



Protecting Our Future

Rutland Quarry Forum

David Baker



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Introduction:

Rutland Quarry Forum - representing Parishes impacted by Mineral Activities in the County.

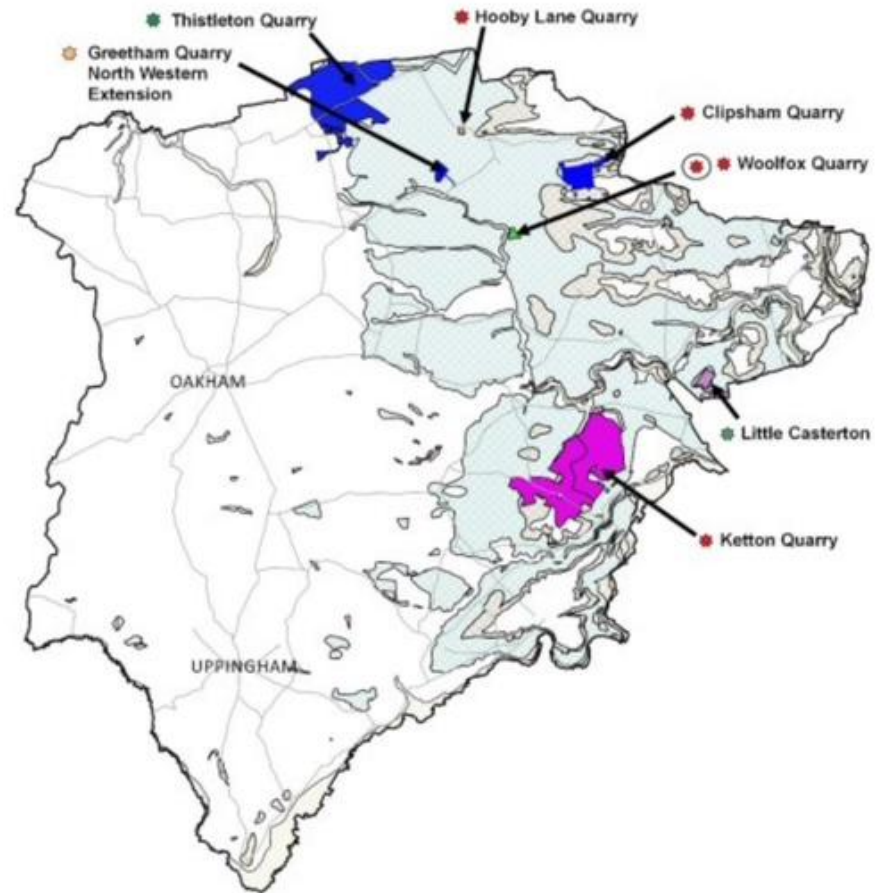
Membership includes CPRE, MPA, Public Protection (Environmental Health) and Parish Councils.

Rutland maybe the smallest County, but has 7 operational quarries, with 1 further large scale quarry application currently being determined.

All in the Eastern half of County.



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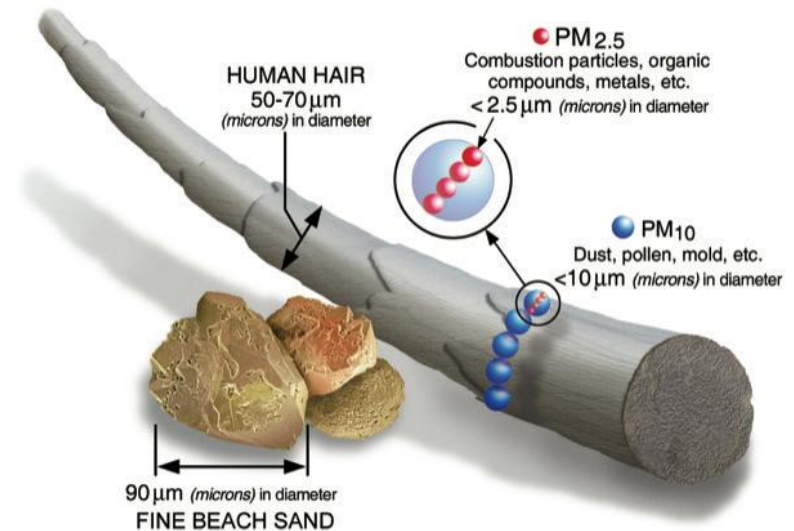


Background.

PM 10. What is this?

microscopic particles

10 millionths of metre in diameter



Health Concerns - WHO, NHS, Respiratory Impacts
including CoPD and Cancers

Air Quality Regulations (2010) - 50ug / m³ / 24hour
average no more than 35 times / year –

40ug / m³ annual average.

please keep these in mind throughout the talk

Mineral Industry:

- over 1300 quarries in England and Wales recognised source of PM10 emissions with no requirements to monitor
- uses 2015 non-statutory industry guidance (published by IAQM)
- guidance assumptions based on historical and limited set of monitoring data along with '*experience and understanding*' of industry members - *lack of scientific credibility?*
- limited amount of monitoring data - unable to accurately predict levels of emissions so relies only on mitigation
- many anomalies and contradictions within guidance, yet used as bible by MPA and Public Protection (EHO's).



Concerns:

- i. No understanding of how much PM 10 contained within quarry dust - limited sources suggest between 5% (Mineral Product Association) & 46% (1 research paper from 2014)
- ii. No regulatory requirement to monitor PM 10 emissions from sites
- iii. No monitoring of the effectiveness of mitigation measures
- iv. No coordinated PM 10 monitoring from any of the 1300 mineral activities within England and Wales
- v. Public Protection state they can only respond to breaches of PM 10 when they occur.

Question:

How will they ever know if no-one is monitoring?



Recent Advances in Understanding:

- i. The quarry at Greetham recently approved after nearly 4 year determination period
- ii. Following legal challenges from GPC, conditions were imposed requiring actual PM 10 emission monitoring
- iii. Contrary to these conditions, the local EHO approved the operators monitoring plan which was based on bad science and does not allow understanding of emissions from site
- iv. GPC commissioned Ricardo to implement and manage a properly designed scientific monitoring regime to provide understanding of emissions from site



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- v. The results from this independent regime differ markedly from the 'approved' regime
- vi. Significant understanding of the effectiveness of the mitigation processes operated at site has been provided by this monitoring
- vii. In short, the mitigation which comprises mainly of damping down haul roads, stockpiles and crushing activities is effective if used properly, but only during operational hours. Outside operational hours, during evening and early morning hours, weekends and bank holidays, when there is no damping down, levels of emissions rise significantly



Concerningly:

The MPA and Public Protection refuse to consider the results from this independent monitoring as it does not form part of the 'approved' monitoring regime.

The cumulative impact, ie the total arisings when there is more than one mineral activity within the area, will not be reconsidered by the MPA nor Public Protection should new information be presented.



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Conclusion:

- i. Mineral activities have the potential for significant PM 10 emissions, but MPAs and Public Protection do not require PM 10 monitoring at sites
- ii. No understanding of the level of PM 10 emissions from any of the 1300 mineral activities within England and Wales
- iii. Current guidance and monitoring considered not fit for purpose
- iv. No understanding of the effectiveness of mitigation measures in controlling emissions from site
- v. No mitigation measures outside of operational hours, thus no control during nighttime, weekends or bank holidays **and significantly:**
- vi. Public Protection only act if there is a breach of emission levels. Permitted levels are microscopic and require scientific based monitoring to determine actual levels:

No monitoring, no breach. It makes life simple for Public Protection.



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Recommendations:

Needs considerably more research and monitoring to allow for scientifically based guidance to ensure the proper safety of local residents

Additionally, consideration needs to be given for having one national based regulator to control this industry in a consistent and transparent manner, rather than the 50 or so local MPAs and Environmental Health Officers each applying their own interpretation to guidance and legislation

Lastly, need to keep in mind the requirements of the precautionary principles, to which the UK remains a signatory despite Brexit:

enables decision-makers to adopt precautionary measures when scientific evidence about an environmental or human health hazard is uncertain and the stakes are high



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