial Ash Disposal Area is low (314.23 m). We have not noticed any seepage or any changes in any of the other bores around the IADA that would indicate leakage. We will continue to monitor the bore.

Regards

John

John McNicol

Acting Station Manager
Kogan Creek Power Station

☎ 07 46652505

sch4 - Personal information

✉ John.mcnicol@csenergy.com.au



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15/06/2012

Brown Ruth

From: Lovejoy Damian
Sent: Thursday, 10 May 2012 9:11 AM
To: Brown Ruth
Subject: RE: kogan ck

Hi Ruth, as far as the NPI component of the audit goes I am only interested in the power station. Will you be doing any Env. Services related work whilst on site? If so we will need to have a bit of a look at the timeframes for what we hope to get done. If it's just NPI I expect we can get through the info in ½ to ¾ of a day. Below I have listed the information I would like the site to have ready for the NPI component of the audit. It would be great if you could include these requirements in any correspondence you send to the site in prep for the audit. Alternatively I am happy to send this to our contact (Gary Joy 3854 7347 gjoy@csenergy.com.au) at the site but it is best in my view that data requests from the Dept. come from the one point of contact. The details are:

- Detailed list of substance emissions from sources estimated at the facility
- Estimation techniques/ methodologies used for calculating emissions of these substances
- Fuel/NPI substance threshold determinations
- Data for any direct measurement data, assay analysis relevant to NPI reporting
- Process flow diagrams for your facility, aerial photographs (to get an overall picture of site operations).

If the site has any questions about this they can contact me directly.

I will probably drive up the afternoon of the 24 May and if you like pick you up at the office or meet you onsite – whatever you are happy with. How long does it take to get there from Toowoomba? If it's a few hours I may stay closer to the site if there is available accommodation.

Thanks

Damian

Damian Lovejoy - Manager Industry Reporting
Air Quality Sciences, Inventory, Modelling and Assessment Unit

P: 07 3330 5460 F: 07 3330 5515 M: [REDACTED] s.73 Irrelevant information

From: Brown Ruth
Sent: Wednesday, 9 May 2012 11:46 AM
To: Lovejoy Damian
Subject: RE: kogan ck

Hi Damian,

The 25 May looks good for me to do the audit at Kogan Creek. Is it at the mine or the power station or both?
[REDACTED] s.73 Irrelevant information
If you can send the initial email out today or tomorrow I can send the official letter out next week.

Thanks. Ruth

Ruth Brown
Principal Environmental Officer
Ph: (07) 4699 4304

From: Lovejoy Damian
Sent: Wednesday, 9 May 2012 10:49 AM
To: Brown Ruth
Subject: FW: kogan ck

Hi Ruth, looks like I will be doing the NPI audit for Kogan Creek. I have had a look at my calendar and the 25 May is fine at this stage. How would this suite you for a combined NPI / Services audit?

I would need to get an email to the contact out there letting them know what information they should have ready for the NPI component of the audit today or tomorrow...

s.73 Irrelevant information

s.73 Irrelevant information

happy to send the heads-up email directly to the contact – let me know what you would prefer.

Regards,

Damian

Damian Lovejoy - Manager Industry Reporting
Air Quality Sciences, Inventory, Modelling and Assessment Unit

P: 07 3330 5460 F: 07 3330 5515 M: [REDACTED]

s.73 Irrelevant information

From: Baddiley Brenda
Sent: Wednesday, 9 May 2012 10:41 AM
To: Lovejoy Damian
Subject: kogan ck

Brenda Baddiley | **National Pollutant Inventory** | Inventory, Modelling and Assessment Unit
Department of Science, Information Technology, Innovation and the Arts

Phone: (07) 3330 5463 | Mobile: [REDACTED]
E: brenda.baddiley@derm.qld.gov.au | W: www.npi.gov.au
Level 6, 400 George Street, GPO Box 2454, Brisbane QLD 4001

From: Brown Ruth
Sent: Thursday, 16 February 2012 3:56 PM
To: Baddiley Brenda
Subject: s.73 Irrelevant information

Hi Brenda,

Stthree tells me you're interested in doing an inspection of Kogan Creek Power Station. I'm the project

manager for KCPS and have it on my plan to do an inspection sometime this financial year. Happy to have you guys come along. No dates have been planned yet but the station manager has said he is happy to have us visit anytime.

So let me know when you'd like to go out and I will organise the inspection.

Ruth

Ruth Brown
Principal Environmental Officer
Environmental Services, South West Region
Department of Environment & Resource Management
PO Box 731
Toowoomba QLD 4350
Ph: (07) 4699 4304
Fax: (07) 4699 4399

From: Hilton Sthree
Sent: Thursday, 16 February 2012 3:43 PM
To: Brown Ruth
Subject: s.73 Irrelevant information

Hi Ruth
Here is the details for the NPI audits
Cheers
Sthree

Sthree Hilton
Principal Environmental Officer
Environmental Services - South West Region
Department of Environment and Resource Management
PH (07) 4699 4375 FAX (07) 4699 4399

From: Baddiley Brenda
Sent: Thursday, 16 February 2012 10:16 AM
To: Hilton Sthree
Subject: s.73 Irrelevant information

Hi Sthree
Sounds great, count us in! Just let me know some possible dates and time frames and I will try and work them into our audit schedule. Also looking at Kogan Creek Power Station at some point too.
Cheers
brenda

Brenda Baddiley | **National Pollutant Inventory** | Inventory, Modelling and Assessment Unit
Part time: Monday - Thursday | Phone: (07) 3330 5463 | Mobile: sch4 - Personal information
E: brenda.baddiley@derm.qld.gov.au
W: www.derm.qld.gov.au, www.npi.gov.au
Department of Environment and Resource Management
Level 6, 400 George Street, GPO Box 2454, Brisbane QLD 4001

s.73 Irrelevant information

s.73 Irrelevant information

EHP RTI DL Release

Brown Ruth

From: BODDICE Janice [JBODDICE@csenergy.com.au]
Sent: Thursday, 19 July 2012 3:46 PM
To: Brown Ruth
Cc: HARTIGAN Roger; peter@imems.com.au
Subject: RE: Amendments to DA ENCD00281405
Attachments: FW: Amended registration certificate; 20091016 - DERM Notice of Annual Return and Changes to ERAs - Kogan Creek Power Station.pdf

Hi Ruth

We have found some previous correspondence (attached) when the changes to the ERA's occurred. An extract follows:

Assigned ERA: ERA 64 Water treatment Threshold 3 – Treating 10ML or more raw water in a day.

Recommended ERA: ERA 64 Water treatment Threshold 2(a) - desalinating, in a day, 0.5 -5ML of water, allowing the release of waste to waters other than seawater.

Justification: Kogan Creek Power Station does not have the facilities to treat 10ML of water per day and is unlikely to have such facilities in the near future. They are also desalinating the bore water by removing salts.

DERM comment: Allow this ERA change to the registration certificate as ERA 16 Water Treatment Plant was on the registration certificate issued 16/11/2006.

As you can see the main argument run by Ian Richardson was the volume of throughput. However we have reviewed this and consider that ERA 64 (3) is the most appropriate if it is the broader ERA for water treatment. The reason is the general belief of what is "desalinating" versus "water treatment". Water treatment on the site includes:

- RO Plant
- Clarification
- Demineralisation through a mixed bed ion exchange process, carbon filter and degasser
- Polishing plant for boiler water recovery.

Therefore if you consider desalinating a particular common industry plant that focuses on major cation and anion removal and NOT polishing etc for the purposes of demineralised water, then "treatment" fits better.

If DEHP have a defined view of "desalinating" as it relates to saline water treatment and not the production of highly treated demineralised water where nearly all impurities are removed, then the answer is definitely ERA 64 (3).

We are unsure of as to what plant type or impacts the regulations are actually trying to regulate. If desalinating is about coal seam water management or production of water from sea water or managing saline waters as the key function, then it may be considered different from KCPS operations.

So in conclusion CSE would argue, that the original notice (attached) had the correct ERA (64 (3)). Given the fee is the highest score, ERA 14 Electricity Generation threshold 2(b), this should have no effect on the annual return costs. Please change to this ERA.

In case you might try and ring, tomorrow is the site monthly RDO (just skeleton staff) so I will not be in until Monday. If you have any questions/comments please forward via email & I'll look at them when I'm back at work on Monday.

Regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | M: 04 - Personal information | E: jiboddice@csenergy.com.au
CS Energy Ltd

From: Brown Ruth [mailto:Ruth.Brown@ehp.qld.gov.au]
Sent: Wednesday, 18 July 2012 2:55 PM
To: BODDICE Janice
Subject: TRIM: FW: Amendments to DA

Hi Janice,

I have found the email from Ian Richardson dated 4 March 2010 (see attached) which explains the new ERAs required by you. Although Ian has asked for ERA 64-2(a) with the justification that Kogan Creek Power Station does not have the facilities to treat 10ML of water per day and is unlikely to have such facilities in the near future, I still need to know if Kogan is desalinating their water to ensure this is the correct ERA threshold.

<<KCPS new ERAs.pdf>>

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

From: Brown Ruth

Sent: Wednesday, 18 July 2012 12:23 PM

To: 'BODDICE Janice'

Subject: Amendments to DA

Hi Janice,

I'm working through the proposed amendments to the Kogan Creek Power Station DAs. On the Power Station one (ENC00281405) you have requested the Water Treatment ERA be changed from ERA 16 to ERA 64-2 (a). We have it listed on our database as ERA 64-3 however I can't find any paper work on file from back in 2009 from us asking you what you wanted to change them to or from you saying what you wanted the changes to be.

The definition of both is;

ERA 64-2(a) Desalinating in a day the following quantity of water, allowing the release of waste to waters other than seawater – 0.5ML to 5ML

ERA 64-3 Treating 10ML or more raw water in a day.

So the question is, are you actually desalinating the water during treatment? If so the ERA 64-2(a) is correct. If no desalination occurs then ERA 64-3 is correct. Can you please give an explanation of the water treatment process that occurs on site to justify which ERA threshold should be applied?

I'm sure there will be more questions as I go through it.

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

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Brown Ruth

From: MCNICOL John [john.mcnicol@csenergy.com.au]
Sent: Monday, 15 October 2012 2:31 PM
To: Brown Ruth
Subject: RE: Site inspection

Hi Ruth

I intend to accompany you on your inspection this Wednesday 17th October, along with personnel from Golding. I do have another meeting at 1.00pm but thought that we will probably have seen most things before then but as Colin and Davorin will be answering most, if not all questions, my absence will probably go unnoticed!
See you Wednesday

John

From: Brown Ruth [mailto:Ruth.Brown@ehp.qld.gov.au]
Sent: Monday, 15 October 2012 2:25 PM
To: MCNICOL John
Subject: Site inspection

Hi John,

As stated in our letter dated 19 September, I'm just checking that it's still convenient for me and Rajesh Jalota to come and do the pre wet-season inspection at the mine this Wednesday 17th October at 10.30am. Are you going to do the inspection with us or will we be meeting someone else?

See you at 10.30am at the mine.

Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

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EHP RTI DL Release

Brown Ruth

From: BODDICE Janice [JBODDICE@csenergy.com.au]
Sent: Thursday, 1 November 2012 1:46 PM
To: Brown Ruth
Subject: RE: Info required for Ash Disposal DA
Attachments: Att_3_20121008_DA for ash IPDE00173405A11_w_changes (3).doc

Hi Ruth,

I've received the feedback from the hydrogeologist:

The table below from pg. 9 of the DA amendment track changes shows the contaminant ranges for the Alluvium, Walloon Coal Measures and Springbok/Walloons. The use of the descriptor Springbok/Walloons applies to two bores MB9, MB10 that were drilled in sandstones near the IADA and have a higher background salinity than bores in the Walloon Coal Measures that are close to the mine pit and either intersect coals or carbonaceous material. There is some uncertainty as to what constitutes Springbok Formation and Walloon Coal Measures and where the boundary lies – hence the use of the descriptor Springbok/Walloons. Both formations are considered to be part of a larger subgroup – the Injune Creek Group. However, to prevent any confusion, the term Springbok alone can be used in Schedule C – Table 3. Table 3 has been modified accordingly with Note 2 expanded to link it to Table 2. The wording of Table 2 has also been modified: alluvials changed to alluvium; Springbok/Walloons changed to Springbok for bores MB9 and MB10.

I've attached an update of the DA amendment track changes. Let me know if it doesn't come through as I've been having some intermittent email issues with attachments disappearing into the ether on random emails.

Schedule C - Table 3 Groundwater contaminant trigger levels

Quality Characteristic	Unit	Contaminant Range ^{2,3} Alluvium	Contaminant Range ^{2,3} Walloon Coal Measures	Contaminant Range ^{2,3} Springbok	Monit
Na	mg/L	50-300	300 - 1800	2500 - 6000	T
SO ₄	mg/L	5-80	<1 - 250	100 - 1000	T
Al	mg/L	<0.01-0.15	<0.01 – 0.04	<0.01 – 0.3	T
Zn	mg/L	0.01-0.3	0.005 -0.4	0.05 – 0.4	T
Cl	mg/L	50-400	100 - 3000	4000 - 10000	T
EC	µS/cm	280-1400	1500 - 7000	13000 - 27000	T
pH	unit	6.5-8	6.5-8	6 – 8	T
Standing Water Level	m	NA ¹	NA ¹	NA ¹	

¹ For SWL – trigger level for exceedence is non-pumping fluctuations greater than 2 m for bores listed in Table 2.

² Range of values with acceptable upper and lower values of a stratum. Contaminant ranges apply to bores in specific aquifer groups, Table 2

Schedule C - Table 2 (Groundwater monitoring locations)

Monitoring Point	Easting	Northing	Aquifer	Surface RL (m)	Total Depth (m)
MB1 : North	280 500	7 020 251	Condamine Alluvium	311	~24 m
MB2 : North East	281 369	7 019 804	Condamine Alluvium	311	~16 m
MB6 : South	278 508	7 017 531	Walloon Coal Measures	319	~64m
MB7 : South East	279 694	7 017 861	Walloon Coal Measures	319	~81m
MB9 : Initial Ash (1)	276 154	7 018 215	Springbok Sandstone	315	~24m
MB10 : Initial Ash (2)	276 808	7 018 029	Springbok Sandstone	313	~21m
KC1273: Northern	280 349	7 019 254	Walloon Coal Measures	314	~30m

boundary of OPAC					
KC1276: North east boundary of OPAC	281 317	7 019 566	Walloon Coal Measures	312	~24m
KC1277: South west boundary of OPAC	281 399	7 019 910	Condamine Alluvium	309	~24m
KC1278: Southern boundary of OPAC	281 073	7 019 785	Condamine Alluvium	308	~24m

Regards
Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | M: [REDACTED] E: jboddice@csenergy.com.au
CS Energy Ltd

From: BODDICE Janice
Sent: Thursday, 1 November 2012 12:08 PM
To: 'Brown Ruth'
Subject: RE: Info required for Ash Disposal DA

Thanks Ruth – I'm just waiting on some feedback from the hydrogeologist. Hopefully will get that back to you within the next hour or so.

From: Brown Ruth [<mailto:Ruth.Brown@ehp.qld.gov.au>]
Sent: Thursday, 1 November 2012 10:42 AM
To: BODDICE Janice
Subject: Info required for Ash Disposal DA

Hi Janice,

As requested in my email of 20/08/2012 we need contaminant trigger levels for the Walloon Coal Measures for what was condition C3-4, now known as condition C7 (see below) of the Ash disposal DA. I don't think you got back to me with this info but if you did can I have it again as it has been misplaced.

(C7) Conduct monitoring and keep records of groundwater quality for the relevant bores listed in Schedule C Table 2. All determinations of groundwater quality must be;

- (i) conducted for the water quality characteristics and at the minimum frequency stated in Schedule C - Table 3;
- (ii) taken from sufficient monitoring points and /or well to obtain representative samples of groundwater both up-gradient and down-gradient of the potential influence;
- (iii) carried out with sufficient regularity, spatial and temporal replication to make reasonably valid conclusions about the presence or absence of contamination or other impact;
- (iv) the method of sampling of groundwater must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual;
- (v) an interpretative review be conducted once every 3 years of the data gathered from Schedule C – Table 3.

Schedule C – Table 3: Groundwater contaminant trigger levels

<i>Quality characteristics</i>	<i>Unit</i>	<i>Contaminant Range² Alluvium</i>	<i>Contaminant Range² Sedimentary Strata – Springbok Sandstone</i>	<i>Contaminant Range² Sedimentary Strata – Walloon Coal Measures</i>	<i>Monitoring Frequency</i>
Na	mg/L	50-300	1000 - 6000		Twice yearly
SO ₄	mg/L	5-80	1 - 1000		Twice yearly
Al	mg/L	<0.01 – 0.15	<0.01 – 0.4		Twice yearly
Zn	mg/L	0.01 – 0.3	0.01 – 0.4		Twice yearly
Cl	Mg/L	50 – 400	300 – 10,000		Twice yearly
EC	µS/cm	280 – 1400	2,500 – 27,000		Twice yearly
pH	unit	6.5 – 8	6.5 – 8		Twice yearly
Standing water level (SWL)	m	NA ¹	NA ¹		Quarterly

¹ For SWL – trigger level for exceedence is non-pumping fluctuations greater than 2m for bores listed in Table 2.

² Range of values with acceptable upper and lower values of a stratum.

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

From: Brown Ruth

Sent: Monday, 20 August 2012 9:07 AM

To: 'BODDICE Janice'

Subject: Amendments to DAs

Hi Janice,

We have run some of your proposed changes to the Development Approvals past our groundwater experts and they have suggested one change for Condition C3-4 on the Ash Disposal DA (IPDE 00173405A11). That is to separate the sedimentary strata in Schedule C – Table 3: Groundwater contaminant trigger levels into the Springbok Sandstone and the Walloon Coal Measures. Their reason is given below;

- The reason for the big ranges in the sedimentary strata column appears to be because ranges for both the Springbok Sandstone and Walloon Coal Measures have been used together. The aquifers are quite different in their characteristics and seem to have different ranges for the various parameters being measured, with the Springbok bores exhibiting a much higher Na, Cl and EC values than that of the Walloon CM. It seems that more effective monitoring would be to

separate these aquifers, so that they have separate acceptable ranges for monitoring, thus adding a third column of parameters to the table. They have already looked at salinity values for the separate aquifers within this report.

If you are agreeable to this change can you please amend the table to show the two sedimentary strata and provide trigger levels for each characteristic?

As I said in my email on 2 August, there aren't any forms or fees to amend the DA under sections 378(4) and 73(C), you simply need to put all the changes we have agreed on in a letter to make it a bit more formal than all these emails and phone calls.

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

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Brown Ruth

From: BODDICE Janice [JBODDICE@csenergy.com.au]
Sent: Monday, 29 October 2012 1:18 PM
To: Brown Ruth
Cc: MAPP Ivan; HARTIGAN Roger
Subject: RE: Application to amend the ash disposal DA

Hi Ruth,
I've spoken with Roger Hartigan who in turn has had legal advice and I can confirm that Ivan Mapp is able to legally act on behalf of Aberdare Collieries in making the application to amend their development approval.

Regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | **M:** [REDACTED] | **E:** jboddice@csenergy.com.au
CS Energy Ltd

From: MAPP Ivan
Sent: Monday, 29 October 2012 11:45 AM
To: BODDICE Janice; HARTIGAN Roger
Subject: FW: Application to amend the ash disposal DA

Can you answer this? I have never acted for Aberdare previously

From: Brown Ruth [<mailto:Ruth.Brown@ehp.qld.gov.au>]
Sent: Monday, 29 October 2012 11:42 AM
To: MAPP Ivan
Cc: BODDICE Janice
Subject: Application to amend the ash disposal DA

Hi Ivan,

I am finalising the draft amendment for the ash disposal development approval as requested in your email of 8 October 2012. Development approval IPDE00173405A11 is held in the name of Aberdare Collieries Pty Ltd. Could you please confirm that you are legally able to act on behalf of Aberdare Collieries in making the application to amend their development approval.

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

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EHP RTI DL Release

Brown Ruth

From: Brown Ruth
Sent: Thursday, 1 November 2012 10:56 AM
To: 'BODDICE Janice'
Cc: Jalota Rajesh
Subject: RE: CS Energy Notification of Water level - IADA & OPAC

Hi Janice,

Thanks for this information. Great to see they are both below the DSA level.

Just to let you know that we have had a shuffle of projects here as one of our Environmental Officers is on maternity leave for 12 months. Once I have completed the amendments to the Power Station and Ash Disposal DAs I will be handing the project management of Kogan Creek Power Station and Coal Mine over to Rajesh Jalota as I have taken on New Acland coal mine and Jondaryan coal loading facility. Rajesh has been out to the mine with me to conduct the pre wet-season inspection and has met Davorin Bosnjak and John McNicol already. As I sit behind Raj I am still able to help him with any problems that might arise from Kogan Creek.

Raj's contact details are 4699 4378 or email Rajesh.Jalota@ehp.qld.gov.au

Regards. Ruth

Ruth Brown
 Principal Environmental Officer
 Environmental Services - Southern Region
 Department of Environment & Heritage Protection
 Ph: (07) 4699 4304

From: BODDICE Janice [mailto:JBODDICE@csenergy.com.au]
Sent: Thursday, 1 November 2012 10:33 AM
To: Brown Ruth
Cc: MAPP Ivan; HARTIGAN Roger; MCNICOL John
Subject: CS Energy Notification of Water level - IADA & OPAC

Dear Ruth,

Please be advised that the water level in the Initial Ash Disposal Area (IADA) at Kogan Creek Power Station as at 1 November 2012 is RL 313.6 m. This level is below the Design Storage Allowance (DSA) value of RL 314.0 m. By comparison, the water level in the IADA as at 1 November 2011 was 315.41 m.

The water level in the Out of Pit Ash Cell (OPAC) as at 1 November 2012 is RL 322.275 m. This level is below the Design Storage Allowance (DSA) value of RL 323.00 m as calculated for the 2011-12 wet season in the OPAC Inspection Report for 2011 undertaken by Golder Associates. By comparison, the water level in the OPAC as at 1 Nov 2011 was approx. 322.5 m.

Our consultants are currently completing the dam safety and capacity adequacy reports for the IADA and OPAC to be submitted to your Department later in November.

Regards

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station

P: 07 4665 2589 | M: [REDACTED] | E: iboddice@csenergy.com.au
CS Energy Ltd

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EHP RTI DL Release

Brown Ruth

From: Brown Ruth
Sent: Friday, 2 November 2012 9:41 AM
To: 'BODDICE Janice'
Subject: RE: Draft amended DA for ash disposal
OK consider it removed.

Ruth Brown
Principal Environmental Officer
Environmental Services - Southern Region
Department of Environment & Heritage Protection
Ph: (07) 4699 4304

From: BODDICE Janice [mailto:JBODDICE@csenergy.com.au]
Sent: Friday, 2 November 2012 9:18 AM
To: Brown Ruth
Subject: RE: Draft amended DA for ash disposal

Hi Ruth,
Yes, the first version of amendments we presented at the meeting in July 2012 we made a mistake due to the confusion in the groundwater report that I did not pick up on at the time. I had come to the conclusion that the hydrogeologist wanted MB4 removed when reviewing the final submission of the DA against the recommendations in the report that you have listed below where in the retain bores section he has not listed this bore. I did note the inconsistency with the hydrogeologist's report in that the 'retain' did not line up with the 'remove' and so when I rung him yesterday after receiving the draft DA for review he confirmed that yes, he did mean for MB4 to be removed. I apologise & understand any confusion as I had quite a bit of it myself in relation to this bore. CSE would prefer to go with the recommendations of the hydrogeologist in relation to this bore.

Regards
Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | **M:** [REDACTED] | **E:** jboddice@csenergy.com.au
CS Energy Ltd

From: Brown Ruth [mailto:Ruth.Brown@ehp.qld.gov.au]
Sent: Friday, 2 November 2012 9:06 AM
To: BODDICE Janice
Subject: RE: Draft amended DA for ash disposal

Hi Janice,

Just checking that you do want to remove bore MB4 from Schedule C Table 2. I ask because it was listed in the original version of amendments provided after our meeting in July 2012, it was still in the amended DA provided in the final application in October 2012 and I can't find it stated in the recommendations of the report *Kogan Creek Power Station and Kogan Mine Groundwater and Surface Water Monitoring Review* that it is to be removed. Section 15.0 Recommendations for Environmental Authority and DA

amendments states;

- Retain bores MB1, MB2, MB6, MB7, MB9, MB10 for groundwater monitoring purposes for DA conditions IPDE00173405A11 and EA MIM800345805.
- Remove MB3, MB5 and MB8 from DA conditions IPDE00173405a11 and EA MIM800345805 and replace with bores KC1273, KC1276, KC1277 and KC1278.

Unfortunately it doesn't mention MB4. As it was retained in both draft versions of the amendment I presumed it was to remain.

Condition G4 and G6 have been corrected. Thanks for picking up this error.

Ruth

Ruth Brown
Principal Environmental Officer
Environmental Services - Southern Region
Department of Environment & Heritage Protection
Ph: (07) 4699 4304

From: BODDICE Janice [<mailto:JBODDICE@csenergy.com.au>]
Sent: Thursday, 1 November 2012 4:24 PM
To: Brown Ruth
Subject: RE: Draft amended DA for ash disposal

Hi Ruth,

I have had a read and the only difference is that MB4 has been included in Schedule C Table 2 which wasn't what we were proposing. I've just checked with the hydrogeologist and confirmed that he has recommended this bore be removed in line with his report recommendations in 2011.

The only other two observations I had were in condition (G4) which I think the final paragraph should read: Any notification given under Section 320.....described in Condition G3....(makes more sense and aligns with the previous version of the DA) & similar for Condition (G6) where I think it should read: Any notification given under Section 320.....described in Condition G6.... The previous DA made mention to the equivalent G5 but not sure that this is what you mean given the G3 one above.

If you agree with these changes I think we are done & can move onto the final.

Regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | **M:** [REDACTED] | **E:** jboddice@csenergy.com.au
CS Energy Ltd

From: Brown Ruth [<mailto:Ruth.Brown@ehp.qld.gov.au>]
Sent: Thursday, 1 November 2012 3:29 PM
To: BODDICE Janice
Subject: Draft amended DA for ash disposal

Hi Janice,

Attached please find the draft of the amended DA for the Ash Disposal. I'm pretty sure I've included all the changes but please review carefully to make sure I haven't forgotten any. For condition C3-1 the initial track changes document had the words "Groundwater affected by the ash disposal activities must be monitored at the locations and frequencies defined in Schedule C – Table 2." So I have added the frequency column to that table. Please let me know if this is what you want.

The headers/footers and title banners etc will probably change but please check that the wording of the conditions is correct. Please let me know if you approve of the draft or if there are any changes required.

<<20121101 New DA for ash disposal.doc>>

Thanks. Ruth

Ruth Brown

Principal Environmental Officer

Environmental Services - Southern Region

Department of Environment & Heritage Protection

Ph: (07) 4699 4304

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Noted errors in issued EHP Permit SPDE04947312 Version 08 Nov 2012

RED – indicates correction to Original (27 July 2005) version for clarification (previously missed error)

YELLOW – indicates correction to Issued version (8 November 2012) to align with Original version.

Condition (A1) – Words missing from Issued when compared with Original approval which references existing financial assurance under ML 50074 and defines rehabilitation to ERA activity.

Issued Version

- (A1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this authority.

NOTE: The calculation of financial assurance for condition (A1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year of the Plan of Operations and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required)

Original Version / Changes

- (A1-1) Provide a financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this authority, unless financial assurance has already been provided pursuant to the Environmental Authority for ML 50074.

NOTE: Subject to the above, the calculation of financial assurance for condition (A1-1) must be in accordance with Guideline 17 and may include a performance discount. The amount is defined as the maximum total rehabilitation cost for complete rehabilitation of all disturbed areas of the ash cells, which may vary on an annual basis due to progressive rehabilitation. The amount required for the financial assurance must be the highest Total Rehabilitation Cost calculated for any year and calculated using the formula: (Financial Assurance = Highest Total Annual Rehabilitation Cost x Percentage Required)

Condition (B3) – Words missing from Issued when compared with Original approval.

Issued Version

- (B3) If evidence can be provided through monitoring that the following limits are not being exceeded then the holder is not in breach of (B1):

Original Version / Changes

- (B1-3) If evidence can be provided through monitoring that the following limits are not being exceeded by emissions from the ash disposal activity then the holder is not in breach of (B1-1):

Condition (B4) – Word “further” inserted in Issued when compared with Original approval.

Issued Version

- (B4) If monitoring indicates exceedence of the relevant limits in Condition (B3), then dust abatement measures must be implemented immediately so that emissions of dust from the activity do not result in further environmental nuisance; or if considered appropriate by the administering authority, undertake appropriate dispute resolution.

Original Version / Changes

Delete – “further” to read:

- (B1-4) If monitoring indicates exceedence of the relevant limits in Condition (B1-3), then dust abatement measures must be implemented immediately so that emissions of dust from the activity do not result in environmental nuisance; or if considered appropriate by the administering authority, undertake appropriate dispute resolution.

Condition (C1) – Words lost from original approval which references the ERA activity and clarification by removal of non-relevant reference (RED).

Issued Version

- (C1) Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters.

Original Version / Changes with minor modification for clarity

- (C1-1) Contaminants must not be directly or indirectly released from the licensed place and as a result of the ash disposal activity to any waters or the bed and banks of any waters except as detailed in Schedule C. Table 3.

Condition (Schedule C Table 1) – Words changed from original approval. “Significant” has been added

Issued Version

Schedule C – Table 1 - notes

NOTE: ARI means annual recurrence interval.

Note. ** Applies to dams with contents with significant or high hazard only.

Original Version / Changes

Note. ** Applies to dams with contents with high hazard only.

Condition (C6 & Schedule C Table 2) –Monitoring Frequency and Location need to be separate references to stop contradiction. Words “affected by ash disposal activities” removed as new text.

Issued Version

- (C6) Groundwater affected by the ash disposal activities, must be monitored at the locations and frequencies defined in Schedule C - Table 2.

Schedule C - Table 2: Groundwater monitoring locations and frequency

Monitoring Point	Easting	Northing	Aquifer	Surface RL (m)	Total Depth (m)	Monitoring Frequency
MB1 : North	280 500	7 020 251	Condamine Alluvium	311	~24m	Quarterly
MB2 : North East	281 369	7 019 804	Condamine Alluvium	311	~16m	Quarterly
MB6 : South	278 508	7 017 531	Walloon Coal Measures	319	~64m	Quarterly
MB7 : South East	279 694	7 017 861	Walloon Coal Measures	319	~81m	Quarterly
MB9 : Initial Ash (1)	276 154	7 018 215	Springbok Sandstone	315	~24m	Quarterly
MB10 : Initial Ash (2)	276 808	7 018 029	Springbok Sandstone	313	~21m	Quarterly
KC1273: Northern boundary of OPAC	280 349	7 019 254	Walloon Coal Measures	314	~30m	Quarterly
KC1276: North east boundary of OPAC	281 317	7 019 566	Walloon Coal Measures	312	~24m	Quarterly
KC1277: South west boundary of OPAC	281 399	7 019 910	Condamine Alluvium	309	~24m	Quarterly
KC1278: Southern boundary of OPAC	281 073	7 019 785	Condamine Alluvium	308	~24m	Quarterly

Note: Coordinate Datum Horizontal AMG Zone 56 & Vertical AHD

Original Version / Changes

- (C6) Groundwater must be monitored at the locations and frequencies defined in Schedule C – Table 2
Remove red highlighted words. Remove “affected by ash disposal activities”

Title of Table – “Schedule C – Table 2: Groundwater monitoring locations and frequency”

Remove red highlighted words

Schedule C - Table 2 (Groundwater monitoring locations) - Table 2 No frequency column – delete column “Monitoring frequency”.

Specification of monitoring frequency to be as per Table 3 of Original licence which is now included in Table 3 of Issued version.

Condition (C7) – Clarification – Insertion of “The holder of ...”

Issued Version

- (C7) Conduct monitoring and keep records of groundwater quality for the relevant bores listed in Schedule C Table 2. All determinations of groundwater quality must be;

Original Version / Changes

- (C3-2) The holder of the development approval must conduct monitoring and keep records of groundwater quality for the relevant bores listed in Schedule C Table 2. All determinations of groundwater quality must be;

Condition (C7) – Rewording of selected sub-points as follows:

Issued Version

- (i) conducted for the water quality characteristics and at the minimum frequency stated in Schedule C - Table 3;
- (ii) taken from sufficient monitoring points and /or well to obtain representative samples of groundwater both up-gradient and down-gradient of the potential influence;
- (iii) carried out with sufficient regularity, spatial and temporal replication to make reasonably valid conclusions about the presence or absence of contamination or other impact;
- (iv) the method of sampling of groundwater must comply with that set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual;
- (v) an interpretative review be conducted once every 3 years of the data gathered from Schedule C – Table 3.

Original Version / Changes

- (i) conducted for the water quality characteristics and at the minimum frequency stated in Schedule C- Table 3;
- (ii) taken from sufficient monitoring points and /or wells bores to obtain representative samples of groundwater both up-gradient and down-gradient of the potential influence;
- (iii) carried out with sufficient regularity, spatial and temporal replication to make reasonably valid conclusions about the presence or absence of contamination or other impact;
- (iv) carried out in accordance with the method of sampling of groundwater set out in the latest edition of the Environmental Protection Agency's Water Quality Sampling Manual.
- (v) subject to an interpretative review once every 3 years of the data gathered from Schedule C - Table 3.

Schedule C – Table 3 – Units for CI in table

Original Version / Changes

Change "Mg/L" to "mg/L".

Condition (C8) – Insert missing words which clarify when action occurs. Remove "baseline".

Issued Version

- (C8) A record of the results of baseline monitoring must be kept and forwarded to the administering authority.

Original Version / Changes

(C8) A record of the monitoring the results of baseline monitoring must be kept and forwarded to the administering authority on request.
 Remove "baseline" as this wording referred to original Condition C3-3 requirement to commence "baseline" monitoring 12 months before waste disposal commenced. Minor improvements to wording.

Condition (C9) – Change “or” to “of”.

Issued Version

- (C9) If the groundwater parameters sampled from the locations specified in C6 do not fall within the defined range in Schedule C – Table 3, then the holder is to complete an investigation into whether or not the change in groundwater quality was caused by ash disposal activity and if so, undertake an investigation into the potential for environmental harm. An investigation report is to be provided to the administering authority within 3 months or receiving the analysis results.

Original Version / Changes

- (C9) ... the administering authority within 3 months of receiving the analysis results.

Condition (D3) – Insert words missing from the original approval; and minor editing.

Issued Version

- (D3) If the development approval holder can provide evidence through monitoring that the limits defined in the table in Schedule D - Table 1 are not being exceeded then the holder is not in breach of Condition (D1). Monitoring must include:

Original Version / Changes

- (D1-3) If the development approval holder can provide evidence through monitoring that the limits defined in the table in Schedule D - Table 1, 2 and 3 inclusive are not being exceeded by noise from the ash disposal activity then the holder is not in breach of Condition (D1-4). Monitoring must include:

Condition (D4) – Delete “further” to make identical to the original approval.

Issued Version

- (D4) If monitoring indicates exceedence of the limits in Schedule D - Table 1, then the development approval holder must immediately implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance or if considered appropriate by the administering authority, undertake appropriate dispute resolution.

Original Version / Changes

- (D1-4) If monitoring indicates exceedence of the limits in Schedule D - Table 1, then the development approval holder must immediately implement noise abatement measures so that emissions of noise from the activity do not result in environmental nuisance or if considered appropriate by the administering authority, undertake appropriate dispute resolution.

Schedule D – Table 1 – Remove footnote to make identical to the original approval.

Issued Version

NOTE: The method of measurement and reporting of noise levels must comply with the latest editions of the Environmental Protection Agency's Noise Manual.

Original Version / Changes

Remove footnote as it is a duplication of the requirement of Condition D5. The wording of the footnote also differs from D5.

Schedule E – Waste – Change subheading from “Destination of Ash” to “Destination of Waste”

Original Version / Changes

The Heading above Condition E1 should be changed as requested, as the scope of E1 is broader than just “ash”.

Condition (E1) –Reduce confusion in terms. Ash dam, Ash cell, dam and align with definitions in Schedule I.

Issued Version

(E1)

- (ii) pulverised fuel (PF) and other coal material either as a solid or in a slurry form; released to the ash cells in a manner that will ensure the stability of the ash dam and in accordance with the conditions of this development approval; and

Original Version / Changes

- (ii) pulverised fuel (PF) and other coal material either as a solid or in a slurry form; released to the ash cells in a manner that will ensure the stability of the ash dam and in accordance with the conditions of this development approval; and

Condition (E2) – Meaning change from words omitted from Original approval; consistency with ash “cell” not “dam”; cross-referencing of requirement to review monitoring data every 3 years.

Issued Version

Ash Dam Management Plan

- (E2) Within twelve months of the date of this approval the holder of this approval must prepare and submit an Ash Dam Management Plan (ADMP) detailing practices and measures necessary to minimise the likelihood of environmental harm being caused by disposal of ash.

The ADMP must include a strategy detailing the future method/s for disposal of ash to the ash dam.
The strategy must include –

- (iii) longer term strategy for the disposal of ash and other wastes and alternative disposal methods to minimise the amount of waste water and conserve ash dam space;
- (iv) Groundwater monitoring and assessment – the ADMP must include monitoring of groundwater quality and interpretation of the results and conclusions by an expert in the field of groundwater monitoring as to whether there is any contamination and if so, the level of environmental harm caused as a result of such contamination. Assessment of groundwater monitoring must be undertaken at least every three years to assess the impact of any release of contaminants from the ash cells to groundwater.

Original Version / Changes

Ash Disposal Management Plan replace Ash Dam...with Ash Disposal

- (E2-1) Within twelve months of the date of this approval in conjunction with the Plan of Operations for ML50074 the holder of this approval must prepare and submit an Ash Disposal Management Plan (ADMP) detailing practices and measures necessary to minimise the likelihood of environmental harm being caused by disposal of ash.

The ADMP must include a strategy detailing the future method/s for disposal of ash to the ash cells. The strategy must include –

- (iii) longer term strategy for the disposal of ash and other wastes and alternative disposal methods to minimise the amount of waste water and conserve ash cell space;

(iv) Groundwater monitoring and assessment – the ADMP must include monitoring of groundwater quality and interpretation of the results and conclusions by an expert in the field of groundwater monitoring as to whether there is any contamination and if so, the level of environmental harm caused as a result of such contamination. Assessment of groundwater monitoring must be undertaken in accordance with Condition C(7) (v) at least every three years to assess the impact of any release of contaminants from the ash cells to groundwater.

Condition (E3) –Clarification of meaning – insertion of “include/s” and “is”.

Issued Version

Ash Handling

- (E3) All reasonable and practicable measures must be implemented to limit dust emissions which emanate from activities associated with fly ash and bottom ash collection, transportation and disposal. For the purpose of this condition, an example of a reasonable and practicable measure for the control of dust emissions include but not limited to conditioning of ash with water.

Original Version / Changes

Ash Handling

- (E3-1) All reasonable and practicable measures must be implemented to limit dust emissions which emanate from activities associated with fly ash and bottom ash collection, transportation and disposal. For the purpose of this condition, an example of a reasonable and practicable measure for the control of dust emissions includes but is not limited to the conditioning of ash with water.

Condition (E8) –Insertion of words for correct reference to Code.

Issued Version

Standards and Criteria

- (E8) The holder of the development approval must comply with the standard environmental conditions in the “Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste”.

Original Version / Changes

- (E5-1) The holder of the development approval must comply with the standard environmental conditions in the “Code of Environmental Compliance for Environmental Authorities for High Hazard Dams Containing Hazardous Waste”.

Condition (E11) – Corrections – additional “the” and “any” should be “and”.

Issued Version

- (a) a rehabilitation plan for the decommissioning the dam such that, amongst other things, water will no longer be stored in the dam, the dam and its contents will be structurally stable and resistant to erosion, any seepage; and any other emissions will not cause environmental harm or nuisance; or

Original Version / Changes

- (E7-1) The development approval holder must, 6 months prior to the cessation of operation of any dam containing hazardous waste, develop:
- (a) a rehabilitation plan for decommissioning the dam such that, amongst other things, water will no longer be stored in the dam, the dam and its contents will be structurally stable and resistant to erosion and seepage and any other emissions will not cause environmental harm or nuisance; or

Condition (G3)(ix) – Correction – change order of words “further any”

Issued Version

- ix) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.

Original Version / Changes

- (ix) actions taken to prevent any further release and mitigate any environmental harm and or environmental nuisance caused by the release.

EHP RTI DL Release

Jalota Rajesh

From: Horton Sarah
Sent: Friday, 23 November 2012 10:04 AM
To: Jalota Rajesh
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Rajesh

Good email – well put.

From: Jalota Rajesh
Sent: Friday, 23 November 2012 9:26 AM
To: BODDICE Janice; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Hi Janice,

The department has accepted to amend the Permit SPDE04947312 under agreement (as per section 376 of the Sustainable Planning Act 2009). EHP has agreed to amend most of the conditions except C6.

EHP would like to retain column (Monitoring Frequency) in Table 2: Groundwater monitoring locations and frequency. The department has taken this decision on the following grounds –

In your amendment application you asked for the condition to state, (C3-1) Groundwater affected by the ash disposal activities must be monitored at the locations and frequencies defined in Schedule C Table 2. However no frequency column was added to that table by KCPS. So the monitoring frequency was taken from Page 82 of the Ground water and Surface Water Monitoring Review which states "Quarterly Sampling for Groundwater Level"

As per your second enquiry about ENCD00281405, a new permit SPDE04917312 was issued on 12 November 2012 and sent to you. If you have not received that then we can send another copy to you.

If you have any question about this please do not hesitate to contact me.

Kind regards!
 Rajesh

Dr RAJESH JALOTA
Senior Environmental Officer
Southern Region
Environmental Services & Regulation
Department of Environment & Heritage Protection

173 Hume Street Toowoomba, Queensland 4350
PO Box 173 Toowoomba, Queensland 4350
P- 07 46994378; F- 07 4699 4399

From: BODDICE Janice [mailto:JBODDICE@csenergy.com.au]
Sent: Wednesday, 21 November 2012 7:49 AM
To: Jalota Rajesh; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au
Subject: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Dear Ruth

Firstly, CS Energy received the amended IPDE 00173405A11 permit by

Jalota Rajesh

From: BODDICE Janice [JBODDICE@csenergy.com.au]
Sent: Wednesday, 21 November 2012 7:49 AM
To: Jalota Rajesh; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au
Subject: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal
Attachments: 20121121_Final Corrections_Permit_SPDE04947312.docx.docx

Dear Ruth

Firstly, CS Energy received the amended IPDE 00173405A11 permit by Registered Mail on 14 November 2012. It was issued as EHP Permit SPDE 04947312 with approval date of 8 November 2012. We have now completed checking the issued version against the requested changes, and it has been noted that many conditions have been changed through either loss of some of the words from the original 2005 approval or through slightly changed wording which now conflicts with other conditions. Many of these changes were to conditions beyond the scope of those agreed and submitted to EHP in relation to groundwater monitoring.

One of the most significant conflicts is in Schedule C where a column for monitoring frequency has been added to Table 2 that now contradicts the agreed frequency stated in Table 3.

We have been through the 8 November document carefully and compared it with the 2005 original approval and the changes requested in our submission. We have listed the discrepancies in the attached word document. The yellow highlighted text is where words have been lost or changed from the original that changes the meaning. The red highlights are some suggested minor changes that were not noted last time, but would help clarify a condition.

It would be appreciated if these changes could be made and the permit re-issued.

Secondly, we have yet to receive any update on our concurrent submission to change existing approval ENCD 00281405 for the Power Station. If the changes to this approval have yet to be finalised and issued, we request that where the same condition is proposed for amendment to ENCD 00281405 as has been made to SPDE 04947312, the condition be updated to the wording proposed in the attached list of discrepancies.

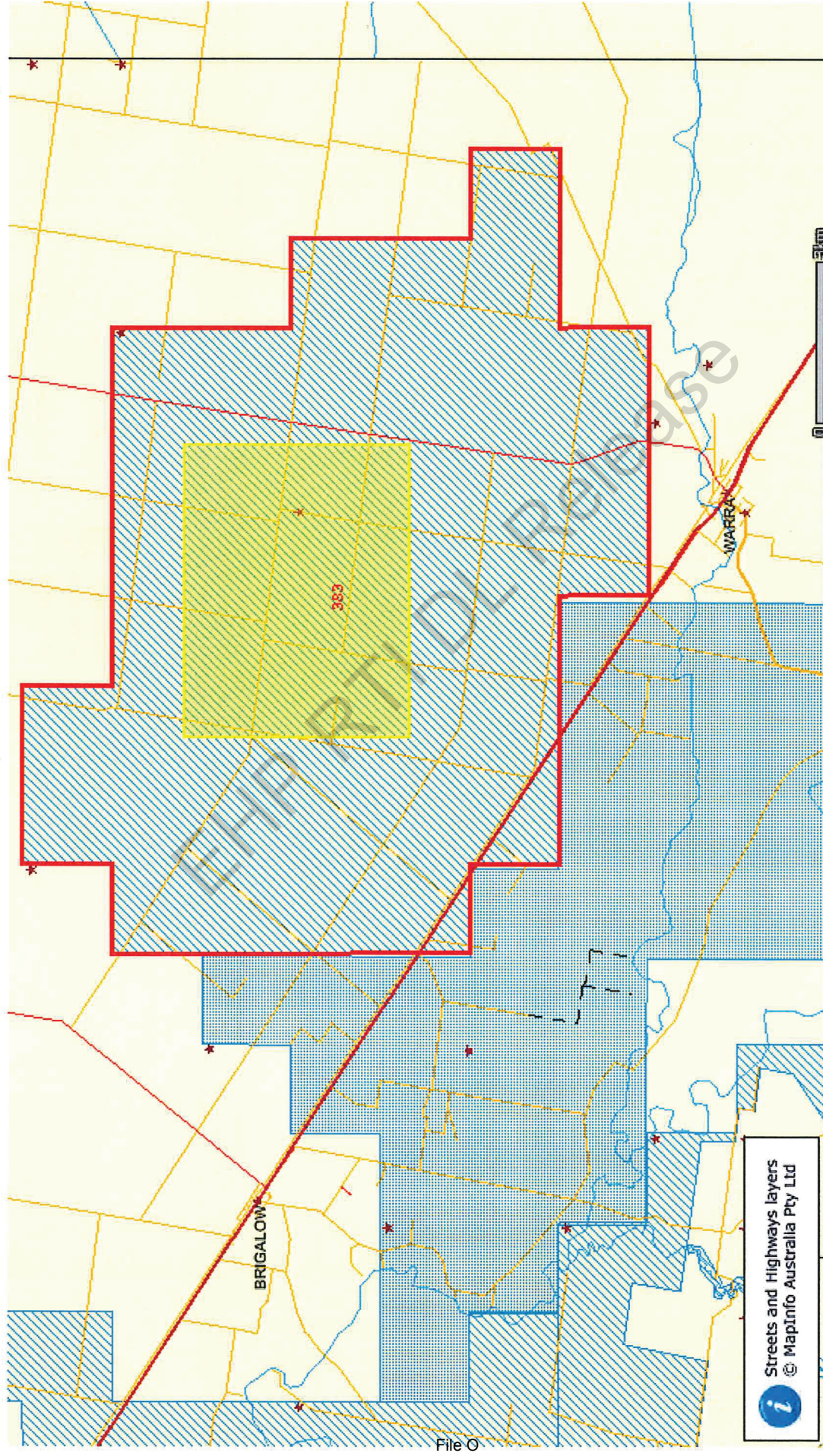
We would be happy to receive a final draft of the proposed amendments to approval ENCD 00281405 for the Power Station before it is issued for final checking if that were still possible.

Note that I am currently away from Kogan Creek on a training course however I will try and get to any emails during breaks. I'll be back at Kogan Creek on Friday 23 November.

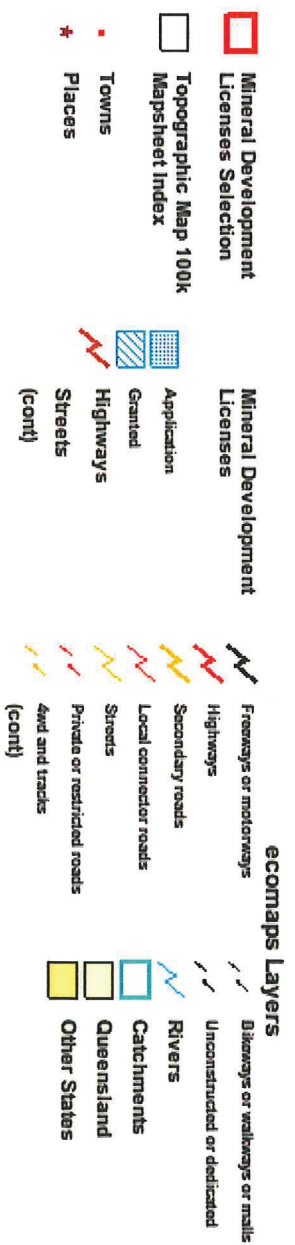
Regards

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2589 | **M:** [REDACTED] | **E:** jboddice@csenergy.com.au
CS Energy Ltd

 This email and any files transmitted with it are confidential and may be privi

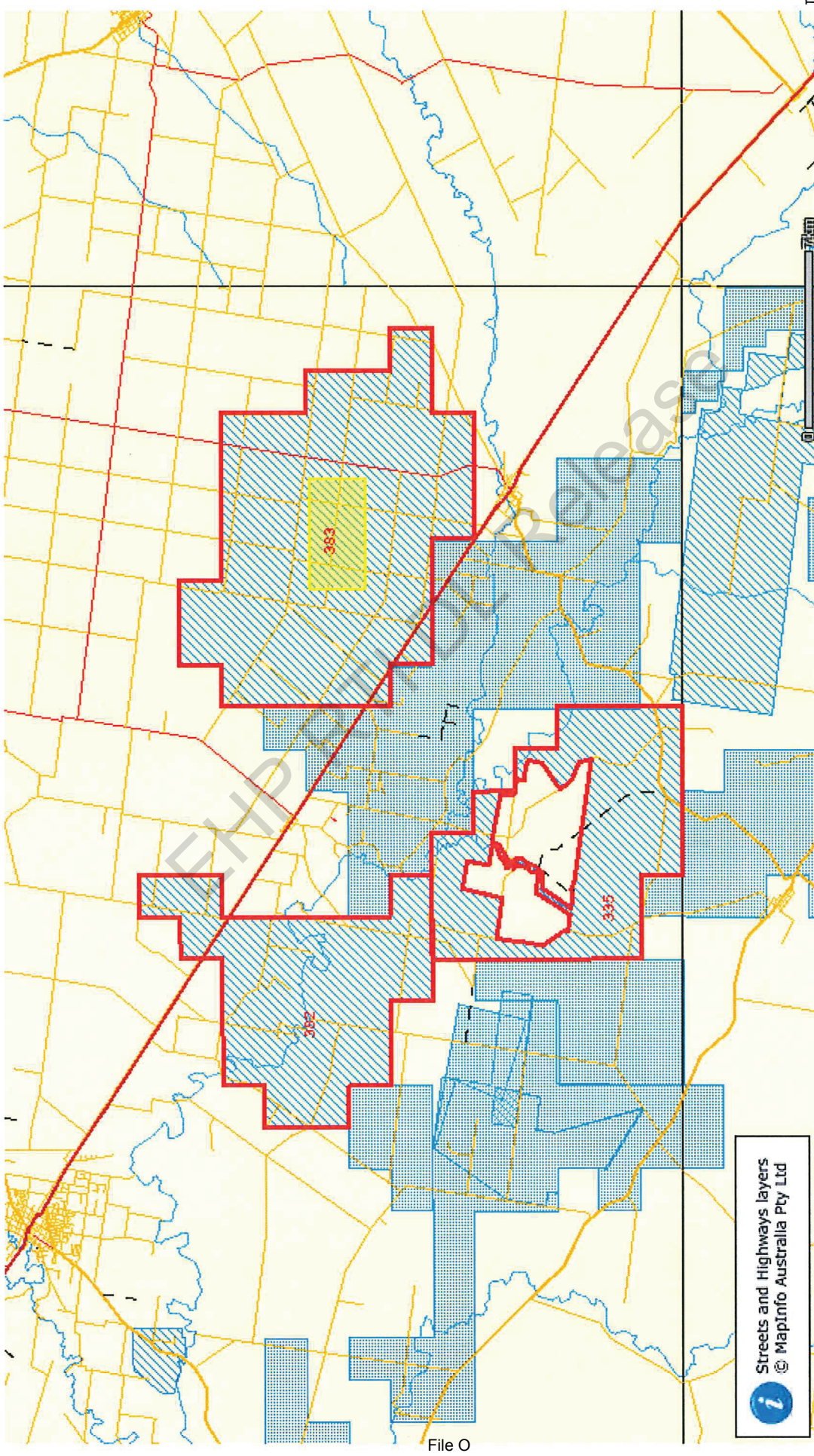


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EHP RTI DL Release



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Jalota Rajesh

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Sent: Friday, 23 November 2012 4:24 PM
To: Jalota Rajesh; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal
Attachments: 20121121_Final Corrections_Permit_SPDE04947312.docx.docx.docx

Hi Ruth & Rajesh,

After our discussion Rajesh, I tried to phone Ruth without success, and then I decided it might be easier to just send you both an e-mail and try to clearly set out what remains to be done to finalise the Ash Disposal DA.

I've just got back to Kogan Creek this afternoon from training that I had all this week in Brisbane so that is why I have not had a chance to get back to you earlier by phone.

Firstly, thank you for the updated permit.

I assume from your e-mail that you are happy to make all the changes we requested in the Attachment to my e-mail of 7.49 am on Wednesday 21 November, with the exception of what I think is a misunderstanding in relation to the agreed frequency of monitoring which is currently in conflict between Conditions (C6) and (C7).

Please be assured that CS Energy is not seeking any change to the frequency in the monitoring from the original DA which was quarterly for standing water level, and six monthly for the other remaining parameters.

But the way that the current 'as issued' Permit No. SPDE04947312 is written there is a conflict between Conditions (C6) & (C7). I am unable to track change so have proposed some slight modifications to the permit to clarify Conditions (C6) & (C7) that should resolve the issue to the satisfaction of both CSE & EHP. The following changes are as per my e-mail of 21 November but perhaps set out more clearly. In essence, there are 4 sets of changes required to Conditions (C6) and (C7) as follows:

CHANGE 1- Condition (C6).

(C6) Groundwater affected by the ash disposal activities, must be monitored at the locations and frequencies defined in Schedule C – Table 2.

CHANGE 2 – Change title of Table 2, and remove "Monitoring Frequency" column.

Schedule C – Table 2: Groundwater monitoring locations and frequency

Monitoring Point	Easting	Northing	Aquifer	Surface RL (m)	T.D. (m)
MB1 : North	280 500	7 020 251	Condamine Alluvium	311	~2
MB2 : North East	281 369	7 019 804	Condamine Alluvium	311	~1
MB6 : South	278 508	7 017 531	Walloon Coal Measures	319	~6
MB7 : South East	279 694	7 017 861	Walloon Coal Measures	319	~8
MB9 : Initial Ash (1)	276 154	7 018 215	Springbok Sandstone	315	~2
MB10 : Initial Ash (2)	276 808	7 018 029	Springbok Sandstone	313	~2
KC1273: Northern boundary of OPAC	280 349	7 019 254	Walloon Coal Measures	314	~3
KC1276: North east boundary of OPAC	281 317	7 019 566	Walloon Coal Measures	312	~2
KC1277: South west boundary of OPAC	281 399	7 019 910	Condamine Alluvium	309	~2
KC1278: Southern boundary of OPAC	281 073	7 019 785	Condamine Alluvium	308	~2

Note: Coordinate Datum Horizontal AMG Zone 56 & Vertical AHD

CHANGE 3 – Change title of Table 3, and change units in Table 3.

Schedule C – Table 3: Groundwater [insert “frequency”] and contaminant trigger levels.

Amend the following table by changing the Units for “Cl” from “Mg/L” to mg/L

Quality characteristics	Unit	Contaminant Range ² Alluvium	Contaminant Range ² Springbok	Contaminant Range ² Walloon Coal Measures
Na	mg/L	50-300	2500 - 6000	300 - 1800
SO ₄	mg/L	5-80	100 - 1000	<1 - 250
Al	mg/L	<0.01 – 0.15	<0.01 – 0.3	<0.01 – 0.04
Zn	mg/L	0.01 – 0.3	0.05 – 0.4	0.005 – 0.4
Cl	Mg/L	50 – 400	4000 – 10,000	100 - 3000
EC	µS/cm	280 – 1400	13,000 – 27,000	1500 - 7000
pH	unit	6.5 – 8	6 – 8	6.5 - 8
Standing water level (SWL)	m	NA ¹	NA ¹	NA ¹

¹ For SWL – trigger level for exceedence is non-pumping fluctuations greater than 2m for

² Range of values with acceptable upper and lower values of a stratum. Contaminant ranges specific aquifer groups, Table 2.

CHANGE 4 – Changes to sub-paragraphs in Condition (C7)

Refer to the minor changes to Condition (C7) as per pages 3 & 4 of 9 of the attachment to my e-mail of 21 November, which I have attached again for completeness.

Happy to discuss further if required.

Kind regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station

P: 07 4665 2589 | **M:** [REDACTED] | **E:** jboddice@csenergy.com.au

CS Energy Ltd

From: Jalota Rajesh [<mailto:Rajesh.Jalota@ehp.qld.gov.au>]

Sent: Friday, 23 November 2012 9:26 AM

To: DDICE Janice; Brown Ruth

Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah

Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Hi Janice,

The department has accepted to amend the Permit SPDE04947312 under agreement (as per section 376 of the Sustainable Planning Act 2009). EHP has agreed to amend most of the conditions except C6.

EHP would like to retain column (Monitoring Frequency) in Table 2: Groundwater monitoring locations and frequency.

The department has taken this decision on the following grounds –

In your amendment application you asked for the condition to state, (C3-1) Groundwater affected by the ash disposal activities must be monitored at the locations and frequencies defined in Schedule C Table 2. However no frequency column was added to that table by KCPS.

So the monitoring frequency was taken from Page 82 of the Ground water and Surface Water Monitoring Review which states "Quarterly Sampling for Groundwater Level"

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If you have any question about this please do not hesitate to contact me.

Kind regards!
Rajesh

Dr RAJESH JALOTA
Senior Environmental Officer
Southern Region
Environmental Services & Regulation
Department of Environment & Heritage Protection

173 Hume Street Toowoomba, Queensland 4350
PO Box 173 Toowoomba, Queensland 4350
P- 07 46994378; F- 07 4699 4399

From: BODDICE Janice [<mailto:JBODDICE@csenergy.com.au>]

Sent: Wednesday, 21 November 2012 7:49 AM

To: Jalota Rajesh; Brown Ruth

Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au

Subject: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Dear Ruth

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One of the most significant conflicts is in Schedule C where a column for monitoring frequency has been added to Table 2 that now contradicts the agreed frequency stated in Table 3.

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It would be appreciated if these changes could be made and the permit re-issued.

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Note that I am currently away from Kogan Creek on a training course however I will try and get to any emails during breaks. I'll be back at Kogan Creek on Friday 23 November.

Regards

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station

P: 07 4665 2589 | M: [REDACTED] | E: j.boddice@csenergy.com.au

CS Energy Ltd

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EHP RTI DL Release

Jalota Rajesh

From: Brown Ruth
Sent: Monday, 26 November 2012 10:14 AM
To: Horton Sarah; Jalota Rajesh
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal
 Hi Sarah and Rajesh,

Just to let you know that the original DA for the ash disposal issued on 1 July 2005 has condition C3-5 stating "Groundwater must be monitored at the locations and frequencies defined in Schedule C – Table 2." The table lists the monitoring frequency as quarterly.

Then the second version of the DA issued on 27 July 2005 has the same condition as condition C3-3 stating "Groundwater monitoring must commence at locations defined in Schedule C – Table 2 twelve months prior to any waste disposal commencing." In this version table 2 has no monitoring frequency column.

You'd have to go back in the files and refer to the RSA for the amendment to find out why the condition was changed.

But the original DA did have the monitoring frequency as quarterly.

Ruth

Ruth Brown
 Principal Environmental Officer
 Environmental Services - Southern Region
 Department of Environment & Heritage Protection
 Ph: (07) 4699 4304

From: Horton Sarah
Sent: Monday, 26 November 2012 9:58 AM
To: 'BODDICE Janice'
Cc: 'HARTIGAN Roger'; 'MAPP Ivan'; 'peter@imems.com.au'; Jalota Rajesh; Brown Ruth
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Hi Janice

That's sounds fine – I understand now your request has not changed the frequency from the original DA.

Rajesh, can you please organise for the agreed changes to be made on your return from leave – happy to go through it with you if need be.

Thanks

Kind Regards
 Sarah

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Sent: Friday, 23 November 2012 4:44 PM
To: BODDICE Janice; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal
Importance: High

Hi Janice

I tried to contact on your office and later on mobile and left a message.

I discussed your phone message with Ruth and we decided to discuss this issue with our manager Ms Sarah Horton before committing to any change.

Thanks for your email (below), now I am understanding the whole issue (correct me if I am wrong) – "Till date you guys were monitoring water level 4 times a year but analyse water only twice a year and you are committed to do the same in future too."

Janice I am on leave for the next week so please remain in touch with my manager Ms Sarah Horton about this.

Kind regards!

Rajesh

Dr RAJESH JALOTA
 Senior Environmental Officer
 Southern Region
 Environmental Services & Regulation
 Department of Environment & Heritage Protection
 173 Hume Street Toowoomba, Queensland 4350
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Hi Ruth & Rajesh,

After our discussion Rajesh, I tried to phone Ruth without success, and then I decided it might be easier to just send you both an e-mail and try to clearly set out what remains to be done to finalise the Ash Disposal DA.

I've just got back to Kogan Creek this afternoon from training that I had all this week in Brisbane so that is why I have not had a chance to get back to you earlier by phone.

Firstly, thank you for the updated permit.

11/12/2012

RTI 14-158

File O

Page 51 of 57

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(C6) Groundwater affected by the ash disposal activities, must be monitored at the locations and frequencies defined in Schedule C – Table 2.

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Schedule C – Table 3: Groundwater [insert "frequency"] and contaminant trigger levels.

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Standing water level (SWL)	m	NA ¹	NA ¹	NA ¹	Quarterly

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Happy to discuss further if required.

Kind regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station
P: 07 4665 2581 M: [redacted] E: [redacted]@cseenergy.com.au
CS Energy Ltd

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Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah
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Ruth Brown
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To: BODDICE Janice; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal
Importance: High

Hi Janice

I tried to contact on your office and later on mobile and left a message.

I discussed your phone message with Ruth and we decided to discuss this issue with our manager Ms Sarah Horton before committing to any change.

Thanks for your email (below), now I am understanding the whole issue (correct me if I am wrong) – "Till date you guys were monitoring water level 4 times a year but analyse water only /ice a year and you are committed to do the same in future too."

Janice I am on leave for the next week so please remain in touch with my manager Ms Sarah Horton about this.

Kind regards!

Rajesh

Dr RAJESH JALOTA
 Senior Environmental Officer
 Southern Region
 Environmental Services & Regulation
 Department of Environment & Heritage Protection

173 Hume Street Toowoomba, Queensland 4350
 PO Box 173 Toowoomba, Queensland 4350
 P- 07 46994378; F- 07 4699 4399

From: BODDICE Janice [mailto:JBODDICE@csenergy.com.au]
Sent: Friday, 23 November 2012 4:24 PM
To: Jalota Rajesh; Brown Ruth
Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au
Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Hi Ruth & Rajesh,

After our discussion Rajesh, I tried to phone Ruth without success, and then I decided it might be easier to just send you both an e-mail and try to clearly set out what remains to be done to finalise the Ash Disposal DA.

I've just got back to Kogan Creek this afternoon from training that I had all this week in Brisbane so that is why I have not had a chance to get back to you earlier by phone.

Firstly, thank you for the updated permit.

I assume from your e-mail that you are happy to make all the changes we requested in the Attachment to my e-mail of 7.49 am on Wednesday 21 November, with the exception of what I think is a misunderstanding in relation to the agreed frequency of monitoring which is currently in conflict between Conditions (C6) and (C7).

Please be assured that CS Energy is not seeking any change to the frequency in the monitoring from the original DA which was quarterly for standing water level, and six monthly for the other remaining parameters.

But the way that the current 'as issued' Permit No. SPDE04947312 is written there is a conflict between Conditions (C6) & (C7). I am unable to track change so have proposed some slight modifications to the permit to clarify Conditions (C6) & (C7) that should resolve the issue to the satisfaction of both CSE & EHP. The following changes are as per my e-mail of 21 November but perhaps set out more clearly. In essence, there are 4 sets of changes required to Conditions (C6) and (C7) as follows:

CHANGE 1- Condition (C6).

(C6) Groundwater affected by the ash disposal activities, must be monitored at the locations and frequencies defined in Schedule C – Table 2.

CHANGE 2 – Change title of Table 2, and remove "Monitoring Frequency" column.

Schedule C – Table 2: Groundwater monitoring locations and frequency

Monitoring Point	Easting	Northing	Aquifer	Surface RL (m)	Total Depth (m)	Monitoring Frequency
MB1 : North	280 500	7 020 251	Condamine Alluvium	311	~24m	Quarterly
MB2 : North East	281 369	7 019 804	Condamine Alluvium	311	~16m	Quarterly
MB6 : South	278 508	7 017 531	Walloon Coal Measures	319	~64m	Quarterly
MB7 : South East	279 694	7 017 861	Walloon Coal Measures	319	~81m	Quarterly
MB9 : Initial Ash (1)	276 154	7 018 215	Springbok Sandstone	315	~24m	Quarterly
MB10 : Initial Ash (2)	276 808	7 018 029	Springbok Sandstone	313	~21m	Quarterly
KC1273: Northern boundary of OPAC	280 349	7 019 254	Walloon Coal Measures	314	~30m	Quarterly
KC1276: North east boundary of OPAC	281 317	7 019 566	Walloon Coal Measures	312	~24m	Quarterly
KC1277: South west boundary of OPAC	281 399	7 019 910	Condamine Alluvium	309	~24m	Quarterly
KC1278: Southern boundary of OPAC	281 073	7 019 785	Condamine Alluvium	308	~24m	Quarterly

Note: Coordinate Datum Horizontal AMG Zone 56 & Vertical AHD

CHANGE 3 – Change title of Table 3, and change units in Table 3.

Schedule C – Table 3: Groundwater [insert "frequency"] and contaminant trigger levels.

Amend the following table by changing the Units for "Cl" from "Mg/L" to mg/L

Quality characteristics	Unit	Contaminant Range ² Alluvium	Contaminant Range ² Springbok	Contaminant Range ² Walloon Coal Measures	Monitoring Frequency
Na	mg/L	50-300	2500 - 6000	300 - 1800	Twice yearly
SO ₄	mg/L	5-80	100 - 1000	<1 - 250	Twice yearly
Al	mg/L	<0.01 – 0.15	<0.01 – 0.3	<0.01 – 0.04	Twice yearly
Zn	mg/L	0.01 – 0.3	0.05 – 0.4	0.005 – 0.4	Twice yearly
Cl	Mg/L	50 – 400	4000 – 10,000	100 - 3000	Twice yearly
EC	µS/cm	280 – 1400	13,000 – 27,000	1500 - 7000	Twice yearly
pH	unit	6.5 – 8	6 – 8	6.5 - 8	Twice yearly
Standing water level (SWL)	m	NA ¹	NA ¹	NA ¹	Quarterly

¹ For SWL – trigger level for exceedence is non-pumping fluctuations greater than 2m for bores listed in Table 2.

² Range of values with acceptable upper and lower values of a stratum. Contaminant ranges apply to bores in specific aquifer groups, Table 2.

CHANGE 4 – Changes to sub-paragraphs in Condition (C7)

Refer to the minor changes to Condition (C7) as per pages 3 & 4 of 9 of the attachment to my e-mail of 21 November, which I have attached again for completeness.

Happy to discuss further if required.

Kind regards

Janice

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station

P: 07 46625591 | E: j.boddice@csenergy.com.au

CS Energy Ltd

From: Jalota Rajesh [mailto:Rajesh.Jalota@ehp.qld.gov.au]

Sent: Friday, 23 November 2012 9:26 AM

To: BODDICE Janice; Brown Ruth

Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au; Horton Sarah

Subject: RE: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Hi Janice,

The department has accepted to amend the Permit SPDE04947312 under agreement (as per section 376 of the Sustainable Planning Act 2009). EHP has agreed to amend most of the conditions except C6.

EHP would like to retain column (Monitoring Frequency) in Table 2: Groundwater monitoring locations and frequency. The department has taken this decision on the following grounds –

In your amendment application you asked for the condition to state, (C3-1) Groundwater affected by the ash disposal activities must be monitored at the locations and frequencies defined in Schedule C Table 2. However no frequency column was added to that table by KCPS.
So the monitoring frequency was taken from Page 82 of the Ground water and Surface Water Monitoring Review which states "Quarterly Sampling for Groundwater Level"

As per your second enquiry about ENCD00281405, a new permit SPDE04917312 was issued on 12 November 2012 and sent to you. If you have not received that then we can send another copy to you.

If you have any question about this please do not hesitate to contact me.

Kind regards!
 Rajesh

Dr RAJESH JALOTA
 Senior Environmental Officer
 Southern Region
 Environmental Services & Regulation
 Department of Environment & Heritage Protection

173 Hume Street Toowoomba, Queensland 4350
 PO Box 173 Toowoomba, Queensland 4350
 P- 07 46994378; F- 07 4699 4399

From: BODDICE Janice [mailto:JBODDICE@csenergy.com.au]

Sent: Wednesday, 21 November 2012 7:49 AM

To: Jalota Rajesh; Brown Ruth

Cc: HARTIGAN Roger; MAPP Ivan; peter@imems.com.au

Subject: Administrative Corrections Required to EHP Permit SPDE 0494 7312 - Aberdare Collieries - Kogan Creek Ash Disposal

Dear Ruth

Firstly, CS Energy received the amended IPDE 00173405A11 permit by Registered Mail on 14 November 2012. It was issued as EHP Permit SPDE 04947312 with approval date of 8 November 2012. We have now completed checking the issued version against the requested changes, and it has been noted that many conditions have been changed through either loss of some of the words from the original 2005 approval or through slightly changed wording which now conflicts with other conditions. Many of these changes were to conditions beyond the scope of those agreed and submitted to EHP in relation to groundwater monitoring.

One of the most significant conflicts is in Schedule C where a column for monitoring frequency has been added to Table 2 that now contradicts the agreed frequency stated in Table 3.

We have been through the 8 November document carefully and compared it with the 2005 original approval and the changes requested in our submission. We have listed the discrepancies in the attached word document. The yellow highlighted text is where words have been lost or changed from the original that changes the meaning. The red highlights are some suggested minor changes that were not noted last time, but would help clarify a condition.

It would be appreciated if these changes could be made and the permit re-issued.

Secondly, we have yet to receive any update on our concurrent submission to change existing approval ENCD 00281405 for the Power Station. If the changes to this approval have yet to be finalised and issued, we request that where the same condition is proposed for amendment to ENCD 00281405 as has been made to SPDE 04947312, the condition be updated to the wording proposed in the attached list of discrepancies.

We would be happy to receive a final draft of the proposed amendments to approval ENCD 00281405 for the Power Station before it is issued for final checking if that were still possible.

Note that I am currently away from Kogan Creek on a training course however I will try and get to any emails during breaks. I'll be back at Kogan Creek on Friday 23 November.

Regards

Janice Boddice | Environmental Coordinator | Kogan Creek Power Station

P: 07 4665 2589 M: 07 4665 2589 E: JBoddice@csenergy.com.au

CS Energy Ltd

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Notice

Addition, change or cancellation to a condition of a development approval

This notice is issued by the administering authority pursuant to section 378 of the Sustainable Planning Act 2009 and section 73C of the Environmental Protection Act 1994.

Aberdare Collieries Proprietary Limited
CS Energy
PO Box 2227
FORTITUDE VALLEY BC QLD 4006

Our reference: EHP Project No. 260990

Re: Change to conditions of a development approval

1. Details of the development approval for the original application

Applicant: Aberdare Collieries Proprietary Limited

Assessment manager ref: Nil – EHP is assessment manager

Date application made or referred to the administering authority: 10 December 2012

Permit Applied For	Permit Number	Decision
Development Approval under Sustainable Planning Act	SPDE04947312	Granted

Property/location description(s): Banana Bridge Road, BRIGALOW QLD 4412 (Lot1&2 on DY187, Lot 11 on DY61, Lot26 on DY374, Lot 28 on DY275, Lot 34 on DY604, Lot 7 on RP176345)

Date of decision for the original application and development approval: ... December 2012

2. The administering authority has decided to change conditions of development approval SPDE04947312 on 20 December 2012.

3. The grounds for changing development conditions are outlined below.

- a. The registered operator for the development approval has requested in writing to the change.

4. The facts and circumstances forming the basis for the grounds are as follows:

Addition, change or cancellation to a condition of a development approval

- a. The client requested to make changes in the development approval via email dated 21 November 2012 and 23 November 2012.
5. The changed condition or cancellation will take effect from the day the notice is given to the owner of the land.

sch4 - Personal information

Delegate

Sarah Horton
Department of Environment and Heritage Protection
20 December 2012

Enquiries

Rajesh Jalota
Department of Environment and Heritage Protection
173, Hume Street Toowoomba QLD 4350
PO Box 731, Toowoomba QLD 4350
Phone: 07 4699 4378
Fax: 07 4699 4399
Email: Rajesh.Jalota@ehp.qld.gov.au

Attachment(s)

Permit Number: SPDE04947312
Information Sheet – Appeals – *Sustainable Planning Act 2009* (extract from the *Sustainable Planning Act 2009*)