Inquest into the death of Andrew John Thwaites

Andrew John Thwaites died on 10 August 2016 from carbon monoxide poisoning whilst scuba diving in Moreton Bay. The poisoning caused Mr Thwaites to lose consciousness and drown. The source of carbon monoxide was Mr Thwaite’s air cylinder which was filled using a poorly maintained air compressor.

Brisbane Coroner Christine Clements delivered her findings of inquest on 24 July 2018.

The Queensland Government responds to recommendations directed to government agencies at inquests by informing the community if a recommendation will be implemented or the reason why a recommendation is not supported.

The departments named in this response will provide implementation updates until the recommendation is delivered. Further information relating to the implementation of recommendations can be obtained from the responsible minister named in the response.

**Recommendation 1**

Legislation relating to recreational diving (*Safety in Recreational Water Activities Act 2011* and the *Work Health Safety Act* and Regulations together with the *Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2011*) be reviewed.

Response and action: the recommendation is agreed in part and implementation is in progress.

Responsible agency: Department of Education (Office of Industrial Relations).

On 9 December 2019 the Minister for Education and Minister for Industrial Relations responded:

The *Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2018* commenced on 8 February 2018 and it is the approved code of practice under section 43 of the *Safety in Recreational Water Activities Act 2011*. The 2018 code of practice replaced the 2011 code of practice referred to in the coroner’s recommendations however this does not impact on the coroner’s recommendations.

The Office of Industrial Relations notes the coroner’s reference in the context of bare boat charter arrangements to the jurisdictional scope of Work Health and Safety Queensland (WHSQ) and has identified that a review of the *Safety in Recreational Water Activities Act 2011* and the *Work Health and Safety Act 2011* and regulations is not necessary to address the coroner’s comments in relation to bare boat charter arrangements.

Both Acts place the primary duty of care and various other duties and obligations on a ‘person conducting a business or undertaking’ (PCBU) in a recreational water activity. Codes of practice offer practical advice to PCBUs and workers about what is reasonably practicable to meet duties and to make diving a healthy and safe activity. The Office of Industrial Relations is currently reviewing the 2018 code of practice and the review includes consideration of amendments that clarify the duties of PCBUs in relation to bare boat charter operators that hire out dive/snorkelling vessels to divers.

The 2018 code of practice updated the references to the maximum amount of carbon dioxide and oil that a gas cylinder may contain to ensure that these figures remain consistent with Australian Standard 2299.1:2015. The 2018 code of practice also includes a requirement for air compressors that are used to fill compressed gas cylinders to be positioned to minimise the potential for overheating. There are no further
amendments identified in the current review of the 2018 code in response to the coroner’s recommendations for compressors and gas cylinders as they are covered by a requirement to comply with the Australian Standard 3848.2 – 1999 in relation to filling compressed gas cylinders.

The Office of Industrial Relations has noted the coroner’s reference to the importance of education to alert divers of the risk of contamination when filling their cylinders. Workplace Health and Safety Queensland provides guidance material as per the 2018 code of practice on the WorkSafe website on the risks of carbon monoxide poisoning. The 2018 Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice is published here: [www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice](http://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice). Workplace Health and Safety Queensland also has a specialty Dive Unit, which conducts audits on providers of recreational diving activities. These audits include assessments of air quality and compressors.

In relation to the current review of the 2018 code of practice, recreational diving industry roundtables were convened in Cairns and Brisbane in 2018 and in Airlie Beach in 2019 as part of the consultation on the recommended change to the code of practice. The industry roundtables were hosted by the Office of Industrial Relations and attended by Minister for Education and Minister for Industrial Relations (the Honourable Grace Grace MP), the Member for Cairns (Mr Michael Healy MP), diving industry operators and associations as well as the Northern and Brisbane Coroners, Surf Life Saving Queensland, the Queensland Police and the Australian Workers’ Union.

A smaller industry working group was established from key stakeholders from the North Queensland, Whitsundays and South-East Queensland region. These representatives met with the Office of Industrial Relations in Cairns in 2018 to consider the recommended changes to the Code of Practice as well as consider relevant regulatory changes. After further industry roundtable and working group meetings in early 2019 a draft code of practice was circulated to working group members in May 2019. Feedback from working group members was incorporated into the draft code and circulated to the industry roundtable and working group members for comment in September 2019. Feedback from the circulation of the draft code is currently being considered with amendments to the draft code before a final draft is circulated to industry. Once stakeholders have been provided the opportunity for input and consultation is complete the draft code will be finalised and considered by government.

The Office of Industrial Relations intends to complete the review and subsequent to the government’s consideration of the review findings, finalise any amendments to the code of practice in the coming months.

**On 4 June 2020 the Minister for Education and Minister for Industrial Relations responded:**

Following consultation with the working group and wider industry consultation in September 2019, a final draft of the code was circulated to the working group and some industry roundtable members for comment with responses by 30 January 2020. Feedback on the final draft of the code will be carefully considered with further amendments made where appropriate.

OIR intends to complete the review and subsequent to the government’s consideration of the review findings, finalise the code of practice as soon as practicable.

**Recommendation 3**

The Queensland Police Service Dive Squad be equipped with suitable initial testing device/capability of air quality, prior to formal testing.

Response and action: the recommendation is agreed in part and is implemented.

Responsible agency: Queensland Police Service.

On 2 May 2019 the Minister for Police and Minister for Corrective services responded:
The Queensland Police Service Dive Squad engaged with multiple key stakeholders in relation to an air quality testing device.

The Dive Squad will meet with the Queensland Fire and Emergency Services Scientific Branch to discuss suitable air quality testing devices. The outcomes of this meeting will determine the next steps.

On 26 November 2019 the Minister for Police and Minister for Corrective Services responded:

The Queensland Police Service Dive Squad met with Queensland Fire and Emergency Services Special Response Unit regarding suitable initial testing devices. As Queensland Fire and Emergency Services are already equipped with suitable testing devices, the Queensland Police Service Dive Squad will work collaboratively with the Queensland Fire and Emergency Services Special Response Unit when an investigation commences involving a deceased diver which will enable a quick assessment of the air breathed during the dive. Both agencies have developed a new protocol/course of action which will facilitate a rapid response during future investigations.

Queensland Fire and Emergency Services currently utilise the Drager Aerotest Simultan HP testing device which is located at most QFES stations across the state. This testing device enables the quantitative detection of various potentially harmful substances including carbon monoxide, carbon dioxide, water vapour and oil in dispersing compressed air. These four substances are those that would likely cause harm to a diver breathing on compressed air.