

HDEA Doctors for the Environment Australia

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DOCTORS AND COMMUNITY GROUPS SAY NEW EVIDENCE ON AIR POLLUTION FROM COAL SEAM GAS MINING MEANS BETTER HEALTH PROTECTION NEEDED

A recent independent University study of the atmosphere of a coal seam gas field near Tara, Queensland has shown evidence of widespread releases of methane and carbon dioxide concentrations.

Hotspot concentrations of methane were detected within the gas field which were more than 3 times higher than background levels found outside the gas fields. Activities such as drilling and hydraulic fracturing (fracking) can release contaminants into sediments and aquifers which escape into the air.

While methane at these levels in air would be unlikely to cause direct health effects, it is of concern that this may indicate leakage of other chemicals which can affect health at relatively low concentrations" said DEA spokesperson Dr Helen Redmond. "Research from the US has found systematic evidence for methane contamination of drinking water associated with unconventional gas extraction".²

"Other air contaminants, such as volatile organic compounds (VOCs), were not measured as part of this study, but are known from studies overseas to be released from gas fields which are fracked" said Dr Mariann Lloyd-Smith, Senior advisor to National Toxics Network. A recent study ¹ looking at the human health risk assessment of air emissions from unconventional gas extraction published in the journal, Science of the Total Environment, found that residents living closest to gas wells had higher risks for neurological, respiratory and other health effects and higher cancer risks than those living further away.

"National Toxics Network recently undertook preliminary sampling of air and water in the Tara region and found evidence of the release of VOCs at the well-head 24 hours after being hydraulically fractured. These included known and suspected carcinogens like benzene and bromodichloromethane, as well as a range of other toxic compounds." said Dr Lloyd-Smith.

A number of Tara residents have been calling on the government for some time to investigate their health complaints. Symptoms reported included headaches, rashes, nausea and vomiting, nose bleeds, eye and throat irritation. "While the cause of these symptoms have not yet been determined, they show many similarities to symptoms experienced by communities living in gas fields overseas. Hydrocarbon exposure cannot be ruled out as a cause without much more comprehensive investigation" according to Dr Redmond.

"Unconventional gas development poses potentially serious yet unassessed health risks" said Dr Redmond, and "protecting the health and wellbeing of all Australians should be the priority."

Doctors for the Environment and the National Toxics Network are calling for immediate action to protect the health and safety of local communities with funding of comprehensive transparent environmental testing and health impact assessment.

¹ Lisa M. Mckenzie, Roxana Z. Witter, Lee S. Newman and John L. Adgate Human health risk assessment of air emissions from development of unconventional natural gas resources." *Science of the Total Environment* March 21, 2012 ²Osborn, SG et al. Methane contamination of drinking water accompanying gas-well drilling and

²Osborn, SG et al. Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing.

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