

COSTS FOR REMEDIATION OF SITES CONTAINING COAL ASH REPOSITORIES

PUBLIC WORKS COMMITTEE

At Macquarie Room, Parliament House, Sydney, on Friday 16 October 2020

PRESENT

The Hon. Daniel Mookhey (Chair)

The Hon. Mark Banasiak (Deputy Chair)

Ms Abigail Boyd

The Hon. Sam Faraway

The Hon. Trevor Khan

The Hon. Tara Moriarty

QUESTIONS ON NOTICE

PETER BOYD, Governance and Assurance Manager, Dams Safety NSW

CHRIS SALKOVIC, Chief Executive Officer, Dams Safety NSW

QUESTION 1

The CHAIR: Before you do, do you mind going through the eight and identifying what is the risk rating by dam?

Mr SALKOVIC: Yes, sure. I can let you know the hazard rating for each of those dams. Bayswater ash at Muswellbrook is rated as significant. Colongra Creek ash at Doyalson is rated as significant. Eraring ash is rated as high A. Liddell is rated as high C. There is Liddell disposal and Liddell levee so that is also at a high C. Mannering Creek ash, which I understand is also known as Vales Point, is significant. Ravensworth at Singleton is significant. Sawyers Swamp Creek ash is high A.

Ms ABIGAIL BOYD: Where is Sawyers Swamp? That is familiar.

Mr SALKOVIC: Lithgow. Sawyers Swamp Creek, Lithgow.

The CHAIR: Sorry, what was the rating for that?

Mr SALKOVIC: That one is "high A".

Ms ABIGAIL BOYD: Is the Ravensworth one at Mount Piper?

Mr SALKOVIC: Ravensworth I have here as Singleton.

Ms ABIGAIL BOYD: Okay. In the past, have you ever had regulatory responsibility for Tallawarra? It has got three ash ponds. I am unsure as to whether one of them is a dam, but it is very close.

Mr SALKOVIC: It is currently not on our declared dams register. Whether it has been in the past, I will need to get back to you.

ANSWER

I am advised:

Our predecessor, Dams Safety Committee had regulatory oversight for Tallawarra Ash Dam No.2 up until 1988 when its prescription was revoked. I understand ash dam No.3 was never included under the dams safety regulatory framework because of its small size. No information is available on ash dam No.1.

QUESTION 2

THE CHAIR: Do you want to give us the societal risk calculation for each of the dams [For each of the eight ash dams listed previously]?

Mr BOYD: We do not have it at the moment, sorry. I do not think we have that with us, unfortunately.

The CHAIR: If it is possible to get it before the hearing ends, that would be most useful. Otherwise, would you be in a position to take that question on notice?

Mr BOYD: Sure.

Mr SALKOVIC: Sure.

ANSWER

I am advised:

Societal risk calculations for declared dams are carried out using a risk assessment technique called Frequency-number (F-N) diagrams. The key output is a risk position shown on a diagram and to determine if it is above the 'Safety Threshold' as described in Dams Safety Regulation 2019. Currently, of the eight coal ash dams we regulate, only one, Eraring, is believed to be above the safety threshold.

Many of the risk positions have been estimated based on engineering judgement and accepted by our predecessor Dams Safety Committee. All dam owners will be obligated to carry out a quantitative assessment of the societal risk rating for their dams from 1 November 2021 and have up to five years to complete from this date.

QUESTION 3

The CHAIR: Can you provide us on notice with a clear definition of that [societal risk] rating?

Mr SALKOVIC: Sure.

Mr BOYD: Absolutely.

ANSWER

I am advised:

Societal risk refers to societal concerns due to the occurrence of multiple fatalities in a single event. A detailed description of how it is calculated is contained in *Societal and Individual Risk Rating Methodology* published in Gazette No 137 of 8 November 2019.

QUESTION 4

Ms ABIGAIL BOYD: When we talk about the regulation of ash dams, and we have talked about the rating system in terms of the risk categories, is there a different category for ash dams or is it simply that they are regulated differently because of the different risk level that is put on them compared to a dam with water in it?

Mr SALKOVIC: No, the consequence rating and how risk assessments are done is consistent across ash dams, tailings dams, and water dams.

The CHAIR: How often do you do the rating?

Mr SALKOVIC: The regulation requires for a societal and individual risk rating once every five years.

THE CHAIR: When were the ratings that you just provided [For coal ash dams] completed? Or is it different per dam?

Mr SALKOVIC: The ratings that I gave were not the risk ratings, they were the actual hazard rating or the consequence rating. I need to get back to you on that exactly. It would be different points of time for different dams.

ANSWER

I am advised:

Consequence categories (or hazard ratings) for each dam were last reviewed on the following dates:

Bayswater Ash Dam - 2017

Colongra Creek Ash Dam - 2015

Eraring Ash Dam - 2016

Liddell Ash Levee - 2019

Liddell Ash Disposal Dam - 2018

Mannering Creek / Vales Point Ash Dam - 2019

Ravensworth Void 5 Ash Dam - 2017

Sawyers Swamp Creek Ash Dam - 2017

QUESTION 5

The CHAIR: Since the formation of Dams Safety NSW, have you been provided with any change to any of the risk ratings by any of the dam owners?

Mr SALKOVIC: We have. I am not sure if it extends to these coal ash dams, but there have been some changes.

The CHAIR: Other dams. Okay, but in respect to these dams, has Dams Safety NSW ever ordered an independent assessment to determine risk separate from the self-assessment?

Mr SALKOVIC: No, we have not.

Ms ABIGAIL BOYD: Why would that be? You have the discretion to conduct an independent audit of that assessment by the operator.

The CHAIR: Just to draw the distinction, you have got the right to audit the assessment and then provide your own independent assessment. Is that correct?

Mr SALKOVIC: That is right.

Ms ABIGAIL BOYD: In what circumstances would you be doing that?

Mr SALKOVIC: In what circumstances would we arrange to do our independent—

Ms ABIGAIL BOYD: When would you exercise that discretion? Is it ever done just randomly as a spot check?

Mr SALKOVIC: I guess it would be if our technical staff see that the rating that has been presented is not quite following the methodologies that they should be using.

Ms ABIGAIL BOYD: Does the operator appoint an external consulting firm, or something of that kind, who then provides that?

Mr SALKOVIC: There is a requirement for consequence ratings for extreme and high-hazard rating dams—that an independent body should be doing those.

Ms ABIGAIL BOYD: So, for example, Eraring.

Mr SALKOVIC: That is right, for Eraring.

The CHAIR: You used the term independent but my colleague asked you external. Is there a distinction between the two?

Mr SALKOVIC: It depends on when you say external—

The CHAIR: I think Ms Boyd was putting to you a scenario in which a dam owner would commission an external consultant to prepare the assessment on their behalf, as opposed to them paying for an independent body who would report to you, effectively, as a distinction. Are you able to explain which one you are referring to?

Mr SALKOVIC: The owner of the dam would have their design team, which could be made up of a dams engineering consultant to do the work and then they would also for those higher consequence category dams arrange for an independent external consultant to review that.

...

THE CHAIR: Perhaps on notice is it possible that you can identify who precisely was, for all of the high-risk category [dams], both the external firm retained to do the assessment in the first instance and the independent firm that was undertaken to review it?

Mr SALKOVIC: Sure. Yes. Certainly.

ANSWER

I am advised:

There are four ash dams that have a consequence category of High as listed below with names of external firms that last reviewed their categories:

- Eraring – Stantec
- Liddell disposal – Aurecon
- Liddell levee – Bashi & associates
- Sawyers Swamp creek - Aurecon

It should be noted that the requirement for consequence category to be reviewed by a competent person who has not been involved in the assessment process came into effect on 1 November 2019. Similarly, for the assessment to be carried out at least once every 15 years.

Eraring is the only dam that has had an independent review carried out on it by SMEC. Nevertheless, our predecessor Dams Safety Committee reviewed and verified current categories for the other above dams.

QUESTION 6 [Regarding closure of Myuna Bay Sport and Recreation Centre and Eraring Ash Dam]

The CHAIR: The dam owners all have a continuous disclosure obligation to you, do they not?

Mr SALKOVIC: I understand they do.

The CHAIR: And it is material, is it not, that they are saying that a recreational camp used by schoolchildren that is right behind the dam has to close because it is not safe—you would agree that is a material event.

Mr SALKOVIC: Yes.

The CHAIR: So was that reported to you in the part of them providing you that report or was that separate? Did the report notification that you received contain that recommendation?

Mr SALKOVIC: We did receive the report. I would need to get back to you on that.

ANSWER

I was made aware of Origin Energy's recommendation to the Office of Sport to close the Sports Centre separately through NSW Public Works Advisory, the agency engaged by Office of Sport to assist with engineering assessment work.

QUESTION 7

THE CHAIR: How much time prior to the decision to close [the Myuna Bay Sport and Recreation Centre] were you aware that that was at risk?

Mr SALKOVIC: I will need to come to you on that. I believe it was all within the same month but I need to confirm.

ANSWER

I was made advised on 8 March 2019 that there may be a possibility of an unacceptable risk level at the dam based on recent engineering assessment work carried out by the dam owner however this needed to be verified through an accepted risk assessment methodology commonly employed to dams.

QUESTION 8 – regarding Eraring Ash Dam closure of Myuna and order to undertake remedial works to dam

The CHAIR: You have just said, in layman's terms, that you validated the finding that it was unsafe. What corrective action did you order the dam owner to take?

Mr SALKOVIC: We directed them that they need to do remedial works immediately to the dam.

...

THE CHAIR: Have you given an order under the new Act?

Mr SALKOVIC: Yes, we have.

The CHAIR: When was that given?

Mr SALKOVIC: I would need to get back to you on that.

ANSWER

I would like to amend my evidence. No, Dams Safety NSW has not given an order under the new Act. However, Dams Safety NSW has been monitoring progress of corrective work being carried out and to date we are satisfied with progress being made against a schedule provided. This was confirmed as recently as last month on 24 September 2020 during a site visit by Dams Safety NSW officers.

QUESTION 9 - regarding Eraring Ash Dam, the closure of Myuna and order to undertake remedial works to dam

THE CHAIR: In the order that you gave under your new Act, how much time did you provide?

Mr SALKOVIC: I would need to confirm that.

ANSWER

I am advised:

An order has not been given however Dams Safety NSW is satisfied with Design and Construction progress being made to address risk by June 2022.

QUESTION 10 - regarding Eraring Ash Dam, the closure of Myuna and order to undertake remedial works to dam

The CHAIR: To the best of your knowledge, have they complied with the new order made under the new Act?

Mr SALKOVIC: I understand yes.

The CHAIR: According to the same time line?

Mr SALKOVIC: I need to confirm that.

ANSWER

I would like to amend my evidence. Dams Safety NSW has not given an order under the new Act. However, Dams Safety NSW has been monitoring progress of corrective work being carried out and to date we are satisfied with progress being made against a schedule provided. This was confirmed as recently as last month on 24 September 2020 during a site visit by Dams Safety NSW officers.

QUESTION 11

THE CHAIR: The dam owners have a continuous disclosure regime under your new Act, is that correct?

Mr BOYD: Yes.

The CHAIR: Did they have one under the previous Act, or is that not the case?

Mr BOYD: I am not sure.

Mr SALKOVIC: I am not sure.

ANSWER

I am advised:

The previous Act, the *Dams Safety Act 1978*, did not provide for continuous disclosure by dam owners to the Dams Safety Committee.

The Dams Safety Committee required prescribed dam owners to report on dam safety matters every five years.

QUESTION 12

THE CHAIR: How many [disclosures] have you received relating to ash dams, have you received any disclosures?

Mr SALKOVIC: To date, relating to ash dams, I would need to come back to you on that.

The CHAIR: On notice, if you can come back to us with a number, the time, who from and what it was about that would be really useful?

ANSWER

I am advised:

Under our new legislation since 1 November 2019 we have received one disclosure of a reportable incident that occurred on 16 July 2020 at Liddell ash dam. The incident involved the failure of a spillway for an internal ash placement cell. The main dam structure was unaffected by this failure.

QUESTION 13

THE CHAIR: On notice, are you in a position to provide us with any general information about your intention to increase your team and your expertise in terms of the regulation and enforcement of the Act in relation to ash dams?

Mr SALKOVIC: Sure.

ANSWER

I am advised:

We currently do not have plans to increase the team or expertise specifically in relation to ash dams. We are, however, currently increasing staff numbers and expertise in relation to auditing and engineering dam safety expertise which would consider all dam types including coal ash dams. We currently have 18 staff and plan to increase this number to about 23, supplemented with some specialist audit and engineering professional contractors.