

Date : 10/07/2020 8:45:00 AM
From : "COPP Rachel"
To : "SELLARS Amelia"
Subject : FW: ESR Alert: Arrow Energy Hopelands Project expansion
Attachment : image001.png;image003.png;image004.png;image005.png;

Morning!

FYI – the alert that went up.



Rachel Copp
Team Leader
Energy, Extractive and Southwest Compliance
Department of Environment and Science

P 07 3330 5585
Level 7, 400 George St, Brisbane QLD 4000
GPO Box 2454, Brisbane QLD 4001

From: BIRCH Kerynne <Kerynne.Birch@des.qld.gov.au>
Sent: Thursday, 9 July 2020 4:37 PM
To: MACKAWAY Clancy; COPP Rachel
Subject: FW: ESR Alert: Arrow Energy Hopelands Project expansion

FYI Team.



Kerynne Birch
Director, Energy and Extractive Resources Assessment
Environmental Services and Regulation
Department of Environment and Science

P 07 3330 6016
Level 7, 400 George Street, Brisbane QLD
GPO Box 2454, Brisbane QLD 4001

Chat with me on Teams!

From: BURGESS-DEAN Rachel <Rachel.Burgess-Dean@des.qld.gov.au>
Sent: Thursday, 9 July 2020 4:24 PM
To: DARVALL David; BIRCH Kerynne; MITCHELL Ian; SKENAR Chris
Subject: FW: ESR Alert: Arrow Energy Hopelands Project expansion

FYI

From: ESR <ESR@des.qld.gov.au>
Sent: Thursday, 9 July 2020 4:22 PM
To: Media Unit; MERRICK Jamie; LAWRENCE Rob; TRACEY Alena; MACGROARTY Robynne; TONES Peter; TONES Peter; Hannah Jackson; 'Angus.Sutherland@ministerial.qld.gov.au'; 'Megan.Surawski@ministerial.qld.gov.au'; 'Debbie.Turner@ministerial.qld.gov.au'
Cc: ESR Snr Mgt; MORRISON Anthony; LOVEDAY Chris; ESR
Subject: ESR Alert: Arrow Energy Hopelands Project expansion

ALERT NAME:

- Arrow Energy Hopelands Project expansion

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopelands Project environmental authority (EA).
- The Hopelands Project is located in close proximity to the former Linc Energy site (the Linc site) (Lot 40 DY85). The Linc site is located within (but excised from) PL253.
- On 22 June 2020, the Department of Environment and Science (DES) met Arrow to discuss the proposed EA amendments.
- At this meeting, and following review of draft application documents, it was identified that:
 - the amendment involves the addition of 280 gas wells (from current authorisation of six gas wells); 440km gathering pipelines; and impacts to environmentally sensitive areas; and
 - the groundwater information primarily focuses on groundwater contamination at the former Linc site, and lacks information pertaining to the impacts of the proposed expansion activity on other groundwater environmental values, such as drawdown and impacts to groundwater dependent ecosystems.

- A thorough technical review of the draft groundwater information could not be carried out prior to formal submission of the application, however, comments were provided to Arrow for their consideration.
- Based on DES's understanding of the contamination at the Linc Energy site and the location of neighbouring water bores, it is likely that contaminants will move beyond the Linc Energy site.
- DES has a number of concerns with the proposed amendments including, appropriateness of the groundwater model and mobilisation and contaminant migration from the Linc site.
- DES will review the EA amendment application to determine whether the application is valid. If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

RISKS & RISK LEVEL:

- Risk level – High
- It is highly likely that the proposed expansion will generate significant community concern and media interest due to the proximity to the Linc site.
- There is significant community concern around the public health and environmental impacts caused by CSG activities around the former Linc site.

PLANNED ACTIONS – (What is going to happen?)

- DES will review the EA amendment application to determine whether the application is valid.
- If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

CONSULTATION WITH MEDIA TEAM:

- Media have been consulted and advised a media statement is not required at this stage.
- Media will be engaged as this matter progresses as a holding statements and Questions and Answers will be developed as required.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean
- Phone number: (07) 3330 5613
- Division: Environmental Services and Regulation

END

Date : 17/07/2020 2:54:55 PM
From : "BIRCH Kerynne"
To : "BURGESS-DEAN Rachel"
Cc : "MACKAWAY Clancy" , "COPP Rachel" , "SELLARS Amelia"
Subject : FW: Updated ESR Alert: Arrow Energy Hopelands Project expansion

Hi Rachel, For progression please.

- On **20 July 2020** DES will make an assessment level decision, determining that the application is a major amendment, requiring public notification after an information request period.
- DES's Community Engagement team continue to be consulted concerning communication with key landholder's and progress of this application.

ALERT NAME:

- Arrow Energy Hopelands Project expansion

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopelands Project environmental authority (EA).
- The Hopelands Project is located in close proximity to the former Linc Energy site (the Linc site) (Lot 40 DY85). The Linc site is located within (but excised from) PL253.
- On 22 June 2020, the Department of Environment and Science (DES) met Arrow to discuss the proposed EA amendments.
- At this meeting, and following review of draft application documents, it was identified that:
 - the amendment involves the addition of 280 gas wells (from current authorisation of six gas wells); 440km gathering pipelines; and impacts to environmentally sensitive areas; and
 - the groundwater information primarily focuses on groundwater contamination at the former Linc site, and lacks information pertaining to the impacts of the proposed expansion activity on other groundwater environmental values, such as drawdown and impacts to groundwater dependent ecosystems.
- A thorough technical review of the draft groundwater information could not be carried out prior to formal submission of the application, however, comments were provided to Arrow for their consideration.
- Based on DES's understanding of the contamination at the Linc Energy site and the location of neighbouring water bores, it is likely that contaminants will move beyond the Linc Energy site.
- DES has a number of concerns with the proposed amendments including, appropriateness of the groundwater model and mobilisation and contaminant migration from the Linc site.
- DES will review the EA amendment application to determine whether the application is valid. If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

RISKS & RISK LEVEL:

- Risk level – High
- It is highly likely that the proposed expansion will generate significant community concern and media interest due to the proximity to the Linc site.
- There is significant community concern around the public health and environmental impacts caused by CSG activities around the former Linc site.

PLANNED ACTIONS – (What is going to happen?)

- DES will review the EA amendment application to determine whether the application is valid.
- If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

CONSULTATION WITH MEDIA TEAM:

- Media have been consulted and advised a media statement is not required at this stage.
- Media will be engaged as this matter progresses as a holding statements and Questions and Answers will be developed as required.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean
- Phone number: (07) 3330 5613
- Division: Environmental Services and Regulation

END

Date : 25/03/2021 4:57:47 PM
From : "MACKAWAY Clancy"
To : "BIRCH Kerynne"
Cc : "SELLARS Amelia" , "COPP Rachel"
Subject : ESR Alert: Arrow Energy Hopelands Project expansion
ALERT NAME:

- Arrow Energy Hopelands Project expansion

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopelands Project environmental authority (EA).
- The Hopelands Project is located in close proximity to the former Linc Energy site (the Linc site) (Lot 40 DY85). The Linc site is located within (but excised from) PL253.
- In February 2021, the Department of Environment and Science (DES) contracted RDM Hydro Pty Ltd to undertake an independent review of Arrow's proposal (the report).
- The report considers whether there is a risk that the proposal could cause contaminant migration from the former Linc Energy site and provides consideration of possible mitigation measures to reduce this risk.
- To enable natural justice DES will release the report to the public submitters and Arrow for review and comment. Comments in relation to the report will be accepted by DES until 8 April 2021.
- DES will provide the report to the submitters and Arrow on Friday 26 March 2021.
- DES will meet with representatives from Arrow on Tuesday 30 March 2021 to discuss all outstanding matters relating to the EA application including; groundwater, noise and prescribed environmental matters.
- A decision on the application is due by 15 April 2021.

RISKS & RISK LEVEL:

- Risk level – High
- The proposed expansion has generated significant community concern and media interest due to the proximity to the Linc site.
- There is potential that Arrow may make representations to senior departmental staff on the lack of transparency in engaging an independent review of their proposal.

PLANNED ACTIONS – (What is going to happen?)

- DES will provide the report to the submitters and Arrow on Friday 26 March 2021.
- DES will meet with representatives from Arrow on Tuesday 30 March 2021 to discuss all outstanding matters relating to the EA application.

CONSULTATION WITH MEDIA TEAM:

- Media has been engaged, as this matter progresses a holding statement and Questions and Answers will be developed as required.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean
- Phone number: 14 - Personal inform
- Division: Environmental Services and Regulation

END

Date : 14/05/2021 3:02:34 PM

From : "BIRCH Kerynne"

To : "MACKAWAY Clancy" , "COPP Rachel" , "SELLARS Amelia"

Subject : FW: UPDATE: ESR ALERT: Arrow Energy Hopelands Project expansion

Attachment : image001.png;image003.png;image004.png;

FYI Team.



Kerynne Birch
Director, Energy and Extractive Resources Assessment
Environmental Services and Regulation
Department of Environment and Science

P - Personal info
Level 7, 400 George Street, Brisbane QLD
GPO Box 2454, Brisbane QLD 4001

From: BURGESS-DEAN Rachel <Rachel.Burgess-Dean@des.qld.gov.au>

Sent: Friday, 14 May 2021 2:05 PM

To: ESR

Cc: MCKEAY Jackie; BIRCH Kerynne

Subject: FW: UPDATE: ESR ALERT: Arrow Energy Hopelands Project expansion

Further alert update:

- Arrow requested a decision date extension (to 15 April 2021) to provide time to further consider the RDM Hydro Pty Ltd Report and address remaining environmental matters raised by DES.
- On 29 April 2021, DES received Arrow's response to these matters which did not provide sufficient detail regarding noise impacts or groundwater measures to mitigate the potential for contaminant migration from the former Linc Energy site.
- On 14 May 2021, Arrow requested an extension by agreement of the decision due date until **30 November 2021**. Arrow have requested the extension to work on the outstanding matters raised by DES.
- On **17 May 2021**, DES will issue Arrow with written agreement to the extension of the decision date until **30 November 2021**.
- DES will continue to liaise with Arrow regarding the application.

From: ESR <ESR@des.qld.gov.au>

Sent: Tuesday, 13 April 2021 10:14 AM

To: MERRICK Jamie; TRACEY Alena; DLO DES; TONES Peter; Media DES; HANSON Anna; GRANT Andrea; STEELE Mary; SENGERS Nathalie; Nick Heath; danielle.shankey@ministerial.qld.gov.au; clare.manton@ministerial.qld.gov.au; sue.lappeman@ministerial.qld.gov.au

Cc: ESR; ESR Snr Mgt; LAWRENCE Rob; MCKEAY Jackie; Corro DES ESR EESC

Subject: UPDATE: ESR ALERT: Arrow Energy Hopelands Project expansion

Good morning,

Please see update to the alert below.

- On 8 April 2021, Arrow requested a 20 business day extension to the decision due date.
- On **15 April 2021**, a notice of the extension will be issued to Arrow.
- The revised decision date is 17 May 2021.
- DES received six submissions (from public submitters) on the RDM Hydro Pty Ltd Report.

Kind regards,



Lindsay Hope
Senior Program Officer
Office of the Deputy Director-General
Environmental Services and Regulation
Department of Environment and Science

P 07 3330 5535
E lindsay.hope@des.qld.gov.au
Level 7, 400 George Street
GPO Box 2454 Brisbane QLD 4001

From: ESR <ESR@des.qld.gov.au>

Sent: Friday, 26 March 2021 10:23 AM
21-452

File A

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To: MERRICK Jamie; TRACEY Alena; DLO DES; TONES Peter; Media DES; HANSON Anna; GRANT Andrea; STEELE Mary; Nick Heath;
sue.lappeman@ministerial.qld.gov.au; danielle.shankey@ministerial.qld.gov.au; clare.manton@ministerial.qld.gov.au
Cc: ESR; ESR Snr Mgt; LAWRENCE Rob; MCKEAY Jackie; Corro DES ESR EESC
Subject: ESR ALERT: Arrow Energy Hopelands Project expansion

ALERT NAME:

- Arrow Energy Hopelands Project expansion

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopelands Project environmental authority (EA), which is located in close proximity to the former Linc Energy site.
- In February 2021, the Department of Environment and Science (DES) contracted RDM Hydro Pty Ltd to undertake an independent review of Arrow's proposal (the report).
- The report considers whether there is a risk that the proposal could cause contaminant migration from the former Linc Energy site and provides consideration of possible mitigation measures to reduce this risk.

PLANNED ACTIONS – (What is going to happen?)

- On **26 March 2021**, DES will release the report to the public submitters and Arrow for review and comment. Comments in relation to the report will be accepted by DES until **8 April 2021**.
- DES will contact Arrow to discuss the report and how it relates to the assessment process prior to its provision.
- DES will meet with representatives from Arrow on **30 March 2021** to discuss all outstanding matters relating to the EA application including groundwater, noise and prescribed environmental matters. A decision on the application is due by **15 April 2021**.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean, Executive Director, Energy, Extractive and Southwest Compliance
- Phone number: ch4 - Personal informa
- Division: Environmental Services and Regulation

END

Date : 14/05/2021 1:08:37 PM
From : "MACKAWAY Clancy"
To : "BIRCH Kerynne"
Cc : "COPP Rachel" , "SELLARS Amelia"
Subject : Hopeland ESR Alert - Updated
ALERT NAME:

- Arrow Energy Hopeland Project expansion

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopeland Project environmental authority (EA), which is located in close proximity to the former Linc Energy site.
- In February 2021, the Department of Environment and Science (DES) contracted RDM Hydro Pty Ltd to undertake an independent review of Arrow's proposal (the report).
- The report considers whether there is a risk that the proposal could cause contaminant migration from the former Linc Energy site and provides consideration of possible mitigation measures to reduce this risk.
- On 26 March 2021, DES released the report to the public submitters and Arrow for review and comment.
- DES met with representatives from Arrow on 30 March 2021 to discuss all outstanding matters relating to the EA application including groundwater, noise and prescribed environmental matters.
- On 8 April 2021, Arrow requested a 20 business day extension to the decision date until **17 May 2021** to further consider the report and address remaining matters.
- On 29 April 2021, DES received Arrow's response.
- Arrow's response did not provide sufficient detail regarding noise impacts or groundwater measures to mitigate the potential for contaminant migration from the former Linc Energy site.
- On 12 May 2021, DES were informed by Arrow of the intention to apply for a further extension.
- On 14 May 2021, DES received formal written request of Arrow's application for an extension by agreement on the decision stage until **30 November 2021**.

PLANNED ACTIONS – (What is going to happen?)

- DES will issue Arrow with written agreement on 17 May 2021 for a extension on the decision date until **30 November 2021**.
- DES will continue to liaise with Arrow regarding the application.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean, Executive Director, Energy, Extractive and Southwest Compliance
- Phone number: b4 - Personal infor
- Division: Environmental Services and Regulation

END

Date : 20/01/2021 1:25:31 PM

From : "BIRCH Kerynne"

To : "BURGESS-DEAN Rachel"

Cc : "MACKAWAY Clancy"

Subject : FW: points on Arrow

Attachment : image001.png;image003.png;

Hi RBD, all additions are in a different text colour or highlighted.

Cheers

Kerynne

Arrow summary points:

- Arrow Energy have applied for an amendment to their environmental authority related to PL253 (the Hopeland Project).
- The Hopelands Project is located in close proximity to the former Linc Energy site (the Linc site) (Lot 40 DY85). The Linc site is located within (but excised from) PL253.
- The EA for PL253 currently authorises six gas wells.
- The EA amendment application involves the addition of 280 gas wells; 440km gathering pipelines; and impacts to environmentally sensitive areas.
- DES requested extra information from Arrow on a range of matters including waste management, impacts to biodiversity and offsets, blasting, subsidence and groundwater.
- In relation to groundwater, DES requested clarification on the limitations and assumptions of the groundwater model provided by Arrow, to understand the risk of migration of contaminants from the Linc site.
- In 2018 Arrow applied for a new EA for the SGP South EA which covers PL493. PL493 is located North East of PL253. The SGP South EA authorises 70 production wells on PL493, provided none are located within 10kms of the Linc site. Well stimulation (hydraulic fracturing, or fracking) is not authorised. The condition limiting the location of production wells on PL493 was included as this condition ensures that the field development plan proposed by Arrow in the application is implemented. The revised field development plan significantly reduced the number of wells that were planned to be drilled on PL493 as well as proposing the implementation of a separation distance of approximately 10km between any CSG production wells and the former Linc site. The revised field development plan was supported by a groundwater model and assessment which indicated that the proposed activity would not adversely affect the existing groundwater contamination on the former Linc UCG site (Lot 40 DY85). Arrow may apply to DES with additional information to support production activities in this area and DES will consider this during a statutory EA amendment assessment process.

Timeline for PL253:

- On 6 July 2020, DES received an application to amend their environmental authority (EA) for PL253 near Hopelands.
- On 20 July 2020, DES made an assessment level decision, determining that the application is a major amendment, and requiring public notification (after an information request period).
- On 27 August 2020, DES issued Arrow with an information request for its EA amendment application.
- On 22 December 2020, Arrow responded to the information request.
- On 18 January 2021, Arrow publicly notified that their EA amendment application was available for public submission.
- On 15 February 2021, public submissions will close.
- By 22 February 2021, Arrow must submit a declaration of compliance with public notification requirements.
- If DES determines that Arrow is compliant with public notification requirements, the decision stage begins.
- DES will have 20bd to assess the application.
- DES has the ability to extend the decision period by 20bd once without Arrow's agreement.
- Any further extensions will require agreement by Arrow.

Timeline for PL493:

- There is no current EA amendment application relating to PL493.
- The public notification stage for the new EA application mentioned above concluded on 16 November 2018.
- Two submissions from members of the public were received and considered in the assessment of the application.
- A decision to approve EA0001613 was made on 14 December 2018.

Similar conditions prohibiting production activities.

- QGC hold an EA within proximity of the Carbon UCG site (EPPG00797813)
- At the request of QGC, in 2018 the department and QGC agreed to the inclusion of a condition prohibiting drilling activities within a 2km buffer of the Carbon Energy UCG site (located 45km West of Dalby).

<https://apps.des.qld.gov.au/env-authorities/pdf/eppg00797813.pdf>



A/Executive Director
Energy, Extractive and Southwest Compliance
Environmental Services and Regulation
Department of Environment and Science

M: - Personal info
Level 7, 400 George Street, Brisbane Q 4000
GPO Box 2454 Brisbane Q 4000

Date : 8/07/2020 2:57:07 PM
From : "MACKAWAY Clancy"
To : "COPP Rachel"
Subject : FW: ESR Alert: Arrow Energy Hopelands Project expansion

Can you please see the questions below?

From: BURGESS-DEAN Rachel <Rachel.Burgess-Dean@des.qld.gov.au>
Sent: Wednesday, 8 July 2020 2:56 PM
To: BIRCH Kerynne
Cc: MACKAWAY Clancy
Subject: ESR Alert: Arrow Energy Hopelands Project expansion
Importance: High

Kerynne

I just checked with ODDG and the original Alert did not progress past DDG – so we have to do a new versus update alert.

I have endeavoured to include your updates into the original alert – so as to have a fresh alert.

However can you review the yellow highlight. What I am wanting to check, is between our meeting on 22 June and the application on 6 July – was feedback given to Arrow re their pending application, as below we reference 'DES will require Arrow to provide an updated groundwater...'

If you could review the below in the context of it being the first/new alert that would be appreciated.

Cheers
Rachel

CUSTOMER DETAILS & LOCATION:

- Arrow CSG (Australia) Pty Ltd (Arrow)
- Petroleum Lease (PL) 253 environmental authority (EA) EA0001401

ISSUE/S – (What happened?):

- On 6 July 2020, Arrow submitted an amendment application to their existing Hopelands Project environmental authority (EA).
- The Hopelands Project is located in close proximity to the former Linc Energy Underground Coal Gasification (UCG) site (the Linc site) (Lot 40 DY85). The Linc site is located within (but excised from) PL253.
- The Hopelands Project currently authorises six gas production wells.
- On 22 June 2020, the Department of Environment and Science (DES) met Arrow to discuss the proposed EA amendments.
- The proposed amendments involve the addition of 280 gas wells; 440km gathering pipelines; and impacts to environmentally sensitive areas.
- As part of the meeting on the proposed amendment, Arrow presented material about the dewatering of wells close to the Linc site (closest proposed well is 1.3km from the Linc site), the flow of groundwater and the flow path and likely concentration of contaminants.
- Based on DES's understanding of the contamination at the Linc Energy site and the location of neighbouring water bores, it is likely that contaminants will move beyond the Linc Energy site.
- DES has a number of concerns with the proposed amendments including, appropriateness of the groundwater model and mobilisation and contaminant migration from the Linc site.
- Due to the proximity with the Linc site, DES will require Arrow to provide an updated groundwater model and findings relating to groundwater impacts to support the proposed expansion.
- DES will review the amendment application to determine whether the application is valid. If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

RISKS & RISK LEVEL:

- Risk level – High
- It is highly likely that the proposed expansion will generate significant community concern and media interest due to the proximity to the Linc site.
- There is significant community concern around the public health and environmental impacts caused by CSG activities around the former Linc site.

PLANNED ACTIONS – (What is going to happen?)

- DES will review the amendment application to determine whether the application is valid.
- If valid, DES will make an assessment level decision and determine whether public notification is required on or before **20 July 2020**.

CONSULTATION WITH MEDIA TEAM:

- Media have been consulted and advised a media statement is not required at this stage.
- Media will be engaged as this matter progresses as holding statements and frequently asked questions will be required.

CONTACT DETAILS:

- Name: Rachel Burgess-Dean
- Phone number: (07) 3330 5613
- Division: Environmental Services and Regulation

END

Checklist – to be deleted by ODDG before escalation past DDG.

Y Has the above information been approved/checked by the ED?

NA Has the Litigation been consulted if applicable?

X Has consultation occurred with other business centres if applicable? Officers from Toowoomba compliance, Technical Support and the UCG Team attended the pre-lodgement meeting.

X Is the Alert current/accurate?

X If the Alert is Risk level High or Extreme, has the DDG been notified verbally or via text?