

London parks are estimated to save the NHS £370 MILLION pounds yearly, in health benefit costs. We have asked NHS Derby for their estimates for Derby parks, though we do not expect a reply, due to the coronavirus crisis. We do not expect a reply from the Ministry of Defence either, regarding the increased flood risk from the 'important base flows' of the Markeaton brook, to the River Derwent

Q52 In anticipation of the question Q26 not being answered again, in HE responses to previous submissions, we ask again, is HE attempting to place 15000 speeded up vehicles onto the A38 Kingsway Island hospital site, (Oral hearings tape 18th February) the most polluted site in the East Midlands? (FOE Enc 1)

Q53 Does HE agree that the Paris Agreement – and associated human rights - is now National Policy?

Q54 Have the additional ozone gas levels (nitrogen dioxide being a greenhouse gas precursor) been calculated, from 15000 extra vehicles, and those effects on greenhouse gas emissions?

Q55 HE response regarding air quality in the park being maintained once the trees are gone, is illogical, as the trees/scrub/hedges form a barrier to the current pollution, which, when destroyed, will mean that air quality in the park will be worsened. Does HE agree that the current tree cover/hedgerows/copses forms an air cleaning function, for vehicular air pollution?

Q56 Re HE response to Q30, Q32 -HE states that, regarding landfill emissions at Kingsway "It is not considered that any additional CO2 emissions will arise as a result of the scheme construction works" then admits that **"a further site investigation is being planned"** and that there

'risks to construction workers in confined spaces and/or excavations from at least one ground gas or from oxygen depletion at each of the junctions,' and

"CO2 and other ground gases in this former landfill area need to be taken into account"

It is quite obvious that, until these 'further investigations' can take place, HE cannot make statements regarding CO2 and safety of workers, 'negligible effect' on residents', shoppers, drivers at the junctions. In responses to Q32 the 'negligible risk', then suddenly becomes 'very low' risk, further on in the response, to construction workers, which does nothing to clarify the situation. In view of the extent of the contamination being unknown, why would NHS Kingsway Hospital not be informed, especially as their business is health?

Q57 Why were FOUR of the trial pits at Kingsway halted at 1-2metre depth and why has worker safety not been properly evaluated ie **"scheme effects upon construction workers was scoped out of the impact assessment"** and who advised that worker safety should be 'scoped out', despite **'further investigations'** needing to take place?

Q58 (re HE response to Q33,Q34) Regarding asbestos, HE states that there is a 'negligible risk' to workers and the general public, despite **'further investigations'** being needed. Several trial pits were also halted. Therefore we have no confidence in HE statement that there is 'very low risk' of pollution to controlled waters, as they themselves do not know the extent of the contamination.

Q59 (re HE response to Q35) Re flood risk 'variation' allowed. 141% of average February rainfall fell in February. HE **"cannot predict the variability associated with specific events or series of events at varying temporal scales"** and **'the climate change allowances cannot predict the variability...'** In that case why is HE attempting to do this?

Q60 The UK Government has acknowledged that rainfall is to increase, due to the declared climate emergency. Does HE agree with the UK Government climate emergency declaration?

Q61 HE flood risk assessments were based on DciC flood risk maps (see FOE SFRA Plans Allestree and Alvaston) These were from 2013 and are 7 years out of date. They do not take account of the flooding in November 2019 or the 141% rainfall event in February. Yet Markeaton Brook is **'forming an important source of base flow'** to the River Derwent (REP 4.10 pg 4 2.4.3)'. Why is HE relying on outdated floodrisk maps?

Q62 (HE response to Q36) Where are the EA referred 'points in writing' regarding the flood data at Markeaton Junction, relating to questions raised at the 19th February meeting?

Q63 (HE response to Q37) At time of writing (25/3/2020), the climate emergency continues, globally, heavy rains in Northern Argentina, New South Wales in Australia, threatening flooding. Gulf states supercell storm in Saudi Arabia, United Arab Emirates and Oman. In Tunisia and Sicily, intense low pressure systems are causing wind, severe thunderstorms and rainfall. Global weather systems are being affected by worsening climatic changes. Yet HE states

that 'most climate change taken into account'. As with the coronavirus crisis unravelling our global systems, has HE reviewed the effects of the climate emergency worldwide, or does HE believe that climate emergency effects are only seen in isolation, in the UK?

Q64 HE response 'runoff will be collected and controlled' As groundwater levels/run-off rise, with increased rainfall, in line with the climate emergency, does HE agree that rising levels of groundwater/run-off will cause contamination from the Kingsway landfill – a site still set to undergo 'further investigations – to be brought to the surface and cause further contamination to controlled waters?

Q65 – The 2010 cost of the schemes is £270 million, which is an outdated underestimate. We ask what the 2020 cost is?

Q66 We have asked the NHS to provide figures for deaths from respiratory illnesses in Derby, though we do not expect answers, within the course of this inquiry, because of the worsening Coronavirus crisis. Does HE know that increased traffic emissions affect the respiratory systems of potential Coronavirus sufferers and make it harder to recover from the illness?

Q67 The Future Generations Bill states that impact assessments of the A38 Junctions scheme should be considered. We ask if HE considers that this is an essential requirement?

National Friends of the Earth have sent their submissions, below, regarding HE responses to their evidence

There is a legal requirement for legal limits to be likely to be met, not just for it to be possible - the conclusion of the judgement in Client Earth 2, and re-iterated in Client Earth 3 as per below, sets this out:

“73. As I explained in the November 2016 judgment, the proper construction of Article 23 imposes a three-fold obligation on the Secretary of State; he must aim to achieve compliance by the soonest date possible; he must choose a route to that objective which reduces exposure as quickly as possible; **and that he must take steps which mean meeting the value limits is not just possible, but likely.**” (emphasis added).

We are not aware whether assessments have been made on the uncertainty of the models used, using the Root Mean Square Error (RMSE), by the local authority, but it seems likely that with the levels seen so close to 40ug/m3 it is unlikely that it could be assured that there is not serious risk of levels not being attained, and thus not at all necessarily being likely legal limits will be attained.

Further it is not clear what allowances for risk HE have made – and the government's 2017 AQ Plan for NO2 refers to levels of uncertainty of +/- 29%, but presumably HE's results are based on the central case, with no sensitivity case of levels being +29%.

This means that there is a high risk that levels could be considerably higher than projected, meaning further worsening of levels already over limits, and even new exceedances possible from levels currently assessed as below limits with the scheme (though of course levels could also be lower).

This is also all more relevant as the Supplement to the AQ Compliance Risk Assessment clearly shows that in 2021 at the Qualifying Features that under Construction Scenario 0, there are 3 places where there are aggravated breaches – and others where levels are over 35ug/m3, including where the scheme is adding to the problem, including in construction scenarios 2 and 4 ie this is not an issue restricted to construction scenario 0.

Derby City Council has no Air Quality Action Plan, despite the city being a UK Government designated Clean Air Zone city. HE clearly states (REP 6-035 Vol 8.84) that “**Emissions overall would increase...**”, “**increased emissions from increased traffic on the A38...**” The A38 Junctions schemes would not assist the council in achieving compliance, especially as DciC outline the additional and numerous city streets that would be impacted, by the A38 schemes. (REP6-037) We believe that HE cannot now demonstrate, exactly, why the A38 Junctions schemes should be constructed.