

Assoc. Professor Andrew Hopkins
Acting Director

24 April 2013

Attention: Director, Mining and Industry Projects
Major Projects Assessment
Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

State-Significant Development Application SSD-4975: Watermark Coal Project

Please find attached the AAO submission in response to the Watermark Coal Project Environmental Impact Statement.

The AAO is not opposed to mining in the region but, as Australia's national observatory for optical astronomy, wishes to emphasise the potential threat posed by mining to the observing conditions at the key Siding Spring Observatory site, mostly in the form of light and dust pollution. Our submission discusses viable mitigation strategies and we hope that we can work with both mine operators and government planning to ensure a solution acceptable to all.

We note that a brief mention is made in Appendix J of the Environmental Impact Statement of the possibility of light-pollution affecting Siding Spring Observatory. We address this issue in detail in our submission, and, in more specific terms, we would request that the owner and operator of the mine meet the following conditions:

1. familiarisation of the above parties with the risks and threats of mining activity to astronomical and astrophysical research, including dust and light pollution and possibly seismic disturbance;
2. recognition of the potential of the Watermark Coal Project to generate these risks and threats for Siding Spring Observatory, located near Coonabarabran in the Warrumbungle Shire;
3. agreement to engage in formal consultation with the Australian National University and the Australian Astronomical Observatory regarding a mitigation program for the minimisation of these impacts;
4. implementation at the Watermark mine site of an approved mitigation program;
5. ongoing engagement with the ANU and AAO to monitor the efficacy of remedial measures, assess the impacts of any expansion of mining activity and explore the potential of new technologies to limit the detrimental effects of light and dust pollution;
6. adoption of effective light and dust minimisation measures at the Watermark mine, including Shenhua Watermark Coal Pty Limited providing suitable

equipment for the monitoring of light and dust levels at both the mine site and at Siding Spring; and

7. observance of the proposed new State Environmental Planning Policy (SEPP) especially governing lighting developments and conditions of consent for mines within 200 km of Siding Spring.

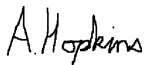
The Observatory is keen to work with Shenhua Watermark Coal Pty Limited and State Planning to minimise any detrimental impact on the Observatory, and will make resources available to achieve that.

AAO CONTACTS

Prof. Fred Watson AM, Astronomer-in-Charge
e: Fred.Watson@aao.gov.au; p: 0420 897 860

Neville Legg, General Manager
e: Neville.Legg@aao.gov.au; p: 02 9372 4813

Yours sincerely



Assoc. Professor Andrew Hopkins
Director