



Public Health  
England

# The role of Public Health England in relation to the extraction of shale gas



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# Introduction

- About Public Health England
- Public Health England's role in onshore oil & gas
- Public health impacts of shale gas extraction (chemicals and radiation)
- Who Public Health England works with



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# Public Health England

- Executive Agency of the Department of Health
- Established in April 2013, 5500 staff
- We protect and improve the nation's health and wellbeing, and reduce health inequalities.
- 9 local centres across 4 regions, supported by several expert centres
- Works closely with Directors of Public Health
- **PHE is NOT a regulator but an advisor**



## PHE's role in onshore oil & gas

- To provide evidence-based public health advice to:
  - Directors of Public Health
  - Planning Authorities – Consultee to planning
  - Regulators
    - Consultee to permitting
    - Advise when drafting guidance and permitting rules
  - The public – eg engagement events
  - Government



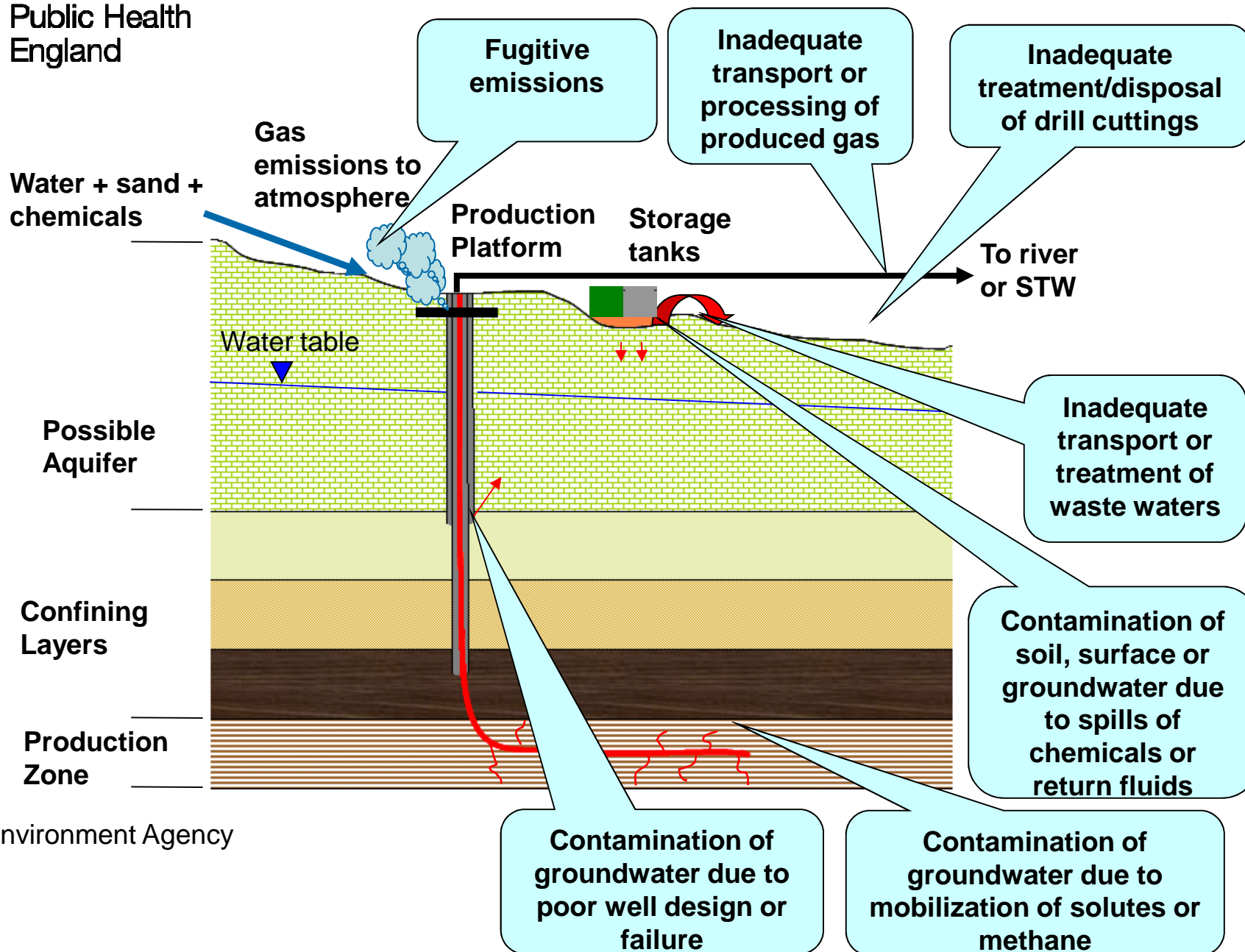
## Public health impacts of chemical and radiological emissions

- Shale gas extraction is at an early exploratory stage in UK, the issue has resulted in public concern
- Review based on published or peer-reviewed scientific literature until January 2014
- PHE report considers the potential adverse effects on human health from direct emissions (air, water, land, wastes)



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# Environmental risks of shale gas extraction





## Key Recommendations

- PHE needs to continue to work with regulators to ensure all aspects of shale gas extraction and related activities are properly risk assessed as part of the planning and permitting process.
- Baseline environmental monitoring is needed to facilitate the assessment of the impact of shale gas extraction on the environment and public health.
- Effective environmental monitoring in the vicinity of shale gas extraction sites is needed throughout the lifetime of development, production and post-production.
- Chemicals used in fracking fluid should be publically disclosed and risk assessed prior to use.
- The UK has the opportunity in advance of significant development of shale gas extraction activities to consider appropriate environmental and epidemiological studies to extend and strengthen the evidence base



## Key Recommendations

- It is important to ensure that broader public health and socioeconomic impacts such as increased traffic, impacts on local infrastructure and worker migration are considered.
- The type and composition of the gas extracted is likely to vary depending on the underlying geology and this necessitates each site to be assessed on a case by case basis.
- Characterisation of potentially mobilised natural contaminants is needed including NORM and dissolved minerals.
- Evidence from the USA suggests that the maintenance of well integrity, including post operations, and appropriate storage and management of fracking fluids and wastes are important factors in controlling risks and appropriate regulatory control is needed.





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## How to contact us

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