

25 March 2021

e: brisbane@appea.com.au
w: www.appea.com.au

Environment Policy and Legislation
Department of Environment and Science
via email – [REDACTED]

Dear Ms Cooper,

RE: Draft Residual Risk Guideline

I am writing to provide preliminary APPEA comment on the proposed Residual Risk Guideline.

The Australian Petroleum Production & Exploration Association (APPEA) is the peak national body representing upstream oil and gas explorers and producers active in Australia. APPEA's member companies account for more than 90 per cent of Australia's petroleum production and almost all of Queensland's production. Further information about APPEA can be found on our website at www.appea.com.au.

Attached are APPEA's initial comments on the Guideline in response to DES's preference for early feedback. We are continuing to review the Guideline and anticipate providing further comment after the Easter break.

Our main point of feedback at this time is that there are a number of terms used in the Guideline that could be interpreted in a variety of ways and therefore should be clearly defined. In the attachment to this letter we have proposed definitions for these terms.

We would welcome the opportunity to discuss these matters further.

Yours sincerely

[REDACTED]
Matthew Paull
A/g Queensland Director

Proposed Definitions and Guidance

APPEA suggests the following definitions be added to the Guideline:

Predominant beneficial use of local groundwater resource

means the most prevalent beneficial use, by number of users, of the uppermost groundwater located below the facility. The term does not include environmental beneficial use or where groundwater supports an environmental sensitivity (e.g. GDE).

For the purposes of residual risk assessment, the term refers to actual licenced (under water licence) beneficial use only and does not include potential beneficial use.

For the purposes of this assessment, a radius of 1,000m should be adopted to assess predominant beneficial use.

Minimum vertical distance between base of facility and known beneficial groundwater resource

means the minimum distance from the base of facility to the watertable or top of aquifer that is actively used for groundwater abstraction under a water licence.

For the purposes of this assessment, a radius of 1,000m should be adopted to assess active groundwater use.

Minimum horizontal distance of facility to env. sensitivity supported by intersected aquifer

means the horizontal distance from facility or well / bore to nearest environmental registered bore, with a water licence, in an aquifer intersected by the facility or plugged and abandoned well / bore.

Horizontal distance from wells / bores to nearest groundwater abstraction point of an intersected aquifer, for beneficial use

means the horizontal distance from well / bore to nearest registered bore, with a water licence, in an aquifer intersected by the plugged and abandoned well / bore.

aquifer

means a saturated underground geological formation or group of formations, that can store water and yield it to a bore or spring. A saturated formation that will not yield water in usable quantities is not considered an aquifer.

groundwater dependent ecosystem

means ecosystems which require access to groundwater on a permanent or intermittent basis to meet all or some of their water

requirements so as to maintain their communities of plants and animals, ecological processes and ecosystem services.

For the purposes of residual risk assessment, groundwater dependent ecosystems do not include those mapped as “unknown”.

intersected aquifer

means

- for Waste Facility – an aquifer that is intersected by the base of the waste facility.
- for BW&Ps – an aquifer that is intersected by the plugged and abandoned bore or well.

known beneficial groundwater resource'

means uppermost groundwater or aquifer that is actively used for groundwater abstraction under a water licence.

local groundwater resource

means uppermost groundwater (i.e. watertable).

minimum vertical distance

means the minimum distance from base of facility to watertable or top of aquifer.

predominant use

means the main/principal beneficial use of local groundwater resource.

wetland

means:

- areas shown on the Map of referable wetlands which is a document approved by the chief executive on 4 November 2011 and published by the department, as amended from time to time by the chief executive under section 144D of the *Environmental Protection Regulation 2008*; and
- areas defined under the Queensland Wetlands Program as permanent or periodic / intermittent inundation, with water that is static or flowing fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six (6) metres, and possess one or more of the following attributes:
 - at least periodically, the land supports plants or animals that are adapted to and dependent on living in wet conditions for at least part of their life cycle, or

- the substratum is predominantly undrained soils that are saturated, flooded or ponded long enough to develop anaerobic conditions in the upper layers, or
- the substratum is not soil and is saturated with water, or covered by water at some time.

The term wetland includes riverine, lacustrine, estuarine, marine and palustrine wetlands; and it does not include a Great Artesian Basin Spring or a subterranean wetland that is a cave or aquifer.

waterway

means a section of a watercourse where groundwater from an aquifer enters the stream to or through the streambed. This includes waterholes and flowing sections of streams dependent on groundwater.

For the Surat CMA, waterway means a 'Mitigation site (verified)' Watercourse Springs as per Figure 9-2 of UWIR.