LEGISLATIVE COUNCIL

QUESTIONS AND ANSWERS

No. 127

FRIDAY 1 NOVEMBER 2019

(The Questions and Answers Paper published for the first sitting day in each week will contain, by number and title, all unanswered questions, together with questions to which answers have been received on the previous sitting and any new questions. On subsequent days, new questions are printed, as are questions to which answers were received the previous day. Consequently the full text of any question will be printed only twice: when notice is given; and, when answered.)

Notice given on date shown

Publication of Questions	**Answer to be lodged by**
Q & A No. 112 (Including Question Nos 0616 to 0619)	01 November 2019
Q & A No. 113 (Including Question Nos 0620 to 0667)	04 November 2019
Q & A No. 114 (Including Question Nos 0668 to 0668)	05 November 2019
Q & A No. 115 (Including Question Nos 0669 to 0672)	06 November 2019
Q & A No. 116 (Including Question Nos 0673 to 0675)	07 November 2019
Q & A No. 117 (Including Question Nos 0676 to 0678)	08 November 2019
Q & A No. 118 (Including Question Nos 0679 to 0679)	11 November 2019
Q & A No. 119 (Including Question Nos 0680 to 0685)	12 November 2019
Q & A No. 120 (Including Question Nos 0686 to 0687)	13 November 2019
Q & A No. 121 (Including Question Nos 0688 to 0688)	14 November 2019
Q & A No. 122 (Questions—Nil)	-
Q & A No. 123 (Including Question Nos 0689 to 0689)	18 November 2019
Q & A No. 124 (Including Question Nos 0690 to 0698)	19 November 2019
Q & A No. 125 (Including Question Nos 0699 to 0701)	20 November 2019
Q & A No. 126 (Including Question Nos 0702 to 0709)	21 November 2019
Q & A No. 127 (Questions—Nil)	-

11 OCTOBER 2019

(Paper No. 112)

*616 WATER, PROPERTY AND HOUSING—WARATAH RIVULET, WORONORA DAM AND ASSOCIATED WATER MONITORING—Mr Primrose asked the Minister for Mental Health, Regional Youth and Women representing the Minister for Water, Property and Housing—

(1) With regard to the Waratah Rivulet, Woronora Dam and associated water monitoring:

(a) Who is responsible for testing of water quality along the Waratah Rivulet of the Woronora 'Special Area'?

(i) Who has access to the results of any such testing?

(ii) Are the results available to the public?

(iii) If not, why not?

(iv) If yes, where can the public access the results? If the results are on a webpage, please provide the specific url.

(b) How many points along the Waratah Rivulet are tested or monitored?

(i) What is the location of these testing or monitoring points? Please provide map location or GPS coordinates.

(ii) How frequently is any such testing or monitoring undertaken?

(c) Are records kept of any damage to the aquatic ecosystems along the Waratah Rivulet

(i) If so what is the nature of any such damage and

(ii) How can a report on any such damage be sourced?

(d) What is the process for successive longwall extraction plans being assessed and approved?

(i) Which department, agency, planning body, or statutory body are involved?

(ii) Under what provisions of which act or regulation or other statutory instrument are these decisions made?

(iii) Where and how can the public access information on each plan, the department or the Minister's assessment of the plan and the details of each approval?

(e) How has this decision-making process taken into account exceedances of conditions of consent in previously approved longwalls by the Metropolitan colliery in the Woronora 'Special Area', and what measures are taken so that the exceedances are not repeated in subsequent longwalls?

(i) How can the public have input into this decision making process?

(2) With regard to water drawn from the Woronora Dam for human consumption:

(a) What chemicals are currently added to the water to ensure its suitability for human consumption?

(b) Over the past 10 years, has the volume and ratio of any chemicals added to the water increased or decreased to ensure that the water continues to be fit for human consumption?

(i) If so, which chemicals have been increased or decreased in volume or ratio?

(ii) In what way has their use changed?

(c) How many complaints have been received regarding the water quality from Woronora Dam each year for the past 10 years?

(i) For each year since 2009, what are the 5 most common concerns raised?

(d) What tests are carried out to check the water as it enters the filtration system?

(e) On an annual basis since 2009, what quantity of metal contaminants are removed, such as iron and manganese oxide⁄oxyhydroxide precipitates, and dissolved aluminium, antimony, barium, cadmium, chromium, iron, lead, manganese and strontium?

(i) What is the annual cost, since 2009, of removing metal contaminants?

(f) At what locations across the Woronora Dam is water quality tested? Please provide map location or GPS coordinates.

(i) How frequently are these tests undertaken?

Answer—

(1)

(a) Peabody Energy Metropolitan Mine is required under their planning approval granted in 2009 to implement water quality monitoring along the Waratah Rivulet. The water monitoring is presented in the Catchment Monitoring Program and Water Management Plans prepared as part of longwall extraction plans. The results of monitoring are presented in Annual Review reports and six-monthly reports. The management plans and monitoring reports as well as independent environmental audit reports are available to the public on the company's website: https://www.peabodyenergy.com/Operations/Australia-Mining/New-South Wales-Mining/Metropolitan-Mine/Approvals,-Plans-Reports

(b) Surface water quality sampling has been conducted monthly since 2008/2010 at 10 sites. These are identified in the Metropolitan Mine 2018 Annual Review report. WaterNSW monitors in the Waratah Rivulet at Flatrock Crossing site E6131 . Routine monitoring has been conducted since August 2006. Site coordinates 150.943553936, -34.185792692 decimal degrees in GDA'94. Monthly grab samples are collected for analysis, plus an autosampler is present on site which triggers water sample collection during high flows. There are in situ instruments located at this site which provide near real time data on key water quality parameters.

(c) The Annual Review reports prepared by Peabody Energy present monitoring results for aquatic ecosystems along the Waratah Rivulet including riparian vegetation monitoring and aquatic biota and their habitats. The annual review reports are available to the public for download from the company's website cited above.

(d) and (e) These parts of the question are for the Minister for Planning and Public Spaces to answer.

(2)

(a) All treatment processes including chemical additions are continuously monitored in accordance with the Quality Management System to meet the Australian Drinking Water Guidelines. During the coagulation process, lime, carbon dioxide, ferric chloride, cationic polymer and non-ionic polymer (L T20) are added and then removed during filtration. After which small amounts of chlorine and ammonia are added for final disinfection, then Fluoride is added to meet the water quality requirements as set by NSW Health.

(b) The volume and ratio of chemicals used varies depending on rainfall and dam take-off point, which can impact on alkalinity, total and calcium hardness, apparent colour and turbidity.

(i) The ferric chloride, cationic polymer dosing and ratio will change mostly because they are the chemicals used to reduce the colour and turbidity of the raw water. For high turbidity and/or high colour water, the ferric chloride and cationic polymer use will increase. The lime and carbon dioxide dosing will increase after rainfall and decrease as the dam level falls as the alkalinity and hardness will increase due to evaporation. There has not been any single increasing or decreasing trend in chemical usage rather it fluctuates with raw water quality as described above.

(ii) There has been no overall change in chemical usage other than the fluctuations described in part (i).

(c) (Answer includes table - please contact the Procedure Office on 9230 2431 to request a copy)

(i) Sydney Water has 4 major water quality complaint categories - discoloured water, taste and odour, health and other. The majority of the water quality complaints (80-90%) for each year in the Woronora Delivery system is in the discoloured water category. These complaints may be the result of water main breaks, operational changes in the network, internal plumbing issues within a customer's property and seasonal variations. The next most common complaint category is taste or odour complaints (-5% approximate). These are generally related to chlorine taste and smell or internal plumbing issues within the customer's property. The other two categories for health and other category (relating to aquariums and internal plumbing issues) make up the remaining five percent from one year to the next.

(d) WaterNSW tests the quality on a monthly basis at site HW01- raw water inlet to Woronora Filtration Plant. (see table)

(e) Long-term and recent data for aluminium, manganese and iron in the raw and clear water is shown below: (see table). Figure 1 Woronora RW quality - metals from July 2009 - Sept 2017 Figure 1 above (see table) illustrates the raw water quality during the period July 2009 to September 2017, where the total metals aluminium, iron and manganese levels

remained relatively stable. Average values for aluminium, iron and manganese during this period were 0.130, 0.287 and 0.018 mg⁄L respectively. Figure 2 Woronora RW Quality - metals September 2017 -April 2019 Figure 2 above (see table) illustrates the raw water quality during the period September 2017 to April 2019, where the total metals aluminium, iron and manganese levels remained relatively stable. Average values for aluminium, iron and manganese during this period were 0.043, 0.124 and 0.009 mg⁄L respectively. Figure 3 Woronora Clear Water metals results - Jan 2009 - Sept 2017 Figure 3 (see table) shows that generally metals results have been stable over the past ten years. Average results for the period were - Aluminium - 0.027 mg⁄L, Manganese - 0.0005 and Iron - 0.007 mg⁄L. Elevated Iron (0.077 mg⁄L) and Manganese (0 .052 mg⁄L) results in October 2010 were due to contamination from chemicals that were dosed into the raw water - an issue with the batch of treatment chemical supplied . All results within specification. Average values were - Aluminium 0.032 mg⁄L, iron - 0.007 mg⁄Land manganese 0.0007 mg⁄L. There were a number of elevated iron results during the period but there were no obvious changes to raw water quality at those times, so the elevated results may have been due to material being dislodged from the inside of the sample line. The quantity of metal removed, on average is 0.103 kg aluminium⁄ ML water treated, 0.287 kg manganese⁄ ML water treated and 0.011 kg iron⁄ ML water treated.

(i) Removal of metals is an integral part of the water treatment process. The process is not adjusted specifically to remove metals. It is not possible to separate out the cost of metal removal from the general costs of operating the WFP.

(f) Monitoring in Lake Woronora is undertaken by WaterNSW at the site DW01 Lake Woronora approximately 50 m upstream of the dam wall. The site coordinates of DW01 are 150.936217-34.109009 decimal degrees in GDA'94. Routine sampling is undertaken at a monthly frequency at DW01. In addition in situ instrument located at this site provides near real time data on key water quality parameters which are used to make water supply selection decision. The results are reviewed regularly by water quality advisers.

*617 ENERGY AND ENVIRONMENT—LAKE TOOLOOMA DAM—Mr Primrose asked the Minister for Mental Health, Regional Youth and Women representing the Minister for Energy and Environment—

(1) When was the Lake Toolooma Dam established in the Heathcote National Park?

(a) How often is the Dam inspected to ensure it meets safety requirements?

(i) What are the dates of the most recent 5 inspections?

(b) Who is responsible for determining the Lake Toolooma Dam safety requirements?

(i) What are their positions?

(c) Since the establishment of the Dam, how many incidents of misses or near-misses relating to safety have been recorded?

(i) What are the total numbers?

(ii) What are the dates of the most recent 5 misses or near misses?

(d) Does the Dam have a Dam Safety Plan?

(i) Is it a public document?

(ii) If so, where can the public access this document? If it is available online, what is the name of the document and the specific url to access it?

(iii) If not, why not?

(e) What measures are being taken to remove per- and poly-fluoroalkyl substances from the Dam water?

(f) Is swimming allowed within the Dam?

Answer—

A dam is assessed as "prescribed" based on the level of risk it presents from the likelihood and community consequences of a dam failure. Lake Toolooma is not on the NSW prescribed dams listing under Schedule 1 of the Dams Safety Act 1978. The NSW Dams Safety Committee recently visited Lake Toolooma to assess whether it should be added to the prescribed dams list. This assessment will be finalised in the near future.

(1) 28 January 1972.

(a) Lake Toolooma Dam is not inspected regularly as it is not a prescribed dam under the Dams Safety Act 1978.

(i) The NSW Dams Safety Committee recently visited Lake Toolooma to assess whether it should be added to the prescribed dams list.

(b) The NSW National Parks and Wildlife Service.

(c) The NSW National Parks and Wildlife Service has no recorded safety incidents since acquiring the dam.

(d) No.

(i) N/A ii. N/A

(ii) Lake Toolooma is not a prescribed dam under the Dams Safety Act 1978, so does not have a Dam Safety Plan.

(e) The EPA has released a fact sheet on PFAS at Lake Toolooma, it is available on the EPA website. Signs have also been installed at the lake advising people to catch and release fish.

(f) Yes. The EPA advises that the recorded PFAS levels are not a safety issue for occasional recreational users of the lake, such as swimmers.

*618 LOCAL GOVERNMENT—STOCKTON DECLARATION AS AN OPEN COAST LOCATION—Mr Primrose asked the Special Minister of State, Minister for the Public Service and Employee Relations, Aboriginal Affairs, and the Arts, Vice-President of the Executive Council representing the Minister for Local Government—

(1) Will Stockton's declaration as a significant open coastal location deliver additional government support, including funding opportunities?

(a) If so, what will this additional government support, including funding, look like?

(2) Will additional support, including funding, be provided to Newcastle City Council to expedite their Coastal Management Program?

(a) If so, what does this additional support, including funding, look like?

(b) If not, why not?

Answer—

(1) The declaration of Stockton as a significant open coastal location means the City of Newcastle Council can apply for funding at any time, especially in circumstances where Coastal Zone Management Plan actions at Stockton cannot wait until the next funding round.

(a) Funding applications will be rapidly assessed so that solutions can be implemented as a priority.

(2) The Council can apply for financial assistance at any time to expedite the preparation of its Coastal Management Program.

(a) Since 2011 NSW Government has awarded the City of Newcastle Council over $1.39 million to assist them address issues across their region's coastline.

(b) Please refer to my answer provided above.

*619 PLANNING AND PUBLIC SPACES—DREDGING FOR THE NEWCASTLE GAS TERMINAL—Mr Primrose asked the Minister for Mental Health, Regional Youth and Women representing the Minister for Planning and Public Spaces—

(1) With regard to recent reports that significant dredging would be required as part of the Newcastle Gas Terminal and that this sand could be used at Stockton Beach to address erosion.

(a) Will this be considered as part of the State Significant Development process?

(b) Would the sand from this dredging be of a suitable quality to use at Stockton Beach?

Answer—

I am advised that: Dredging of the southern arm of the Hunter River was approved by the then Minister for Infrastructure and Planning in August 2005. Any emplacement of this dredged material at Stockton Beach would require further assessment and approval under the Environmental Planning and Assessment Act 1979.

1 NOVEMBER 2019

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Nil Questions submitted.

David Blunt
Clerk of the Parliaments

Authorised by the Parliament of New South Wales