31 January 2017

Minerals and Energy Resources  
Department of Natural Resources and Mines  
Level 12, 61 Mary Street  
Brisbane Qld 4000

By email: cwpfeedback@dnrm.qld.gov.au

Dear Ms Bartholomew

AFOEM feedback on the consultation paper titled *Spirometry for the Coal Mine Workers’ Health Scheme - Next steps in planning reform*

Thank you for the opportunity to provide comment to the Queensland Department of Natural Resources and Mines (DNRM) on the consultation paper *Spirometry for the Coal Mine Workers’ Health Scheme - Next steps in planning reform.*

The Australasian Faculty of Occupational and Environmental Medicine (AFOEM) is a Faculty of the Royal Australasian College of Physicians (RACP) representing specialist occupational and environmental physicians (OEPs) in Australia and New Zealand. We are committed to establishing and maintaining the highest standards of practice in occupational and environmental medicine (OEM) in Australia and New Zealand through training, continuing professional development and advocacy.

**Background**

We acknowledge that the Department of Natural Resources and Mines (DNRM) is working to improve the medical screening program for Queensland's coal mine workers. We also note that submissions to the consultation will inform the further development of a preferred option that will be presented to the Coal Mining Safety and Advisory Committee (CMSHAC) and the Queensland Government for consideration.

Regarding the review by the Monash University Centre for Occupational and Environmental Health led by Professor Malcolm Sim, FAFOEM, we support the 18 recommendations to improve the respiratory component of the Coal Mine Workers' Health Scheme. The proposed model includes accreditation standards for spirometry equipment and the performance of spirometry, quality control, quality assurance and an audit component.

**Distribution of coal mine workers**

We note that there are approximately 29,000 coal mine workers in Queensland working at 54 coal mines many of whom live in regional Queensland whilst a
proportion are fly-in fly-out. We acknowledge the geographic and logistic challenges faced as a result of these factors.

**Proposed new regulated accreditation program**

We note the details of the proposed new regulated accreditation program on pages 15 and 16 of the consultation paper. We specifically note that the proposed features of the program on page 16 include:

- An accreditation program
- Spirometry training
- Spirometry equipment standards
- Performance and interpretation standards
- Records management requirements.

We note that the summary of the proposal includes:

- An established organisation (the Thoracic Society of Australia and New Zealand or similar body) with experience in administering spirometry accreditation, with strong expertise in respiratory medicine, and governance and resources, to administer an accreditation program for spirometry.
- Nominated Medical Adviser practices applying for accreditation must meet standards around spirometry training, equipment, taking and interpretation of spirometry and records management.
- Organisation also endorses training providers for the program.
- Audits (including on-site audits as required) undertaken by approved program provider.
- Regulations amended to provide that only accredited practices can conduct spirometry for the purposes of the Health Scheme.
- The department will also implement a revised model for nominated medical advisers (e.g. qualifications, experience) in accordance with the Monash review recommendations.

**Comments and recommendations**

We are pleased to confirm our support for strategies outlined within the proposal to improve the screening process, including training, assessment and accreditation processes.

In addition, we provide the following comments:

a) We feel it will be important for the training component to include instruction about the strengths, weaknesses and limitations of spirometry as a screening test. It is essential that minimum standards and key competencies are established.

b) Clinical guidelines should be developed for the diagnosis and management of coal mine dust lung disease (CMDLD). The clinical guidelines would specify appropriate processes and pathways for health surveillance. They would also document the processes for the referral, further investigation and management of identified cases, including the review and monitoring of any ongoing coal dust exposures.
c) Regarding records management, the proposal states that practitioners should use “an appropriate electronic management system to store spirometry data to allow for comparison over time”. In our view, a centralised electronic database should be established for storing health surveillance records. The database should comply with all data security, audit and privacy standards. It is essential that previous records are available for comparison with subsequent assessments.

d) The confidentiality of medical records, including spirometry, and the privacy of coal mine workers must be maintained. In addition, a mechanism needs to be developed that will allow employers to be provided with sufficient information to appropriately manage exposure risks. An exemption to privacy of medical records should be made in the case of a medical auditor appointed by the DNRM and in the case of research, when approved by a human research ethics committee.

e) When an abnormality is detected using the baseline screening testing, more detailed follow-up lung function testing should be performed to allow the early detection and diagnosis of the spectrum of CMDLDs. These tests should also be performed by accredited services.

f) Spirometry is a uniformly accepted screening test, however it is also acknowledged that it has limitations. Other medical tests, such as the diffusing capacity of the lungs for carbon monoxide (DLCO) may have a role to play, however further evaluation and research will be required before this would be more broadly adopted.

g) All coal miners presenting with respiratory symptoms, new radiological abnormalities, and/or a decline in lung function greater than predicted using the NIOSH algorithm, or similar, should be referred for evaluation by a respiratory physician. Where further evaluation of the coal miner's history of exposure to coal dust, silica or other workplace respiratory hazards is required, the worker should be referred to an occupational physician.

h) A more effective, longitudinal industry-wide health surveillance system should be implemented covering data from all aspects of medical screening and outcomes for all CMDLD in coal miners, with regular analysis and wide dissemination of the results of such surveillance, at least annually.

i) Further medical research is required into optimal methods of screening for CMDLD, particularly the utility of more sophisticated lung function testing techniques and of high resolution computed tomography (HRCT) applications. Australia could be at the forefront of the development of protocols which add to and improve on the International Labour Organisation (ILO) classification system. Future advances could include the development of a standardised HRCT protocol for screening and diagnosis of CMDLDs.

j) We also seek some further information about the legal framework for the approval and auditing components of the proposed program. In our view, clarity will be required about where the legislative authority will sit for these aspects. We respectfully suggest that whilst an established organisation (such as the Thoracic Society of Australia and New Zealand) may provide the education and accreditation processes, it would be appropriate for the DNRM to maintain responsibility for the governance, final approval and auditing components of the proposed program.
Thank you again for this opportunity to provide our feedback. Should you have any questions or require any further information about this submission, please contact AFOEM on AFOEM@racp.edu.au.

Yours sincerely,

Associate Prof Peter Connaughton
President AFOEM