

**Subject:**

National Grid proposal at Daedalus airfield

**From:** Juli Treacy

**Sent:** 04 October 2016 16:00

**To:** Wyatt, Mark

**Cc:** James Isaac

**Subject:** FW: National Grid proposal at Daedalus airfield

Hello Mark

You contacted us on 6<sup>th</sup> Sept with some further queries regarding the relationship between electromagnetic fields and childhood leukaemia. The queries had come from one of your residents. We have also received an FOI request from your resident with similar questions. I'm sorry we have responded sooner, however here is the response that we have received from CRCE:

*Knowledge about the short-term and possible long-term health effects of exposure to electromagnetic fields, as highlighted by SCENIHR and WHO is already taken into account in the policies that are applied in the UK. The SCENIHR and WHO views were also considered in formulating PHE's initial response to the IFA2 Environmental Statement. Public Health England is committed to keeping emerging evidence under review and to advising government should the overall body of evidence indicate a need to review policies*

**BACKGROUND:**

*The European Commission is advised on the health aspects of EMF exposures by the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). SCENIHR takes account of worldwide studies on EMFs and has produced several reports, known as Opinions, in which it expresses views broadly in line with those of PHE, ICNIRP and WHO. The most recent SCENIHR Opinion was published in 2015 and contains detailed conclusions on different aspects of the scientific evidence. A plain language summary based on the Opinion explains that the results of current scientific research show that there are no evident adverse health effects if exposure remains below the levels set by current standards. SCENIHR publications can be found through the following webpage and EMF Opinions are under the "Physical Risks" category:*

[http://ec.europa.eu/health/scientific\\_committees/emerging/index\\_en.htm](http://ec.europa.eu/health/scientific_committees/emerging/index_en.htm)

*In relation to EMF exposure and childhood leukaemia, SCENIHR conclude the following:*

*"Overall, existing studies do not provide convincing evidence for a causal relationship between ELF MF exposure and self-reported symptoms.*

*The new epidemiological studies are consistent with earlier findings of an increased risk of childhood leukaemia with estimated daily average exposures above 0.3 to 0.4  $\mu$ T.*

*As stated in the previous Opinions, no mechanisms have been identified and no support is existing from experimental studies that could explain these findings, which, together with shortcomings of the epidemiological studies prevent a causal interpretation."*

*The World Health Organization also publishes authoritative reviews of the science. The main conclusion from WHO's own reviews is that EMF exposures below the limits recommended in the ICNIRP international guidelines do not appear to have any known consequence on health. Short-term exposure to very high levels of electromagnetic fields, as highlighted in the last part of the FOI request, is addressed by the international guidelines. Information from WHO about EMF exposure guidelines can be found at:*

*<http://www.who.int/peh-emf/standards/en/>*

*In relation to EMF exposure and childhood leukaemia, WHO published an Environmental Health Criteria Monograph in 2007 on ELF EMFs in 2005, which concludes the following:*

*"Scientific evidence suggesting that every day, chronic low-intensity (above 0.3-0.4µT) power-frequency magnetic field exposure poses a health risk is based on epidemiological studies demonstrating a consistent pattern of increased risk for childhood leukaemia. Uncertainties in the hazard assessment include the role that control selection bias and exposure misclassification might have on the observed relationship between magnetic fields and childhood leukaemia. In addition, virtually all of the laboratory evidence and the mechanistic evidence fail to support a relationship between low-level ELF magnetic fields and changes in biological function or disease status. Thus, on balance, the evidence is not strong enough to be considered causal, but sufficiently strong to remain a concern."*

I hope this helps.

Regards  
Juli

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