LAND COURT OF QUEENSLAND

CITATION: Re Idemitsu Australia Resources Pty Ltd & Ors [2010]

QLC 0120

PARTIES: Idemitsu Australia Resources Pty Ltd

Bligh Coal Limited

J-Power Australia Pty Ltd

LG International (Australia) Pty Ltd

(Applicants)

FILE NOS: MRA079-10

PROCEEDING: Application for mining lease

DELIVERED ON: 20 August 2010

DELIVERED AT: Brisbane

MEMBER: Mr WA Isdale

ORDERS:

- 1. I recommend to the Honourable the Minister for Natural Resources, Mines and Energy and Minister for Trade that the application for the mining tenure sought by the Applicants be granted over the whole of the application area for the purposes and term sought by the Applicants.
- 2. As referred to in paragraphs [48] and [49], it is recommended that it be a condition of any lease granted in respect of this application that the present Applicants at their expense implement a monitoring program to audit the condition of the river and floodplain after significant flood events and at two yearly intervals during the life of the mine. It is also recommended that it be a condition that the results of the audits be provided to the Department of Environment and Resource Management and published within the time and in the manner as may be specified and at the expense of the Applicants.
- 3. As referred to in paragraph [56], it is recommended that it be a lease condition that at their expense the Applicants monitor the two bores described as RN100,036 and RN103,024 as if they were bores listed in condition W43 of the draft environmental authority MIM800086202 dated 8 February 2010. In addition, that the results of that monitoring be promptly provided to the holder of the land on which the bores are situated at the Applicants' expense.

CATCHWORDS: MINING – APPLICATION FOR MINING LEASE

Mineral Resources Act 1989 s.245

APPEARANCES: Mr P Ambrose SC, instructed by Messrs Clayton Utz,

solicitors, for the applicants

[1] This is an application made under s.245 of the *Mineral Resources Act 1989* (the Act) by the Applicants. They seek to have a Mining Lease number 70366 for a period of 22 years over 254.2 ha of land located in the Central Highlands of Queensland approximately 40 kms north-east of Emerald and 200 kms west of Rockhampton.

- [2] The application was lodged in the office of the Mining Registrar at Emerald on 6 October 2006.
- [3] Certificate of application for mining lease was issued on 8 March 2007 and certificate of public notice for mining lease was issued on 2 February 2010.
- [4] Public notice of the application was published on page 25 of the Central Queensland News newspaper on 12 February 2010.
- [5] After the conclusion of the objection period on 16 March 2010 the Mining Registrar referred the application material and the objections which had been received to the Land Court.
- [6] In the course of this Court's case management, objections have been progressively withdrawn until there were no longer any objections to the applications under the Act and one objector with concerns in relation to environmental aspects as distinct from an objection to granting the mining tenement sought; see Mr Nigel Burnett's objection form dated 16 March 2010. Mr Burnett withdrew his objection on 12 August 2010 by notice filed in the Land Court. There are now no objections.
- [7] Section 270 of the Act, although omitted by s.51 of Act No. 17 of 2010 which commenced on 21 April 2010, is preserved in operation by s.773 in respect of applications, such as the present, which were lodged before 21 April 2010. It allows this Court, as a matter of discretion, to dispense with a hearing under certain circumstances.

I have concluded that the discretion in s.270 to dispense with a hearing of an application to grant a mining lease should not be exercised in this case. The Applicants requested, and were granted, a hearing to make submissions on the tenure aspects and reading the Respondent's submissions in support of his environmental objections, now withdrawn, improved the Court's ability to consider the

environmental aspect as required by s.269(4)(j) as well as permitting one decision to be given which addresses all aspects, promoting economy of court resources. The Court's duty under s.269(4)(j) on the evidence supplied to it is not removed simply because there is no longer any objection. The Court will inform itself inclusively of the material provided to it by the former objector and the former statutory party, the Chief Executive, Department of Environment and Resource Management, in order to be in the best position possible to address the matters required by s.269(4)(j).

The criteria in section 269(4) of the Act

[8] In considering these criteria I have considered and taken into account all of the material lodged with the Mining Registrar and provided to this Court in addition to all of the material provided to the Court by the parties and all of the evidence and submissions.

Section 269(4)(a) – Have the provisions of the Act been complied with?

- [9] The certificates mentioned in [3] have been issued and the public notice referred to in [4] has been given. The statutory declaration made by Mr Colin Moffatt on 23 March 2010 provides uncontradicted evidence that proper marking out of the land took place. It also declares, in paragraph 4, that the Applicants are the owners of the underlying land. It goes on to declare that the Central Highlands Regional Council was duly notified and that the other notifications and publications as there set out occurred.
- [10] Mr Moffatt, by separate statutory declaration also dated 23 March 2010, declares that the Applicants have fully complied with the public notice requirements imposed by the *Environmental Protection Act 1994* (EP Act).
- I am accordingly satisfied that the provisions of the Act have been complied with and also that the public notice requirements of the EP Act have been complied with.

 Concerning compliance with s.269(4)(a), paragraph 45 of Mr Colin Moffatt's 122 paragraph affidavit dated and filed on 18 June 2010 explains that a number of marker posts have gone missing and several had fallen over and were found adjacent to where they had been standing. The affidavit offers some possible causes of loss or falling of the posts, such as rural operations or, in the case of fallen posts, the actions of cattle. It is stated that the posts were reinstated. Paragraph 54 requests that the Court apply s.392 of the Act and accept that there has been substantial compliance with this matter. In view of the extent of the loss of markers, one of four on ML70366, the rectification work and the fact that there is no objection relating to this

aspect the Court records, in accordance with s.392 that there has been substantial compliance in respect of this matter.

Section 269(4)(b) – Is the area of land applied for mineralised or are the other purposes for which the lease is sought appropriate?

- [12] The additional mining lease applicant information and statutory declaration for the Land Court was declared by Mr Moffatt on 25 March 2010. It is declared that the proposed mining lease area is mineralised. This is declared to be so on the basis of exploration, 3D seismic investigations and extrapolations from adjacent existing mine workings.
- [13] The application discloses that the mineral is, unsurprisingly for this area, coal. The application discloses that the tenure is sought for coal mining and infrastructure related to coal mining, stockpiles, overburden, environmental buffer and rehabilitation. I am therefore satisfied as required by s.269(4)(b).

Section 269(4)(c) – If the land applied for is mineralised, will there be an acceptable level of development and utilisation of the mineral resources within the area applied for?

[14] The land sought is for the purpose of extending operations which have been conducted successfully since 1993. In view of the proven activity in the area of this land by the Applicants, I am satisfied that there will be an acceptable level of development and utilisation of the mineral resources within the area applied for.

Section 269(4)(d) — Is the land and the surface area of that land in respect of which the mining lease is sought of an appropriate size and shape in relation to the matters mentioned in paragraphs (b) and (c) and the type and location of the activities proposed to be carried out under the lease and their likely impact on the surface of the land?

- [15] The size and shape of the subject land needs to be considered in the context of the whole operation in order to properly answer this question. The application discloses that it is being sought in order to carry forward what has, for a considerable period, been a large and developing mining activity.
 - The size and shape of the subject land, when considered in its context, is in my view appropriate in relation to the matters mentioned in paragraphs (b) and (c) and the type and location of the activities proposed to be carried out under the lease and their likely impact on the surface of the land.

Section 269(4)(e) – Is the term sought appropriate?

[16] The term sought is to expire on 31 January 2028. This will bring it into alignment with existing tenures which are being utilised in the overall coal mining operation. In view of the fact that the tenure is being sought so as to be utilised as part of the

existing operation it is appropriate that it be for a term which expires when the other tenures do. I am satisfied that the term sought is appropriate.

Section 269(4)(f) — Does the Applicant have the necessary financial and technical capabilities to carry on mining operations under the proposed mining lease?

[17] In the statutory declaration referred to in [12], it is declared that the overall operation, known as the Ensham Coal Mine, was established in 1991. It is a Queensland based thermal coal producer and has an output of around 7 million tonnes per annum of high energy low ash thermal coal. The coal is exported to leading energy producers in Japan, Korea, India, China and other countries. Thermal coal is used for electricity generation and is in demand world-wide.

I am satisfied that having carried on such a large coal mining operation over an extended period demonstrates that the Applicants have the necessary financial and technical capabilities to carry on mining operations under the proposed mining lease.

Section 269(4)(g) – Has the past performance of the Applicant been satisfactory?

- [18] In the statutory declaration referred to in [12] it is declared that the Applicants have not ever had a:
 - (i) notice to rectify non-compliance or damage,
 - (ii) notice to show cause,
 - (iii) tenure cancelled,
 - (iv) penalty imposed, or
 - (v) conviction

under the Mineral Resources Act 1989.

It is disclosed that on or about 17 February 2004 the Ensham Joint Venture Participants were directed by the Environmental Protection Agency under the *Environmental Protection Act 1994* to prepare a draft environmental management program in relation to the Whites Hill spoil dump outside the area of the Applicants' existing mining leases.

It is declared that the Applicants have complied with that direction and that they have since received the grant of mining lease number 70326 over that area.

In view of these matters, I am satisfied that the past performance of the Applicants has been satisfactory.

Section 269(4)(h) – Will any disadvantage result to the holders of existing exploration permits or mineral development licences or to existing Applicants for exploration permits or mineral development licences?

[19] In the statutory declaration last referred to, it is declared in paragraph 5(c) that there will be no such effect. I also note that there is no objection to this aspect of the proposed tenure and am therefore satisfied that there will not be any disadvantage.

Section 264(4)(i) – Do the operations to be carried on under the authority of the proposed mining lease conform with sound land use management?

[20] This land would be able to be used for general agricultural and pastoral activities were it not to be used for the purposes which the Applicants intend. I am satisfied that the proposed operations conform with sound land use management when environmental obligations and rehabilitation requirements are taken into account.

Section 264(4)(j) – Will there be any adverse environmental impacts and, if so, the extent thereof?

- [21] In view of the proposed use of the land in coal mining activities it would be rational to expect some adverse environmental impact. Indeed, the Department of Environment and Resource Management has issued Draft Environmental Authority MIM 800086202 in pursuance of its responsibilities as the environmental regulator.
- The 44 paragraph affidavit of Mr Colin Moffatt dated and filed on 18 June 2010 discloses that he is the General Manager Technical of Ensham Resources Pty Ltd which operates the Ensham Coal Mine on behalf of the Applicants. He holds a Bachelor's degree in Engineering and an MBA. He states that the operation is planned to be expanded to achieve an overall output of 12 million tonnes per annum, up from 7.584 million tonnes of coal in 2009. It will involve underground longwall mining, bord and pillar underground mining and extension of existing open cut mining.
- [23] In January 2008 there was what Mr Moffatt describes as an unprecedented flood event in the Nogoa River and the Ensham coal mine was inundated. Partly due to this, the mining methodology was revised with the intention of significantly reducing disturbance of the flood plain and the impact of flood events.
- [24] The mining activities will include roadways under the Nogoa River and it is stated that based on investigations conducted there will be no impact on the Nogoa Mackenzie Water Supply Scheme. The Fairbairn Dam on the Nogoa River is the main storage for the scheme.

- The affidavit states that groundwater impacts will occur as a consequence of the mining and that the Applicants have managed this by entering into agreements with some landowners who may be affected and also by way of, in particular, condition W43 of the draft Environmental Authority to provide an equivalent water supply to the owners of identified bores if the mine is demonstrated to have adversely affected the use of those bores.
- [26] It is stated that the mining techniques to be adopted will prevent subsidence occurring within 100 metres of the Nogoa main and anabranch channels.
- [27] The Applicants have sought to raise flood protection levee banks to a height sufficient to protect their operating areas from inundation in a 1 in 1,000 year average recurrence interval flood event and received necessary approvals to do so. They point to flood modelling and at paragraph 30 of the affidavit it is stated that:
 - "... modelling confirmed that no impacts, in the form of flood level afflux, would arise beyond the upstream Ensham land boundary."

Following the January 2008 flood event, the Applicants developed their current operational plan and undertook further investigations of the environmental impacts that may be caused by those plans.

- [28] Mr Colin Moffatt's 122 paragraph affidavit dated and filed on 18 June 2010 explains in some detail the Revised Central Area Mining Methodology (RCAMM) developed following the January 2008 flood event. It also addresses seriatim the matters set out in s.269(4) of the Act.
- It is pointed out in paragraphs 30 to 33 that at the date when the applications were lodged there were two mining tenements not held by the Applicants that overlapped the area of mining lease (ML) application 70367. The owners of those tenures have provided their written consents as set out in paragraphs 32 and 33. In paragraph 31 it is stated that there are no mining tenements held by anyone other than the Applicants concerning ML70365, 70366 and additional surface area application number 3 for ML7459.
- [30] The affidavit explains that authority to prospect for petroleum (ATP) 553 and ATP 684 extended over the areas of present relevance and their holders provided the necessary consents. Those tenures do not any longer extend over the relevant areas.
- [31] It is stated in paragraphs 37 to 40 that ATP806 extends over the area of ML70365 and the area of additional surface area application number 3 for ML7459.
- [32] It is claimed in paragraph 85 of the affidavit that there will be no significant environmental impacts caused by the proposed operations such as would warrant the

Court making an unfavourable recommendation in respect of the applications before it.

This is a swearing of the issue, the thing to be decided by the Court, and is outside of the ability of a person providing an affidavit to attest to. This statement can have no weight in the Court's deliberations.

- [33] In paragraph 88 it is stated that investigations have demonstrated that only in a worst case situation would their proposed operations be foreseen to have adverse effects and that these would be minimal and easily addressed.
- Paragraph 108 sets out that the effects of raising the flood protection levee banks on ML7459 from the existing 100 year event level to a 1 in 1,000 year height has been modelled. The modelling confirmed that no impacts in the form of flood level would arise beyond the upstream boundary of Ensham land.
- The affidavit of Dr Paul Elias Harding was filed on 2 July 2010. Dr Harding is a hydrologist. He provides his opinion that the Kellogg Brown & Root Pty Ltd model should not be used to assess the impact on Colorada, Mr Burnett's property, as the property is too close to the boundary of the model. It is a two dimensional model which uses flows and water levels estimated by a Sunwater one dimensional model. He advises that he has sought further information and proposed to report his analysis of that information in a future report. Perhaps due to the withdrawal of the objection, this did not occur.
- Mr Nigel Trent Burnett's affidavit sworn on 5 July 2010 was filed on 6 July 2010. Mr Burnett explains that he leases Colorada from his mother and sub-leases the contiguous Langley Downs. On them he produces cotton, cattle and dry land farm crops such as sorghum. The Nogoa River runs along the southern boundary of Colorada where there are about 10.5 kms of levee banks from 1 to 4.5 m high. Langley Downs adjoins Colorada on Colorada's northern boundary.
- [37] At paragraph 10, Mr Burnett deposes that the properties referred to are approximately 9 kms upstream from Ensham coal mine.
- [38] In the January 2008 flood, Colorada's levee banks were inadequate to protect it. When the Ensham mine flooded he observed the river level at Colorada drop by approximately 50 cm (see paragraph 15). After the mine flooded the Colorada levees were adequate.
- [39] At paragraph 19 Mr Burnett makes clear that he was concerned that raising the Ensham levee banks to the height designed to protect against a 1 in 1,000 year flood event might cause a bottleneck upstream and breach Colorada's levee banks. Mr

- Burnett goes on to set out proceedings he is taking in the Queensland Civil and Administrative Tribunal (QCAT) concerning the decision to permit the Ensham levee banks to be raised.
- [40] Recorded video footage taken by Mr Burnett from a helicopter is provided and he points out what he believes to be levee construction. He disputes Mr Moffatt's statement in his affidavit as to the height of the levee banks and refers to his unsuccessful attempt to obtain information from the Applicant's solicitors on the state of the levee banks.
- [41] In paragraphs 36 to 43 Mr Burnett sets out his concerns which lead him to his then view that the draft Environmental Authority conditions are not adequate to address the impact of the proposed levee banks.
- [42] At paragraph 45 of his affidavit, Mr Burnett refers to a report he commissioned which estimates the potential financial cost of a flood on Colorada as in excess of \$2.8 million. Raising the levees on Colorada in order to protect it has been the subject of a quotation of \$2,436,500 and other levees may also need to be constructed.
- [43] In paragraphs 61 to the end of his affidavit, Mr Burnett refers to two bores which are within 15 kms of the mine and the costs of them being materially affected by the proposed works.
- [44] The Supplementary Report, August 2009 contains the following appendices:
 - i. Subsidence Report
 - ii. Flood Assessment Report
 - iii. Air Quality Report
- [45] The Subsidence Report addresses design considerations relevant to obtaining the desired levels of safety so that the risk of subsidence is managed at a low level. This expert evidence is uncontradicted and unchallenged and is accepted.
- [46] The Flood Assessment Report prepared by Kellogg Brown & Root Pty Ltd and dated 10 August 2009 provides an assessment of the predicted flooding and river morphology impacts for the revised mining operations which are planned. It takes into account recent development on the floodplain and data obtained from the January 2008 flood event.
- [47] The engineering study has considered the situation prior to the construction of the mine, farm levee banks and other structures and the Fairbairn Dam. It has also considered the situation while the mine is in operation, including the proposed upgraded mine levees.

- Thirdly, the situation after mining has been considered.
- It is concluded that the proposed revised mining operations and levee upgrades will result in an increase in flood levels for a flood of 20 year recurrent interval of 3 cms. It is also concluded that there is unlikely to be extensive erosion or morphological change to the Nogoa River floodplain. The Flood Assessment Report, see the last paragraphs on pages vii and 5-19, contains a recommendation, which the court endorses, that a monitoring program be implemented to audit the condition of the river and floodplain after significant flood events and at two yearly intervals during the life of the mine.
- [49] The Court recommends that this be a condition of any lease granted pursuant to the present applications and that the results of the audits be provided to the Department of Environment and Resource Management within times to be specified in such lease. In addition, the results should be published at the same time in the manner specified in the lease at the expense of the Applicants.
- [50] The proposed levees are designed to be of sufficient height to exclude a 1 in 1,000 year average recurrence interval flood. Their design is conservative as typical flood protection levees have a freeboard of .2 to .4 m whereas a full metre is allowed here. In addition to that, a further .2 to .4 m extra has been allowed so that overtopping can be designed to occur in the downstream part of the levee so as to limit damage.
- The engineering evaluation concludes that increases in flood levels due to the mining works will be significantly less under the proposed plan than would have been the case under the previous plan, 3 cms as compared to 1.1 m in a 1 in 20 year flood. Conservatively, the modelling assumes that Fairbairn Dam, a large dam, is full at the start of the modelled flood event.
- [52] It is noted that 1,000 year flood immunity is a requirement of the Department of Environment and Resource Management; see Draft Environmental Authority MIM800086202 at C32 and Table 16.
- The Sun Water modelling was prepared for the Nogoa River Flood Plain Board in response to their request made in December 2007. It showed that the proposed levees, when considered in the presence of all the approved developments in the flood plain in the 1997-2007 period and in the case of a 20 year annual exceedence probability 168 hour flood event for the entire floodplain, would cause an increase in flood levels of 14 mm. This modelling did not consider the January 2008 flood event. The Kellogg, Brown & Root analysis did consider that event and concluded that the increase in flood levels would be 30 mm, a very close result. Sun Water's modelling

undertaken on the basis of excluding approved developments showed that the proposed extension of the southern levee resulted in an increase in peak flood levels of up to 50 mm in Winton Creek. This model has been used in order to provide consistency with all other investigations done by Sun Water on behalf of the Nogoa River Flood Plain Board over the previous 10 years.

[54] Sun Water has provided a report dated June 2008 consequent on the January 2008 flooding event which was caused by up to 700 mm of rainfall in the five days to 20 January 2008. At the commencement of this event Fairbairn Dam was at only 35% of its capacity. Taking the January 2008 flood event into account, modelling was undertaken to assess the likely impacts from the proposed extended mine levees, assuming that the Fairbairn Dam was full at the start of the event and also assuming that it was 35% full at that time. Modelling was done on the basis of a 1 in 20 year flood and also for the January 2008 flood with the Fairbairn Dam being assumed to be full at the start of the event. To quote from the Executive Summary of the report:

"For both events, the proposed extensions of Ensham Mine levees cause affluxes of up to 25 mm at any location, either within the Ensham Mine holdings or at any neighbouring properties. This is well below the acceptable afflux of 300 mm set by the Nogoa Flood Plain Board."

This is consistent with the estimate made by Kellogg, Brown and Root Pty Ltd.

- [55] On 16 July 2010 Mr Colin Moffatt's affidavit of that date was filed in response to Mr Burnett's affidavit filed on 6 July 2010. In paragraph 19 Mr Moffatt points out that Mr Burnett has not specified any particular conditions of the draft environmental authority MIM800086202 dated 8 February 2010 to which he is objecting and that he has not proposed any alternate conditions.
- [56] Concerns held by Mr Burnett and stated by him have been responded to under five headings. In summary, it is stated that:

(a) Groundwater

Expert opinion is that there will be less than 1 m drawdown on the existing bores on Colorada. It will be unnecessary to install a water distribution system or obtain a high security water allocation from the Nogoa River. Any impacts on the existing bores could be addressed by sinking an affected bore deeper, fitting a larger pump or replacing the bore. It is pointed out that Mr Burnett has not provided any evidence that contradicts the expert evidence provided on behalf of the Applicants.

It is stated that the Applicants would be prepared to monitor the bores on Colorada as if they were bores listed in condition W43 of the draft environmental authority MIM800086202 dated 8 February 2010.

(b) Loss of water from the Nogoa River

It is stated that Mr Burnett has not provided any evidence contrary to the expert evidence introduced on behalf of the Applicants.

(c) Upstream flood impacts

It is also stated that damage from the January 2008 flood and resulting losses suffered by the Applicants are in the order of \$535 million.

Addressing the video recording which Mr Burnett has made on 30 May 2010, according to paragraph 29 of his affidavit, it is stated that work was then being done to repair levees which were built to 1 in 100 flood levels.

It is also stated that some work was done to further raise the B pit/Southern Levee but that this was ordered to be stopped when it was realised that the necessary permit had not been issued.

(d) Impact on strategic cropping land

It is stated that Mr Burnett has not provided any evidence in support of this matter and that the Applicants, as landowners, are entitled to take any action on their own land that an owner may. It is also pointed out that the draft environmental authority contains conditions which require rehabilitation of the land.

(e) Decommissioning

Mr Moffatt points out that it is not a requirement for levee banks to be removed at any time and that they will be left in place after mining has been completed.

- [57] Also filed on 16 July 2010 was the affidavit of Mr Errol Briese affirmed on 15 July 2010. Mr Briese is the Managing Director and Principal Hydrogeologist of Australian Groundwater and Environmental Consultants. Mr Briese has prepared a report in response to Mr Burnett's objections.
- [58] After discussing the proposed mining methodology and the groundwater situation generally, Mr Briese explains that depressurisation of the coal seam by mining will lower the levels in bores, the potentiometric surface, where the water level depends on the pressure transmitted from water in the coal seam. This may reduce the yield from the bore or cause it to become dry.
- [59] In Part 5 of his report, Mr Briese specifically addresses Mr Burnett's objections which he endeavours to encapsulate under five rubrics.

Objection (O)

1. The objector's two existing bores, RN100,036 and RN103,024 which are within 15 km of the project will be affected by the dewatering of the aquifer necessary for the mining.

Response (R)

The two bores are up to 4 km beyond where a 1 m drawdown is expected so it would be highly unlikely that they would be affected.

- O. 2. It will be difficult to prove any affect on the bores is due to the mining project.
- R. There should be baseline data collected prior to commencement of the project.

 This will require cooperation of the landowner.
- O. 3. The risk to groundwater limits future development of bores.
- R. Any measurable impact will occur at the very eastern extent of the properties. At that distance from the project there may be a 1 to 5 m drawdown. The aquifers are poor with water quality generally of limited suitability for stock.
- O. 4. The objector is not convinced that there is no connection between the river and the alluvial aquifer and would like to view a report on the field investigations and of the then Department of Natural Resources, Mines and Water.
- R. Appendix C of the Environmental Impact Statement (EIS), s.5, is referred to. It is stated to have been proved conclusively that there is no connection.

 I note that 5.4.2 of the EIS explains the importance of this aspect to the applicants who are interested in mining and the results of the investigations. The description of the field investigation program conducted by Australasian Groundwater and Environmental Consultants Pty Ltd includes, on page 265, plate 4, which shows the clay in the bed of the Nogoa River and a dry hole about a metre deep dug right up against the water-filled channel. Clearly the clay isolates the water in the river very effectively.
- O. 5. The objector asks whether there are reports stating that there will be no effect on the river due to the proposed mining activities.
- R. The response is that the groundwater report states that there will be no impact on the river due to the mining activities.
- [60] The affidavit of Glen Jonathon Schulz is dated 21 July 2010 and was filed on 22 July 2010 on behalf of the statutory party, the Department of Environment and Resource Management. Mr Schulz is a Principal Environmental Officer of the department and has had considerable involvement with this mining project.

- [61] Mr Schulz provides a helpful chronology of the progress of the project and, in paragraphs 73 and 74, sets out how, in his view, Mr Burnett's objections are dealt with in the Draft Environmental Authority MIM800086202. Those paragraphs are in the following terms:
- [62] "73. In my view, Burnett's objections are addressed in the final Draft EA.
 - a. In particular, the objections are addressed in following identified paragraphs as summarised below:
 - i. A3 Prevent and/or minimise the likelihood of environmental harm
 - i. Ensham must take all reasonable and practicable measures to prevent and/or minimise environmental harm and to carry out any environmentally relevant activity in a proper manner in accordance with the conditions of the authority.
 - ii. W43 Groundwater
 - i. A suitably qualified person must conduct monitoring of groundwater affected by mining activities at a number of specified bore locations, which include surrounding private properties.
 - ii. If, as a result of assessment of the monitoring results, the mine is demonstrated to have adversely affected a privately owned bore, Ensham is required to provide an equivalent (in quality and quantity) water supply to the owner of the affected bores.
 - iii. W44 Groundwater
 - If groundwater investigation trigger levels are exceeded, Ensham is required to complete an investigation into the potential for environmental harm and notify DERM.
 - iv. W45 Groundwater
 - i. Groundwater levels and groundwater drawdown fluctuations, not resulting from the pumping of licensed bores must be notified to DERM.
 - v. W46 Background groundwater monitoring program
 - i. Ensham is required to develop a monitoring program to include bores which could potentially be impacted by the mining activities.
 - vi. W47 Background groundwater monitoring program
 - i. A review of the groundwater monitoring data must be submitted to DERM each year.
 - g. Dams and levees
 - i. C1 Ensham must ensure that each dam is designed, constructed, operated and maintained in accordance with accepted engineering standards and is fit for the purpose for which it is intended.
 - ii. C2 The hazard category of each dam must be assessed at least once a year.
 - 2. C23-C25 set out additional conditions addressing flood protection levees.
 - a. Board and pillar factors of safety
 - i. F2 Ensham is required to determine relevant pillar and roadway dimensions to ensure that the following factors of safety are achieved:
 - a) 2.11 for bord and pillar workings beneath the Nogoa River anabranch;
 - b) 2.11 for access roadways beneath the Nogoa River to connect the bord and pillar and longwall mining areas; and
 - c) 1.6 for all other bord and pillar workings beneath the floodplain of the Nogoa River.
 - ii. F3 Ensham is required to implement operational management protocols to ensure that minimum pillar and roadway dimensions calculated to achieve the factors of safety are achieved during the life of the bord and pillar operation.
 - Rehabilitation landform criteria
 - i. F5 All areas that are significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover.
 - F7 Ensham must develop a Rehabilitation Management Plan for submission to DERM.
 - j. Rehabilitation Monitoring Program
 - i. F11 once rehabilitation has commenced, Ensham is required to conduct a Rehabilitation Monitoring Program on an annual basis.
 - k. Post Closure Management Plan —

- i. F14 a post closure management plan must be prepared 18 months prior to the final coal processing on site.
- ii. F15 the plan must include a number of elements, including monitoring of surface water quality, groundwater quality, seepage rates, erosion rates, the integrity and effectiveness of final cover systems, and the health and resilience of native vegetation cover."
- I note that in paragraph 74(h)(i)(a) and (b) filed on behalf of the Department it is made clear that the factor of safety specified for bord and pillar workings beneath the Nogoa River anabranch and for access roadways beneath the river will be 2.11. This stands in contrast to the Supplementary Report dated August 2009, exhibit 6, part 10.6.2, where in the second paragraph the factor of safety here was proposed to be 2.06. That factor of 2.06 is also to be found elsewhere, for instance at 2.73 of the Response to Assessment Report on Supplementary Report dated November 2009. Table 6 of 2.74.1 of that report discloses that a factor of safety of 2.06 indicates a probability of failure of 1 in 900,000 whereas a factor of safety of 2.11 gives a probability of failure of 1 in 1,000,000. The relevant conditions may be found at page 127 of the exhibit to Mr Schulz's affidavit where F2 of Draft Environmental Authority MIM800086202 is reproduced.
- [64] The affidavit of Dr Ross Seedsman, affirmed on 16 July 2010 and filed the same day, exhibits his report. Dr Seedsman was engaged to review the objections of Mr Burnett in relation to subsidence and any material and reports filed on the objector's behalf. The substance of the report from Seedsman Geotechnics Pty Ltd is in the form of responses to objections raised.
- [65] To the objection that longwall mining and bord and pillar mined roadways will impact on the Nogoa Mackenzie Water Supply Scheme, the response is that this is incorrect. Reference is made to the proposed distance of the longwall mining from the high bank of the river, 100 metres plus a 35° angle of draw. By illustration of mining at a depth of 160 metres, it is shown that this will keep mining from coming closer than 212 metres from the high bank of the river.
- [66] Referring to the proposed bord and pillar roadways, the report states that the risk of pothole subsidence is negligible and that the construction with a factor of safety of greater than 2.11 is designed to ensure long term stability. Dr Seedsman states:
 - "I know of no way in which the proposed mine layout can adversely impact the Nogoa Mackenzie Water Supply Scheme."
- [67] In relation to the objection regarding the integrity of bord and pillar mined roadways, the response is that the high factor of safety to be applied in construction will

- increase over time as the works eventually fill with water and that any collapse would extend no more than 10 metres vertically.
- [68] The objection in relation to mined linking roadways, was posed in the form of a question as to how many are essential for the mine. Dr Seedsman explains that the planned roadways are consistent with standard development practice in Australian longwall mines and represent the minimum required number of access roadways.
- [69] The affidavit of Mr Lindsay Delzoppo was affirmed on 23 July 2010 and filed on 26 July 2010. Mr Delzoppo is a Senior Director of the Department of Environment and Resource Management. In his affidavit, he relates that he determined that the proposed levee bank changes would not cause a significant increase in environmental harm. Accordingly, an Environmental Impact Statement would not be required for the proposed amendment to the Environmental Authority.
- On 6 August 2010 Mr Lindsay Delzoppo affirmed another affidavit, which was filed on the same day. It is primarily in response to matters raised by the solicitors for Mr Burnett in their letter dated 30 July 2010. Mr Delzoppo provides further details in relation to the matters referred to in his previous affidavit, essentially the decision that an Environmental Impact Statement would not be required in respect of the applicants' revised proposals. Attached to his affidavit are copies of the report of Kellogg Brown and Root Pty Ltd dated 21 September 2009 and the Sun Water Limited letter dated 22 September 2009 providing certification of the flood modelling.

Section 269(4)(k) – will the public right and interest be prejudiced?

[71] The declaration referred to in [12] states, in paragraphs 5(b) that there will not be any affect on any public infrastructure over or on the proposed lease area. I am accordingly satisfied that the public right and interest will not be prejudiced.

Section 269(4)(l) – Has any good reason been shown for a refusal to grant the mining lease?

[72] There is no objection before the Court on the question of whether the proposed tenure ought to be granted; that stands separately to the environmental objections that have been made. There is nothing in the evidence which provides any good reason for refusal to grant the mining lease.

Section 269(4)(m) – Is the proposed mining operation an appropriate land use taking into consideration the current and prospective uses of the land?

[73] This is rural land and the current use is for intermittent grazing. It is otherwise capable of being used for general agricultural and pastoral activities.

There is no evidence of any prospective use of the land other than that after the conclusion of the envisaged coal mining operations.

As rehabilitation of the land following mining will once again make it fit for its present use or likely use, I find that the proposed mining is an appropriate land use.

Native Title

[74] There do not appear to be any native title considerations concerning the subject land. *Recommendation*

- [75] Taking into account all the evidence that has been put before the Court, I recommend to the Honourable the Minister for Natural Resources, Mines and Energy and Minister for Trade that the application for mining lease sought by the Applicants be granted over the whole of the application area for the purposes and term sought by the Applicants.
- [76] As referred to in paragraphs [48] and [49], it is recommended that it be a condition of any lease granted in respect of this application that the present Applicants at their expense implement a monitoring program to audit the condition of the river and floodplain after significant flood events and at two yearly intervals during the life of the mine. It is also recommended that it be a condition that the results of the audits be provided to the Department of Environment and Resource Management and published within the time and in the manner as may be specified and at the expense of the Applicants.
- [77] As referred to in paragraph [56], it is recommended that it be a lease condition that at their expense the Applicants monitor the two bores described as RN100,036 and RN103,024 as if they were bores listed in condition W43 of the draft environmental authority MIM800086202 dated 8 February 2010. In addition, that the results of that monitoring be promptly provided to the holder of the land on which the bores are situated at the Applicant's expense.

WA ISDALE MEMBER OF THE LAND COURT