

HUMAN RIGHTS IMPACTS OF UNCONVENTIONAL GAS

AUSTRALIAN
SESSION – SUBCASE I



SUBCASES

Right to Health

Health impacts

Right to food, water, housing

Infrastructure impacts

Right to safe, healthy, sustainable environment

Climate change impacts

Right to participation

Government subsidised pursuit of fossil fuels

Right to cultural heritage, land, resources, social

Cultural and social impacts

SUBCASE I – HEALTH AND INFRASTRUCTURE

The human health subcase will examine

- the health impacts of unconventional gas, both acute and chronic, especially for vulnerable groups – due to exposures to endocrine disruptors, known and probable carcinogens, radon gas, neuro- and developmental toxicants, ozone, and noise.

TESTIMONY INVITED

- The following is a summary of the issues associated with this subcase.
- You are invited to provide testimony or witness statements supporting this subcase.

NO DATA NO PROBLEM

- No baseline studies and no health impact assessments were done prior to the Coal Seam Gas production licences being issued in Queensland, and in Queensland comprehensive health studies have still not been done. Real time air quality monitoring has never been done. Science has been singularly lacking. There has been no comprehensive assessment of the level of fugitive emissions from the Queensland gas fields. In Queensland there are effectively no limits on emissions from each well or the wider reticulation system. The gas companies can flare or vent 3 million cubic meters of gas from each well during production testing before having to even pay royalties. Emissions from the thousands of high point vents are not used in any calculation of emissions.
- People living in the Queensland gasfields are subjected to the emissions of raw gas (including BETX) being vented from thousands upon thousands of gas relief vents on the water gathering lines. These emissions are not being monitored by government, and no publically available data on the releases from these vents is available from industry. Yet, some of these vents are within of few metres from family homes. Families including vulnerable children are also subjected to particulate pollution and monocyclic and polycyclic aromatic hydrocarbons when raw, unprocessed gas is used as fuel to power the gas wells themselves. They are subjected to the noxious emissions from the flares, from the compressor stations, processing plants and water treatment plant, so that this raw gas can be “cleaned” to trade specifications and pumped overseas.

NO DATA NO PROBLEM

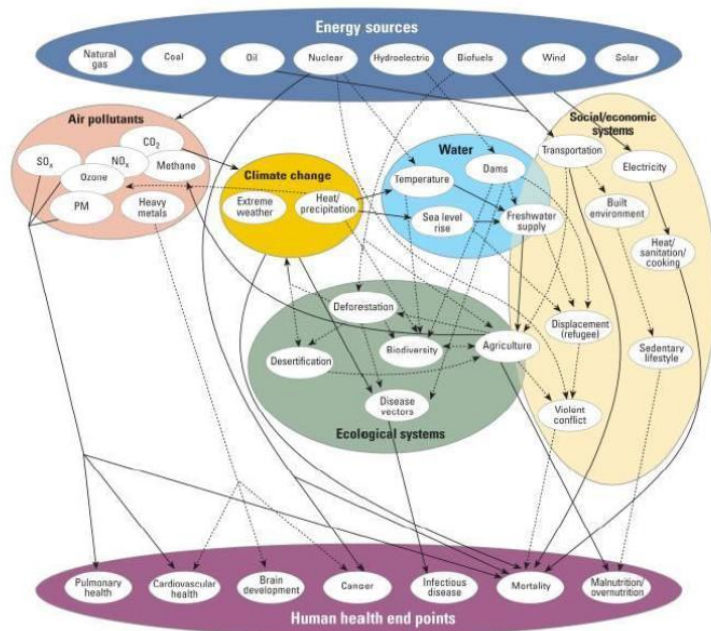
- The industry and government have failed to establish baselines prior to the rapid development of the industry
- Communities have continuously raised concerns regarding impact on health both direct and indirect
- To date no formal health study has been undertaken to determine impacts of the industry.
- Despite the lack of specific data regarding this industry, the impact of the fossil fuel industry is known

KNOWN HEALTH IMPACTS

- The health costs associated with fossil fuel energy production and consumption are significant
- Current global and national energy policy privilege fossil fuels at the expense of safer, renewable, and more sustainable energy options.
- In Australia, the health implications of energy policy are not currently considered in policy decisions regarding the allocation of energy sector subsidies, in plans for Australia's energy future, in decisions regarding new energy infrastructure projects, nor in energy trade.

HEALTH IMPACT

- Human individual and societal health is determined by ecological as well as social factors. The provision of clean air, fresh water, and fertile soil are all ecosystem services that underpin society's ability to feed, house, and clothe itself, provide protection from weather, help prevent the spread of disease and support psychological and emotional well-being.

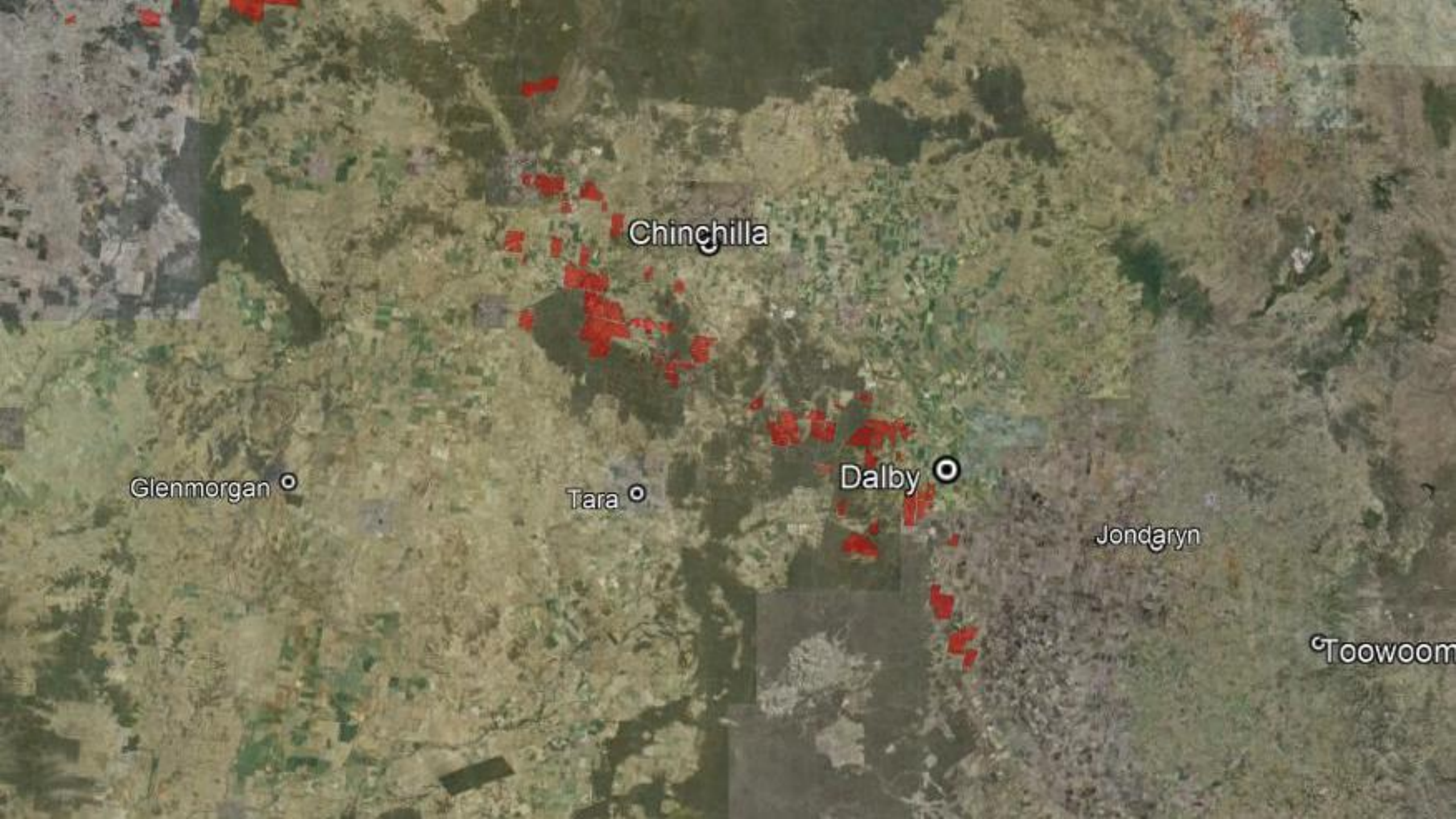


From: Golke, J. et al. Environmental Health Perspectives, 2008 June; 116 (6): A236–A237.

- These 'externalities' - health, social and environmental costs not accounted for in the market price of electricity or fuel costs - are nonetheless borne by the community

OVERVIEW OF HEALTH IMPACT EXPOSURES





Chinchilla

Glenmorgan

Tara

Dalby

Jondaryn

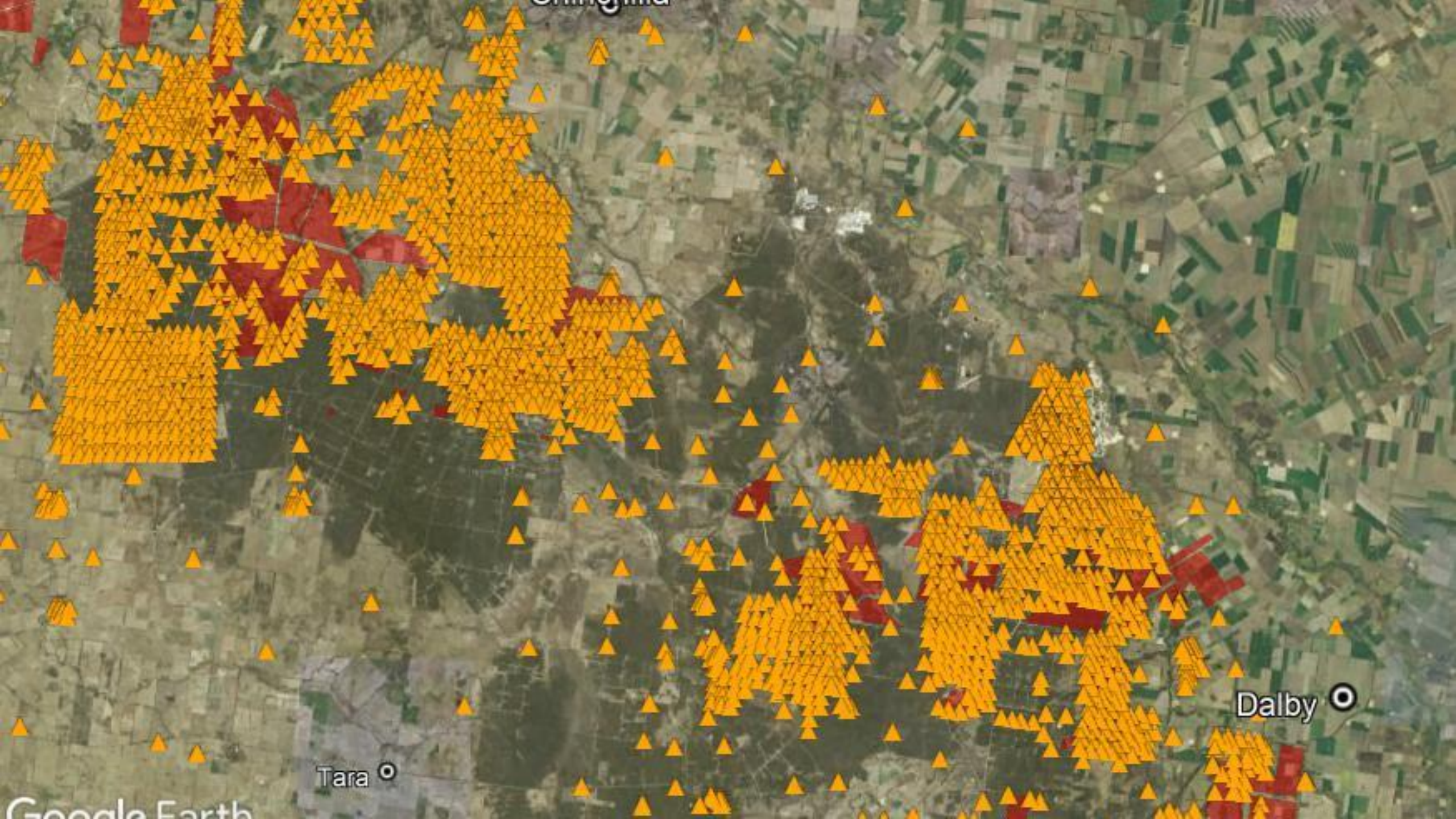
Toowoomba

Chinchilla



Tara

Dalby

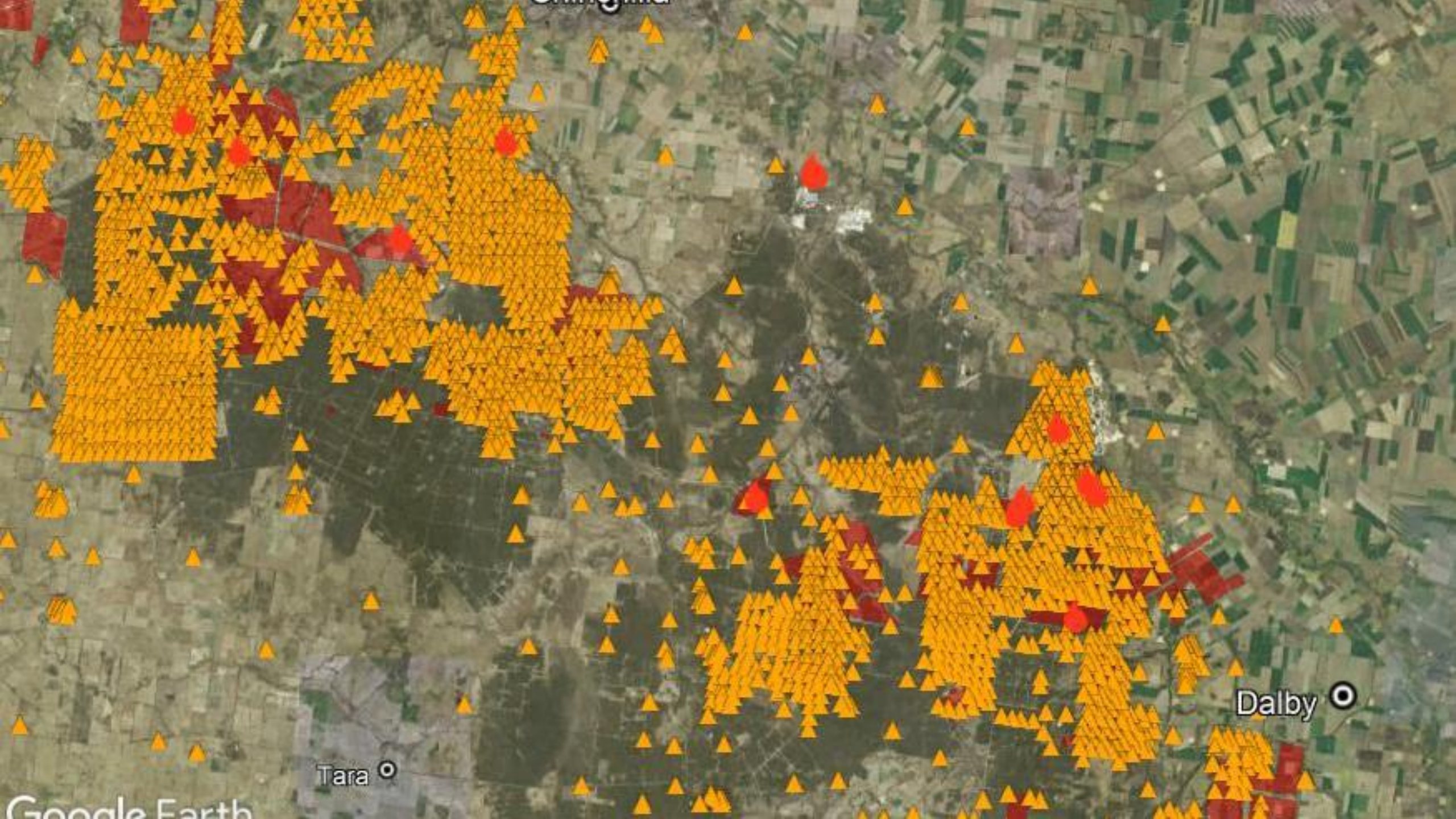


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Dalby

Tara








Google Earth



Tara

Dalby

Google Earth

Substance 	Source	Air (kg)^[1]	Land (kg)^[1]	Water (kg)^[1]
Acetaldehyde 		13,000		
	Oil and Gas Extraction [070]	13,000		
Arsenic & compounds 		68	0.036	
	Oil and Gas Extraction [070]	68	0.036	
Benzene 		1,200		
	Oil and Gas Extraction [070]	1,200		
Beryllium & compounds 		3.4	0.026	
	Oil and Gas Extraction [070]	3.4	0.026	
Cadmium & compounds 		4.0	0.0058	
	Oil and Gas Extraction [070]	4.0	0.0058	
Carbon monoxide 		5,200,000		
	Oil and Gas Extraction [070]	5,200,000		

Chromium (III) compounds ⓘ	790	0.059
Oil and Gas Extraction [070]	790	0.059
Copper & compounds ⓘ	340	0.057
Oil and Gas Extraction [070]	340	0.057
Cumene (1-methylethylbenzene) ⓘ	0.48	9.4
Oil and Gas Extraction [070]	0.48	9.4
Cyclohexane ⓘ	56	
Oil and Gas Extraction [070]	56	
Ethylbenzene ⓘ	140	
Oil and Gas Extraction [070]	140	
Fluoride compounds ⓘ	2,300	7.3
Oil and Gas Extraction [070]	2,300	7.3
Formaldehyde (methyl aldehyde) ⓘ	280,000	

Oil and Gas Extraction
[070] 10,000

[Lead & compounds](#) ⓘ

400 **0.018**

Oil and Gas Extraction
[070]

400 0.018

[Mercury & compounds](#) ⓘ

0.69 **0.0013**

Oil and Gas Extraction
[070]

0.69 0.0013

[Nickel & compounds](#) ⓘ

570 **0.13**

Oil and Gas Extraction
[070]

570 0.13

[Oxides of Nitrogen](#) ⓘ

7,100,000

Oil and Gas Extraction
[070]

7,100,000

[Particulate Matter 10.0 um](#) ⓘ

5,300,000

Oil and Gas Extraction
[070]

5,300,000

[Particulate Matter 2.5 um](#) ⓘ

90,000

Oil and Gas Extraction
[070]

90,000

[Polychlorinated dioxins and furans \(TEQ\)](#) ⓘ

0.000000019

Oil and Gas Extraction
[070]

0.000000019

[Polycyclic aromatic hydrocarbons \(B\[a\]Peq\)](#) ⓘ

1.7

3.5

Oil and Gas Extraction
[070]

1.7

3.5

[Sulfur dioxide](#) ⓘ

5,000

Oil and Gas Extraction
[070]

5,000

[Toluene \(methylbenzene\)](#) ⓘ

51

Oil and Gas Extraction
[070]

51

[Total Volatile Organic Compounds](#) ⓘ

840,000

Oil and Gas Extraction
[070]

840,000

[Xylenes \(individual or mixed isomers\)](#) ⓘ

1,100

3.3

Oil and Gas Extraction
[070]

1,100

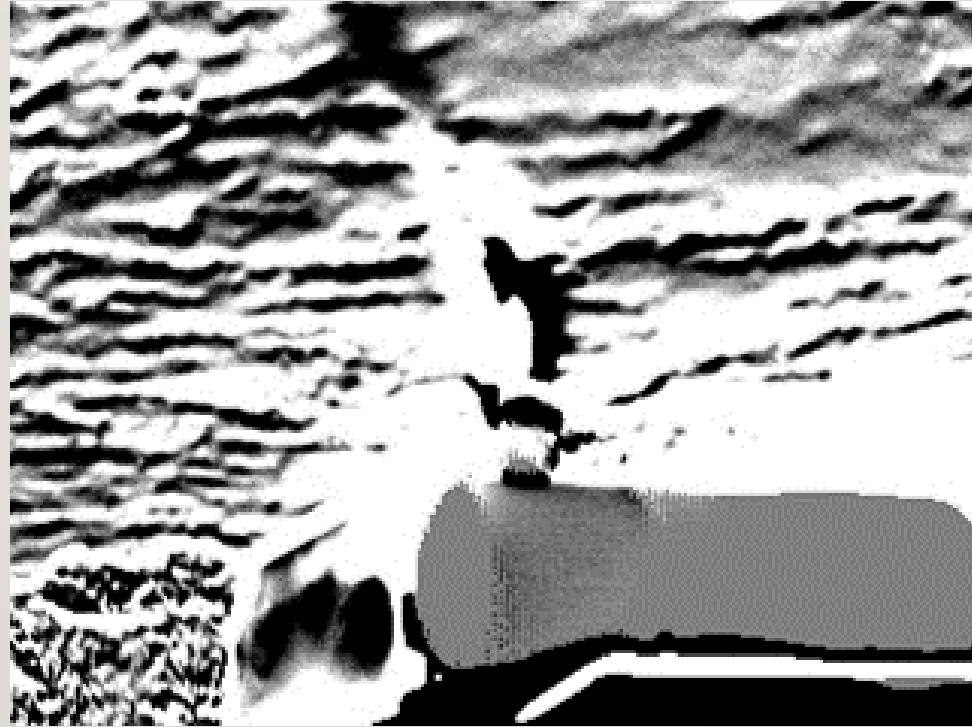
3.3



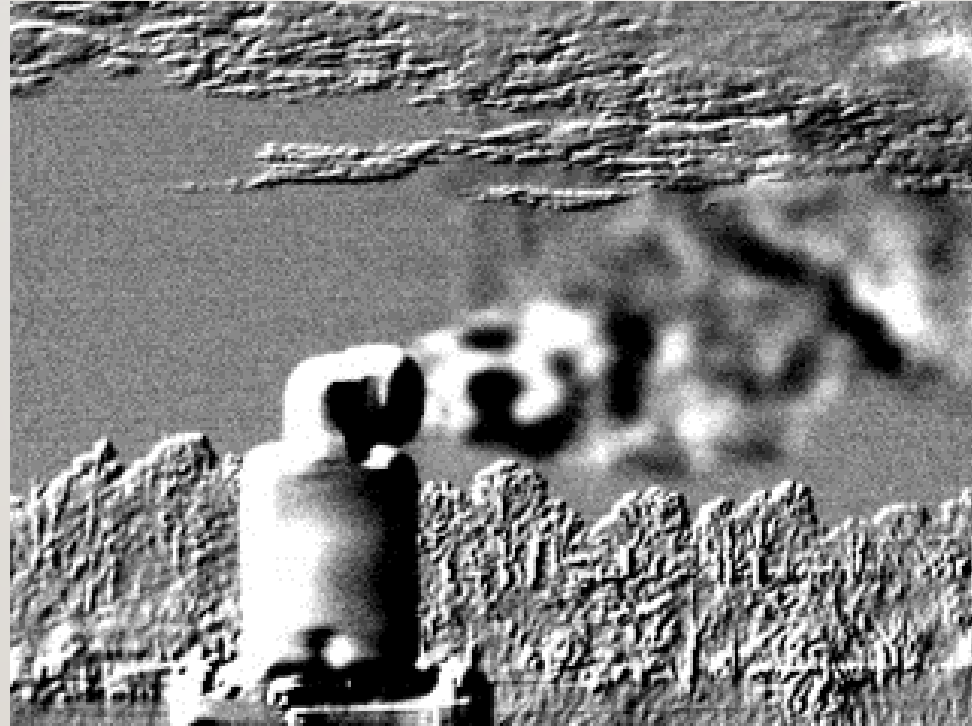
Well 

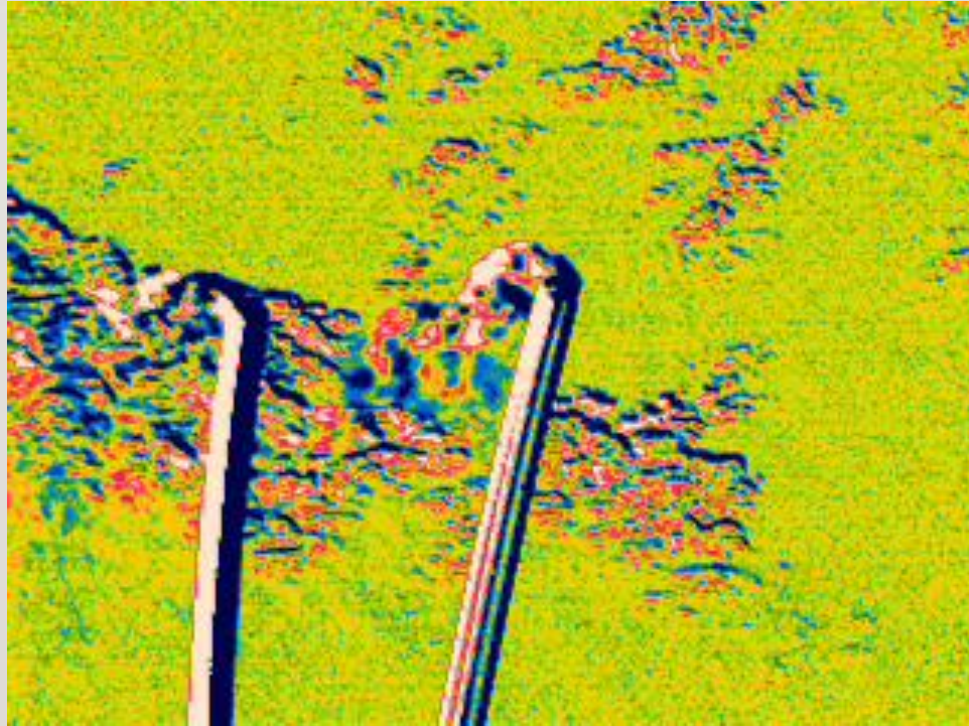
HPU 

Vent-on-water-gathering-line-on-well and-on-Riser 









TESTIMONY INVITED

- This has been a brief summary of the basics of the impacts that this industry has on health.
- Please contact us to provide your testimony regarding the impact of the industry on health.

CONTACT US

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