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MAKE no mistake, if a gas field is approved over the Surf Coast Shire it will industrialise the region.

The economics of unconventional gas are pretty simple; once approval for a commercial gas field is granted, the company needs to extract as much gas as possible to maximise its return on investment.

That typically means thousands, potentially tens of thousands of wells, as we see with coal seam gas in Queensland or shale and tight gas fields in the United States.

Every one of those wells is connected with access roads and pipelines, interspersed with compressor stations, holding ponds for toxic water and other heavy industrial infrastructure. Will tourists to the region really want to visit a gas field?

But what happens under the ground is the really serious bit. Every shale or tight gas well needs to be hydraulically fractured (fracked), multiple times.

Every time a well is fracked it requires between 11 and 30 million litres of water. That means up to 1,100 tanker truckloads per fracture. That's serious truck traffic.

And it's not just water being trucked in. According to data released by the US gas industry, each fracture also needs between 80 and 330 tonnes of industrial chemicals. That's up to about 30 tanker loads. These chemicals include neurotoxins, reproductive toxins and endocrine disruptors.

And gas wells leak. There are hundreds of civil cases brought against fracking companies in the US for air and water pollution. Most are settled out of court with a gagging order, but recently \$3 million was awarded to a Texas family for health impacts from nearby drilling. Last year, in New South Wales the gas company Metgasco drilled a tight gas well. It exploded, blowing the steel

well casing 200 meters into the air. The subsequent inquiry found the well had been leaking the entire time.

During the exploration stage, companies will talk about the dozen or so exploration wells and are careful not to draw attention to the hundreds or thousands of wells once it becomes a commercial gas field. But be assured that they are not there to explore just for the sake of it. The aim is to get a commercial gas field approved, and that means hundreds if not thousands of wells.

An exploration company like Lakes Oil is highly unlikely to develop a commercial gas field themselves. Their business model is to prove the gas is there, get the approvals, and then sell onto an oil and gas major, like Esso or Santos, to develop the gas field.

The economic benefits touted by the industry to justify these projects are often illusory. Most of the employment will be Drive In Drive Out or Fly In Fly Out workers who spend little money in the region. Workers employed locally will be mostly drawn from other local business, forcing those businesses to compete with gas industry wages.

Sadly, even the institutions we trust the most to give us reliable information on the risks of this industry have become reliant on gas industry funding. The CSIRO is a partner in the Gas Industry Social and Environmental Research Alliance (GISERA) which is funded by two huge multinational gas export projects with a combined \$35 billion dollar stake in coal seam gas in Queensland.

We should be wary about claims that "new technology" and superior regulation will protect us. These types of claims have been made by the industry every step of the way through its development in both the US and Queensland. Will we risk the Surf Coast in another unconventional gas experiment?

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