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## Drayton South PAC Hearing, UHCM, Muswellbrook, 17.11.16

Catherine Chicken BVSc (Hons), PhD, MANZCVS (Eq. med.)

Consultant Veterinarian



Good morning. My name is Catherine Chicken. I am a consultant veterinarian with Scone Equine Hospital and I moved to Scone as a young vet over 20 years ago to pursue a career in the thoroughbred breeding industry. After many years of frontline clinical work, I undertook a PhD, and am currently employed doing primary accession pathology work as well as being engaged in research, in collaboration with a number of academic institutions and industry bodies.

I represent the equine industry on the UHAQACommittee and have a keen interest in air quality and environmental sustainability.

Firstly, I would like to say that the views expressed today are entirely personal.....

Many of the environmental effects of open cut coal mining on this district are obvious for all to see, hear and smell, regardless of which industry you are involved in.....Dust, dirty air, unpleasant odours emanating from coal mines and coal-fired power stations, not to mention visual degradation of the landscape, are increasingly apparent.

The air quality of the Upper Hunter region is measured by a network of air monitors put in place in October 2010 after the community raised significant concerns over air quality in this region. There are 14 monitors measuring particulate matter of less than or equal to 10um (PM 10) – the large visually detectable particles - with 3 of those monitors also measuring small particulates, 2.5um or smaller (PM2.5) – the particles that are small enough to enter the bloodstream of humans and animals. It is the PM 2.5s that have been associated in international studies with deleterious health effects and are of major concern to the health and well-being of the communities of the Upper Hunter.

There are a number of government departments actively involved in implementing measures to improve air quality in the Upper Hunter region of NSW and more broadly. The Environment Protection Agency (EPA) and Office of Environment and Heritage (OEH) have details of these initiatives on their respective websites.....

The major problem with attempting to improve air quality in this region, as I see it, lies in the ever-increasing number of coal mines polluting the air and the inability to effectively regulate the level of pollution emanating from each mine site. Despite all good intentions of the regulatory bodies, open cut coal mining is a dirty business and air quality in this region continues to be a major concern for all living here. The long-term effects of air pollution on the communities of the Upper Hunter are as yet unknown. Time will tell....but since the community of this region is not of such magnitude as a major metropolitan centre, epidemiological studies are unlikely to provide meaningful information regarding health impacts. We are therefore relying on quantitative and qualitative assessment of the air pollution in this region to formulate plans to reduce its impact on us all. There is a wealth of information being gathered through the UHAQMN and the installation of this network has provided information that has helped guide initiatives to improve air quality in our region. Yet, the process by which mines are being approved does not take into consideration the cumulative impact that one more mine will have.

As part of the National Clean Air Agreement, the new National Environment Protection Measure (NEPM) standards for air quality in Australia were recently agreed to at 8 ug/m³ for PM 2.5 and 25 ug/m³ for PM 10. The EPA undertook predictive modelling in 2014 (by Pacific Environment) which showed that an annual average PM 2.5 Ambient Air Quality Standard of 8 ug/m³ is unlikely to be met in Singleton and Muswellbrook. The modelling also showed that man-made particulate emissions need to be reduced by 50% to meet the new standard. (EPA website, review of the load based licensing scheme: issues). This points to the on-going challenge of air quality in the face of on-going open cut coal mine expansion in this region.

The horse breeding industry of the Hunter Valley is a sustainable, well established industry that has been present and thriving in this area for 150 years. It is one of 3 centres of excellence in the world for thoroughbred horse breeding. Four PAC decisions over the past 10 years have concluded that horse breeding and coal mining cannot co-exist in close proximity.

The proposed Drayton South mine if allowed to proceed will be in close proximity to 2 major horse breeding operations, in Coolmore and Godolphin Woodlands. Please consider carefully the implications of approving this mine in this place on the wider horse industry and the overall impacts to air quality that yet another open cut coal mine will have on this region.

Thank you for your time.