Submission No. 46
11.1.12

Jane Hyde

RE Water Legislation Amendment Bill 2015

I am a writer and retired consultant and my work in previous years has included projects for, among other clients, the Julius Kruttschnitt Mineral Resource Centre at the University of Queensland and the Minerals Council of NSW.

I appreciate the importance of mining to the Australian and Queensland economies. I am reasonably well informed about mineral extraction processes and the vast amount of water they require. I am, above all, acutely aware of the highly organised and strategic way in which the mining industry protects its interests.

I believe this is starkly evident in proposed legislation which will -

- remove the obligation on miners using underground water to obtain a water licence;
- preserve the obligation on landowners who use the same water to obtain a water licence;
- remove the Land Court from the water licence appeal process as it affects coal miners uniquely.

Water is a high-cost item in Australia. It is up to miners to structure their businesses to accommodate this, just as farmers are expected to do. It is up to governments to impose equitable systems in respect to water and to cease yielding to what amounts to bullying.

Jane Hyde
Amended as requested
7 January 2016

Jane Hyde Explanatory Supplement to Submission 046 re Water Legislation Amendment Bill 2015

Summary

The Queensland Water Act, 2000 sought to consolidate and systemise the fair and sustainable management of water in Queensland. The mining industry has used litigation and *force majeure* to subvert this on the grounds that the extractive industries are privileged over other stakeholders by a unique 'right' to groundwater. Legislators have indulged this outrage in the belief, fostered by the industry, that to do otherwise would bring the economy to its knees.

Recommendation

The clear and stated object of the amendments under review should include a groundwater management system that is not only sustainable but *fair*. Provisions which obstruct this object should be removed and replaced by provisions consistent with an *aquifer interference approval process* similar to that used in NSW. [1]

Discussion

The Alpha Coal Mine loophole

In the Alpha Coal Mine case of April 2014, Hancock Coal succeeded in convincing the Land Court that the authorised extraction of minerals by lease or licence under the Mining Resources Act, 1989 includes the extraction of groundwater within and around the tenement. The win hinged on a loophole arising from an oversight; when the Queensland Water Act was introduced in 2000, the MRA was not amended to remove impediments to the authority of the Water Act, enabling Hancock to argue that the 'taking or supplying or interfering with' underground water under the Water Act, 2000 s.808 did not include 'diverting' and 'appropriating' it under MRA s.235(3).

Legislative response, 2014

Rather than fix the loophole to restore the authority of the Water Act, the Government of the day came up with WROLA 2014 which, in relation to mining, fulfils the implicit strategic goal of the mining industry to

- Give miners a legislative 'right' to groundwater similar to that wrested by the petroleum industry in 2005, in egregious defiance of the accepted meaning of the term in Australia (the taking of minor amounts of bore-water for stock and domestic use without need of a licence);
- Privilege extractive industries by making this 'right' the operating principle of groundwater use by them (producing in effect a dual system, one for extractors and one for the rest);
- Pave the way (miners are nothing if not hopeful) for major extractors to make independent arrangements with the state (as in WA) respecting big-scale projects for which they seek unlimited groundwater.

A Coherent Policy on Aquifer Interference

The ability of legislators to resist this strategic push is frustrated by the absence of a considered and coherent policy on the fair use of groundwater on which to base the amendments under review.

A helpful model exists in the NSW Aquifer Interference Approval Policy which addresses the often conflicting demands in regional areas of the extractive industries and agriculture (and tourism), a situation acutely relevant to Queensland. The policy and the Act benefit from currency and clarity in terminology.

NSW policy in summary

Under the NSW Water Management Act, an *aquifer* means a geological structure or formation or an artificial landfill that is, or is capable of being permeated with water and of yielding productive volumes of water.

An *aquifer interference activity* means penetrating an aquifer, interfering with the water in it, obstructing its flow, taking it while carrying out mining or any other prescribed activity, and disposing of it.

Approval to interfere with an aquifer is required in accordance with the *aquifer interference approval policy* administered under the Act.

A Fact Sheet *NSW Aquifer Interference Policy: Quarrying and Extractive Industries* (July 2014) is included separately with this document.

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1. Lest there be caution about referencing policy from NSW: Queensland legislators are required to ensure that legislation before the Parliament is consistent with legislation in other jurisdictions. Even if a piece of legislation is specific to the state, which arguably applies to any legislation, consistency in the *objects* of the respective legislation, e.g. the fair use of groundwater as in this case, warrants an investigation at the very least. Legislators are also obliged to observe fundamental legislative principles which include currency and clarity in terminology supported by definitions, especially in a 'trade' context. Refer Queensland Legislative Standards Act 1992, Section 4.

ATTACHMENT TO SUBMISSION NO. 046

Attachment

Department of Primary Industries
Office of Water

NSW AQUIFER INTERFERENCE POLICY | FACT SHEET 7

Quarrying and extractive industries

July 2014

This factsheet aims to assist extractive industries, such as quarrying, dredging and the extraction of sand and aggregate, to understand and comply with the NSW Aquifer Interference Policy.

The Policy was released in September 2012 and applies across NSW. It explains the water licensing, impact assessment and approval requirements for aquifer interference activities under the *Water Management Act 2000,* and other relevant legislation.

Water management in NSW

In New South Wales water is managed under the *Water Management Act 2000* and the *Water Act 1912.*

Water sharing plans are used to manage surface water and groundwater through associated water licences and approvals. Water sharing plans are in place for all inland water sources and are progressively being introduced for coastal water sources.

The purpose of water sharing plans is to protect water sources and their dependent ecosystems, whilst recognising the social and economic benefits of the sustainable and efficient use of water.

These plans set limits on the total volume of water that can be taken from each water source and specify rules for water access. Long term average annual extraction limits (LTAAELs) are set for each water source and aim to ensure that water is available for the environment and other water users, including domestic and stock users, irrigators, town water suppliers and other industries such as mining and agricultural processors.

Water licensing

Activities associated with extractive industries may take water from the groundwater sources in which they occur, and from other hydraulically connected water sources.

Aquifer interference activities taking water outside of water sharing plan areas require a licence under the *Water Act 1912*. In areas covered by water sharing plans, a water access licence is required under the *Water Management Act 2000* unless an exemption applies. The current exemptions from the requirement to hold a water access licence are specified in the *Water Management (General) Regulation 2011*.

A water licence is required regardless of whether the water is taken for consumptive use such as irrigation, or whether it is taken incidentally in the course of conducting the primary activity. For example, dewatering of groundwater to allow quarrying or sand mining to occur requires a water licence even where the extracted water is not being used consumptively as part of that industry's operation. Water licensing requirements also apply to activities that are State significant.

A licence is required for water that:

- Is extracted as entrained water within the resource
- Is dewatered to allow quarrying and resource extraction
- Flows into a void as a result of evaporation
- Is required for processing or washing
- Is required for dust suppression
- Is extracted for any other reason or purpose, whether passively or actively.

A water access licence specifies the holder's shares in the available water within the relevant water source. Separate water access licences are required to account for water taken from groundwater and surface water sources through aquifer interference activities, including quarrying and extractive industries. A licence with sufficient entitlement and water allocation must be held to account for all take of water, both during the life of the activity and for any ongoing take after the activity has ceased. Ongoing take includes the volume of groundwater inflow to voids that results due to evaporation where the void intersects the water table.

Where water is taken, a water access licence must be obtained for the correct category (eg aquifer), within the correct water source (as defined by the relevant water sharing plan), and that can be linked to the location that the water will be taken from.

These water licensing requirements are important for ensuring that the amount of water taken from a water source does not exceed the LTAAEL set in the water sharing plan.

Estimating the volumes of water that will be taken

Proponents are required to provide predictions of take during operations and after they have ceased, in order to ensure that appropriate entitlement is held to account for that take. The estimates of take should be made using modelling or analysis. The level of analysis required will depend on the nature and scale of the proposal.

Obtaining water entitlement

In areas still being managed under the *Water Act 1912* a water licence with entitlement can be obtained from the Office of Water for groundwater sources that have unassigned water. In areas being managed under the *Water Management Act 2000* water entitlement will need to be purchased on the open market. From time to time, the Office of Water will also make controlled allocation orders that allow a small portion of unassigned groundwater to be made available as new licences. Under a controlled allocation process the right to purchase water entitlement is obtained through a tender, bid or other competitive process.

Approvals

Where a water sharing plan has commenced, the water supply work approval, controlled activity approval and use approval requirements of the *Water Management Act 2000* apply. This means that all works taking water from a water source require an approval unless an exemption applies. The exception to this is where approval for a State significant development, State significant infrastructure or public priority infrastructure is given under the *Environmental Planning and Assessment Act 1979*. In this case, the approval requirements of the *Water Management Act 2000* do not apply however the NSW Office of Water will still assess the project against the provisions of the Aquifer Interference Policy and provide advice to the consent authority.

Applications for approvals will need to nominate the works from which the water will be taken. Works include bores, pumps, voids and excavations. Where an approval is given under other legislation the proponent must still nominate the works that will take water, even if no works approval is required under the *Water Management Act 2000*.

Further information in relation to approvals under the *Water Management Act 2000* can be obtained from http://www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx

Assessment of impacts

The Policy details how the NSW Office of Water will assess quarrying and extractive industry activities to determine their potential impacts on water resources. It also explains the information and modelling or analysis that proponents will need to provide to enable the impacts to be adequately assessed.

An assessment needs to be conducted before approval will be given to carry out an aquifer interference activity such as quarrying (where the water table is intersected), or to construct and use a water supply work. This involves assessment of the predicted impacts on the groundwater source, connected water sources, the users of these water sources and dependent ecosystems.

The assessment criteria for aquifer interference activities are set out in the Policy and are called 'minimal impact considerations. These considerations include impacts on water table levels, water pressure levels and water quality in different types of groundwater systems. Impacts on connected alluvial groundwater

systems and surface water systems are also considered, as well as the impacts on other water-dependent assets including water supply bores, groundwater dependent ecosystems and culturally significant sites that are groundwater dependent. Rules in relevant water sharing plans also apply if an approval is being given under the *Water Management Act 2000*, for example distance conditions.

Thresholds are set in the Policy so that the impacts of both an individual activity and the cumulative impacts of more than one activity in a water source can be considered.

Monitoring and reporting

A water measurement and monitoring program should be developed to monitor and report on water levels, water quality and water take. The monitoring program should identify all users and water dependent features with the potential to be impacted by the activity. Water level and quality monitoring should be initiated prior to commencement of the activity to establish baseline conditions. The water monitoring program should include regular assessment and reporting of results to ensure that impacts are not greater than predicted. The program should also include threshold trigger levels and a response strategy in the event that trigger levels are exceeded.

New initiatives

The NSW Office of Water is developing return flow rules for groundwater that are proposed to be made under section 75 of the *Water Management Act 2000*. Under these rules, it is proposed that licence holders will receive a credit to their water allocation account for water returned to the same groundwater source from which it was taken, providing specific conditions are met.

An exemption from the requirement to hold a licence is also being developed where less than 3 ML per year is taken from a groundwater source. This will only apply where the take is not principally for the purposes of water supply or water use.

Both initiatives require amendments to be made to the Water Management (General) Regulation 2011.

This factsheet will be updated when any changes to the legislation are made.

More information

www.water.nsw.gov.au

Find more factsheets on the Aquifer Interference Policy.

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