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NSW Water Metering Framework - Consultation Paper and Draft Regulation

NSW Minerals Council Submission - September 2018

1 Introduction

The mining industry is a transparent and responsible user of water. The industry already uses water meters extensively where water is pumped from streams or extracted from groundwater bores and has other measurement or estimation techniques in place for water take that cannot be metered. Mining operations publicly report on their water use and water management practices and they are closely regulated by several agencies in relation to water use and management.

While mining operations already have extensive metering, data logging and communications systems in place, the proposed NSW Water Metering Framework (Metering Framework) has the potential to be more prescriptive around the requirements that apply to existing meters, requiring changes to existing equipment. It could also require the installation of new equipment where it is not currently installed, such as on some mine-owned buffer lands.

The NSW Minerals Council (NSWMC) is the peak industry association representing the mining industry in NSW and has prepared this submission to highlight some of the practical implications of the proposed Metering Framework on mining operations and provide recommendations as to how it could be improved.

2 Draft Metering Framework comments

2.1 Thresholds for metering

There is the potential for mines to have to install a significant number of new meters on land they own. For example, bores on surrounding properties owned by mines will require meters if:

- a. They are in a high risk water source, or
- b. They exceed the 200 mm diameter threshold for an individual bore, or
- c. They exceed the cumulative threshold because (even if the individual bore diameter is less than 200mm)
 - i. More than one work is authorised by the applicable approval or entitlement or nominated in the applicable access licence
 - ii. The work is one of 2 or more works subject to an approval or entitlement or nominated in an access licence and situated on the same landholding

Furthermore, if the 100mm threshold for surface water pumps or the 200mm threshold for groundwater pumps is exceeded, telemetry equipment will also be required.

In particular, NSWMC questions the need for telemetry on all meters that exceed the infrastructure size thresholds. Mines are already subject to extensive assessments, approval conditions, public reporting requirements and ongoing compliance and enforcement activities by multiple regulators. Telemetry adds significant costs and there is no clear need for real time data collection and reporting for the vast majority of meters. The requirement for telemetry should be limited to meters where there is a demonstrated need, e.g. surface water works >500mm or where there is a compliance issue that warrants greater regulatory oversight.

Furthermore, NSWMC recommends that clause 232(2) be broadened so that it also covers circumstances where water take can be measured but to do so is unreasonable given the take of water is assessed thoroughly as part of the planning approval process and managed under detailed management and monitoring plans. NSWMC recommends that clause 232(2) is amended to read as follows:

- (2) *The Minister may grant such an exemption only if the Minister is satisfied that:*
- (a) *it is not possible for water taken using a water supply work to be measured by metering equipment; or*
 - (b) *the measurement of water take by metering equipment would be unreasonable in circumstances where the water take is assessed and monitored as part of an existing development consent or under a transitional part 3A project approval under the Environmental Planning and Assessment Act 1979.*

2.2 Exemptions for groundwater seepage into mine voids

The seepage of groundwater into mine voids cannot be metered and will therefore require an exemption from the metering requirements under clause 131 or 132 of the draft Regulation.

Mines have a good understanding of the volume of water that seeps into mine voids. Groundwater seepage into mine voids is estimated through a combination of techniques e.g. numerical groundwater modelling and/or detailed water balance modelling. Mines publicly report on their water balances and are transparent and accountable for this type of water take. Therefore, the intent of the metering framework in providing accurate and transparent water use data will continue to be met by mines in relation to groundwater seepage.

In terms of the exemption:

- NSWMC believes a permanent exemption should be provided for this type of water seepage under a new subclause in cl 231 given that metering this take is not feasible.
- The exemption needs to cover water ingress into mine voids, as well as any water entrained within extracted product (e.g. given that coal seams themselves contain groundwater, albeit often saline) or moisture extracted through mine ventilation.
- The exemption should be framed so that it broadly applies across a class of licence holders rather than individual licence holders.

NSWMC requests that the mining industry is consulted further when the exemption is being drafted. NSWMC has prepared some suggested wording for an exemption under Clause 231 below:

Clause 231

- (1) *The mandatory metering equipment condition is not required to be complied with if any of the following circumstances apply:*
- (a)
 - (b)

- (c)
- (d)
- (e)
- (f)
- (g) *The water supply work or access licence is solely used to take incidental water take required in the course of carrying out a mining activity as referred to in section 60I of the Water Management Act 2000.*

'Incidental water take' could be defined as:

- (a) *Water take where the take of water can be measured by relying upon mathematical models; or*
- (b) *Groundwater ingress into excavated areas that has been assessed and approved as part of an existing development consent or transitional Part 3A project approval granted under the Environmental Planning and Assessment Act 1979.*

2.3 Standards for metering equipment

2.3.1 Data logging and telemetry protocol

As discussed in section 2.1, NSWMC questions the need for telemetry on all meters that exceed the infrastructure size thresholds. Telemetry adds significant costs and there is no clear need for real time data collection and reporting for the vast majority of meters.

In cases where telemetry is required, it is important that the Regulation and associated telemetry protocol are not overly prescriptive about the type of technology used, but rather specify the features of the overall system that are required.

For example, the documents outline a requirement for data loggers for new and existing flow meters. The use of SCADA-type monitoring with data storage capability should preclude the need for a 'data logger'. The protocol should allow for telemetry systems to read output from the flow sensor (as in the case of SCADA systems), not just a data transfer from the data logger.

NSWMC requests that the mining industry is consulted further when the telemetry protocol has been drafted.

2.3.2 Data use

As stated in our previous submissions, NSWMC does not support the real time reporting of meter readings and water account balances given the commercially sensitive nature of this information as well as the need for sites to verify and QA data.

We understand that DoI Water will be conducting further consultation on the proposed reporting of water data. NSWMC asks that the mining industry is consulted through that process.

2.4 Duly qualified persons

NSWMC believes that a requirement to have a person with a current certificate issued by Irrigation Australia to perform all installations, certifications and maintenance would be excessive and supports having other relevant qualifications, skills or experience recognised by the Minister under cl 235(1)(b).

The installation and maintenance of water meters on mines sites is common. Mines generally have multiple staff who have several years of experience installing and maintaining water meters, but do not

have an Irrigators Australia accreditation. Water infrastructure in active mining areas is often moved as mining progresses, and water meters are frequently removed and reinstalled. While these meters (located within mines' internal water management systems) will not be subject to the Metering Framework, it provides context as to the level of experience mine site personnel have in this area, together with the management of meters on permanent pumps and bores on the mine site and surrounding properties owned by mining operations.

These arrangements should be allowed to continue, and a 'duly qualified person' should recognise 12 months' experience in the installation and maintenance of metering equipment. Appropriate documentation could be required to be kept and installation and maintenance should be conducted in accordance with manufacturers' specifications.

NSWMC requests that the mining industry is consulted on the draft list of qualifications, skills and experience to be recognised by the Minister.

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