The Planning Inspectorate

LATE SCOPING CONSULTATION RESPONSES

Consultation bodies have 28 days to respond with any comments, stating either the information that they consider should be included in the ES or that they do not have any comments.

Any responses received after the deadline are not considered within the scoping opinion but are forwarded to the applicant for consideration in accordance with the policy set out in Advice Note 7: Environmental Impact Assessment, Screening and Scoping.

The following EIA scoping consultation responses were received after the consultation deadline specified under legislation and therefore did not form part of the Secretary of State's scoping opinion.

Organisation	**Received**
Historic England	27 May 2015
Public Health England	27 May 2015
Thames Water	26 May 2015

Date: 5 June 2015

Historic England

Richard Hunt
EIA Adviser
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: NSIP 0076/00
Your ref: 150427_TR040009_3145977

22 May 2015

By email:
environmentalservices@infrastrcuture.gsi.gov.uk

Dear Mr Hunt,

Re: Scoping opinion on information to be provided in an Environmental Statement Application by Network Rail for an Order Granting Development Consent for a proposed Western Rail Link to Heathrow

Thank you for consulting Historic England on the scoping report for an Environmental Statement for the proposed Western Rail Link to Heathrow.

For clarity, we would like to explain that from 1 April 2015 English Heritage divided into two organisations. Historic England takes forward the role and responsibilities for providing planning advice previously provided by English Heritage. We continue to protect and champion England's wider historic environment, including through listing, grants, research, public information and advice on planning applications and statutory plans.

As a general point, references to planning practice guidance relating to cultural heritage should now refer to the National Planning Practice Guidance (NPPG) and the Good Practice Advice Notes published by English Heritage (March 2015). These supersede the PPG5 Practice Guide.

Archaeology

With regard to archaeology, the comments contained in the letter dated 22 December 2014 from the Greater London Archaeological Advisory service (GLAAS) should be taken forward. GLAAS is co-located with English Heritage/Historic England. A copy of the letter is forwarded

with this response so that you can formally record it at this consultation stage. The conclusion of GLAAS is that there is likely to be a significant effect with respect to London's archaeology, and the approach set out in the scoping assessment is appropriate. Please note that outside London, the advice of the local authority archaeological advisers should be sought.

The table on pages 35/36 (section 5.1) of the report refers to the GLAAS response concerning the scope of archaeological assessment. The comments below on Chapters 6 and 8 refer to assessment of potential impacts on above ground, designated heritage assets, including listed buildings, conservation areas, historic landscapes, and their settings.

Chapter 6 Cultural Heritage

The scheme runs close to the Colnbrook and Longford conservation areas. It would be advisable to include consideration of these within the scope of the assessment. We suggest amendment to the topic definition section (para 6.1.1), and the study area (6.1.3). The construction phase may result in impacts on the settings of the conservation areas, for instance, through noise and vibration. The design is to be finalised later in 2015; there is not yet sufficient detail to understand the impact of the operational stage on the conservation areas, in terms of views of structures or noise and vibration, though such impacts may be minor.

We also recommend in para 6.1.1 that the term historic landscape is clarified (3rd bullet) to include all man-made interventions represented in archaeological remains, historic buildings and other features of significance such as field boundaries or planting.

The planning context section on page 38 should be updated to refer to the National Planning Practice Guide (NPPG) 2014, and the recently published Good Practice Advice Notes. We recommend that paragraph 129 of the NPPF is referred to here relating to the setting of heritage assets. Good Practice Advice note 3, published in March 2015, 'The Setting of Heritage Assets' is also highly relevant .[1]

To reflect assessment of the nearby conservation areas the baseline information in 6.2 should be augmented and sections 6.3, 6.4 and 6.5 should include assessment of any potential for effects on the settings of these conservation areas. Conclusions regarding potential conservation area impacts should be included in the Cultural Heritage Impact Tables in Appendix C. We recommend that mapping of the relevant heritage assets in Appendix A, Figure 6.1 should include conservation areas.

[1] http://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/

Historic England

Chapter 8 Landscape and Visual

We note that Harmondsworth, Longford, West Drayton and Colnbrook conservation areas are mentioned on page 73. This recognises their role in the wider landscape. It remains appropriate to include more specific assessment of potential impacts on the settings of conservation areas within the cultural heritage section, although some cross-referencing may be needed.

With the additions detailed above, Historic England considers the scope and approach described within the report as appropriate. We would stress that this is based on the information available at this juncture and that the advice of local authority specialists should also be sought. With regard to the likely significant archaeological impacts within London, contact should be made with Sandy Kidd in GLAAS as the scheme is worked up in detail.

Yours sincerely,

[redacted]

Katharine Fletcher
Historic Environment Planning Adviser
E-mail: katharine.fletcher@HistoricEngland.org.uk
Direct Dial: 020 7973 3771

CC: Elizabeth Wood-Griffiths
Network Rail – IP Western
Western House
1 Holbrook Way
Swindon
SN1 1BD

ENGLISH HERITAGE

Mr Jonathan Mullis
Jacobs UK Ltd
1180 Eskdale Road
Winnersh
Wokingham
RG41 5TU

Your Ref:

Our Ref: CLO15421

Contact: Sandy Kidd
Direct Dial: 0207 973 3215
Email: sandy.kidd@english-heritage.org.uk

22 December 2014

Dear Mr Mullis

TOWN & COUNTRY PLANNING ACT 1990 (AS AMENDED)
NATIONAL PLANNING POLICY FRAMEWORK 2012

Western Rail Access to Heathrow (WRAtH) project

Environmental scoping report on behalf of Network Rail for the Western Rail Access to Heathrow (WRAtH) project. The proposed route will extend from Langley to Heathrow, and comprises a c.5km tunnel, with a 'cut-and-cover' section at the northern end and two vent shafts, one located close to the M4 (S1 or S2), the other located close to Heathrow (S4, S5 or S6).

Recommend Pre-Determination Archaeological Assessment/Evaluation

Thank you for your consultation received on 03 December 2014.

The Greater London Archaeological Advisory Service (GLAAS) provides archaeological advice to boroughs in accordance with the National Planning Policy Framework and GLAAS Charter.

The National Planning Policy Framework (Section 12) and the London Plan (2011 Policy 7.8) emphasise that the conservation of archaeological interest is a material consideration in the planning process. Paragraph 128 of the NPPF says that applicants should be required to submit appropriate desk-based assessments, and where necessary undertake field evaluation, to describe the significance of heritage assets and how they would be affected by the proposed development. This information should be supplied to inform the planning decision.

Appraisal of this proposal using the Greater London Historic Environment Record and information provided indicates a need for further information to reach an informed judgment of its impact on heritage assets of archaeological interest.

The proposed scheme would involve major groundworks within Hillingdon Borough Council's Heathrow Archaeological Priority Zone and is therefore likely to have a significant adverse effect on archaeological heritage. The Heathrow APZ is described in an appraisal document avaliable on Hillingdon's webiste and reflects the extensive prehistoric, Roman and later landscapes investigated at numerous sites across the Heathrow plateau - most notably at Heathrow Terminal 5. Part of the proposed rail route run through previously quarried land and the M25 corridor where archaeological remains are unlikely to survive but the area of the Bedfont Court Estate between the River Colne and Stanwell Moor Road has high potential indicated by an evaluation conducted by Framework Archaeology in 2002-3 which found features probably related to the prehistoric and medieval landscapes recorded to the east at Terminal 5. Also present was a Mesolithic wooden stake suggesting the possibility of occupation sites and even structures of this period as seen elsewhere in the Colne Valley. The Framework Archaeology evaluation will need to be reviewed and possibly further evaluation undertaken - for example the potential for nationally important in-situ Mesolithic sites needs to be reliably assessed. East of Stanwell Moor Road there have been extensive archaeological excavations in advance of T5 so further investigations would only be necessary if there is new landtake beyond the areas previously investigated.

I therefore recommend that the following further studies should be undertaken to inform the preparation of proposals and accompany a planning application:

Desk Based Assessment

Desk-based assessment produces a report to inform planning decisions. It uses existing information to identify the likely effects of the development on the significance of heritage assets, including considering the potential for new discoveries and effects on the setting of nearby assets. An assessment may lead on to further evaluation and/or mitigation measures.

The DBA should identify areas sterlised by previous mineral extraction, archaeological excavation etc and those areas which retain significant potential. With respect to the latter the extent of previous evaluation should be mapped and the need for further evaluation considered. Particular attention should be given to the potential for in-situ Mesolithic sites and associated palaeo-environmental remains in the Colne Valley for which a geo-archaeological deposit model may be needed.

The nature and scope of assessment and evaluation should be agreed with GLAAS and carried out by a developer appointed archaeological practice before any decision on the planning application is taken. The ensuing archaeological report will need to establish the significance of the site and the impact of the proposed development.

Once the archaeological impact of the proposal has been defined GLAAS can discuss mitigation options and make recommendations to the local planning authority. The NPPF accords great weight to the conservation of designated

heritage assets and also non-designated heritage assets of equivalent interest. Heritage assets of local or regional significance may also be considered worthy of conservation. If archaeological safeguards do prove necessary, these could involve design measures to preserve remains in situ or where that is not feasible archaeological investigation prior to development.

Further information on archaeology and planning in Greater London is available at: http://www.english-heritage.org.uk/professional/advice/our-planning-role/greater-london-archaeology-advisory-service/about-glaas/

Please note that this advice relates solely to archaeological considerations and is without prejudice to the local authority's decision-making role. If necessary, English Heritage's Development Management or Historic Places teams should be consulted separately regarding statutory matters.

Yours sincerely

Sandy Kidd

Archaeology Advisor

Greater London Archaeological Advisory Service
National Planning and Conservation: London

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Your Ref : 150427_TR040009_3145977

Our Ref : TRRARA 150427 385

FAO:- Mr Richard Hunt

27th May 2015

Dear Sir,

Re: Scoping Consultation
Application for an Order Granting Development Consent for the proposed Western Rail Link to Heathrow

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Our response focuses on health protection issues relating to chemicals and radiation. Advice offered by PHE is impartial and independent.

In order to ensure that health is fully and comprehensively considered the Environmental Statement (ES) should provide sufficient information to allow the potential impact of the development on public health to be fully assessed.

We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the ES. PHE however believes the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be

relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

It is noted that the current proposals do not appear to consider possible health impacts of Electric and Magnetic Fields (EMF). The proposer should confirm either that the proposed development does include or impact upon any potential sources of EMF; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES.

The attached appendix outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. We are happy to assist and discuss proposals further in the light of this advice.

Yours sincerely,

Allister Gittins
Environmental Public Health Scientist

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA[1]. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES[2].

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

[1] Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from: http://www.communities.gov.uk/archived/publications/planningandbuilding/environmentalimpactassessment

[2] DCLG guidance, 1999 http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- should fully account for fugitive emissions

- should include appropriate estimates of background levels

- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)

- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data

- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)

    — If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1

    — This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion

- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

Additional points specific to emissions to air

When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)

- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)

- should include modelling taking into account local topography

Additional points specific to emissions to water

When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts

- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)

- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure

- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc) alongside assessment of potential exposure via drinking water

Land quality

We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the

migration of material off-site should be assessed[3] and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

Other aspects

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.

[3] Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report[4], jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: “Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible.” PHE supports the inclusion of this information within EIAs as good practice.

Electromagnetic fields (EMF) [include for installations with associated substations and/or power lines]

There is a potential health impact associated with the electric and magnetic fields around substations and the connecting cables or lines. The following information provides a framework for considering the potential health impact.

In March 2004, the National Radiological Protection Board, NRPB (now part of PHE), published advice on limiting public exposure to electromagnetic fields. The advice was based on an extensive review of the science and a public consultation on its website, and recommended the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP):-

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/

The ICNIRP guidelines are based on the avoidance of known adverse effects of exposure to electromagnetic fields (EMF) at frequencies up to 300 GHz (gigahertz), which includes static magnetic fields and 50 Hz electric and magnetic fields associated with electricity transmission.

PHE notes the current Government policy is that the ICNIRP guidelines are implemented in line with the terms of the EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

For static magnetic fields, the latest ICNIRP guidelines (2009) recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT as advised by the International Electrotechnical Commission.

[4] Available from: http://www.cph.org.uk/showPublication.aspx?pubid=538

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m^{-1} (kilovolts per metre) and 100 μT (microtesla). If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects. Further clarification on advice on exposure guidelines for 50 Hz electric and magnetic fields is provided in the following note on the HPA website:

http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/InformationSheets/info_IcnirpExpGuidelines/

The Department of Energy and Climate Change has also published voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for the industry.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE) was then set up to take this recommendation forward, explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government. In the First Interim Assessment of the Group, consideration was given to mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields. A Second Interim Assessment addresses electricity distribution systems up to 66 kV. The SAGE reports can be found at the following link:

http://sagedialogue.org.uk/ (go to “Document Index” and Scroll to SAGE/Formal reports with recommendations)

The Agency has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes:

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage/

The evidence to date suggests that in general there are no adverse effects on the health of the population of the UK caused by exposure to ELF EMFs below the guideline levels. The scientific evidence, as reviewed by PHE, supports the view that precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public.

The Government response to the First SAGE Interim Assessment is given in the written Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009:

http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

HPA and Government responses to the Second Interim Assessment of SAGE are available at the following links:

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage2/

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130703

The above information provides a framework for considering the health impact associated with the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Liaison with other stakeholders, comments should be sought from:

- the local authority for matters relating to noise, odour, vermin and dust nuisance

- the local authority regarding any site investigation and subsequent construction (and remediation) proposals to ensure that the site could not be determined as ‘contaminated land’ under Part 2A of the Environmental Protection Act

- the local authority regarding any impacts on existing or proposed Air Quality Management Areas

- the Food Standards Agency for matters relating to the impact on human health of pollutants deposited on land used for growing food/ crops

- the Environment Agency for matters relating to flood risk and releases with the potential to impact on surface and groundwaters

- the Environment Agency for matters relating to waste characterisation and acceptance

- the Clinical Commissioning Groups, NHS commissioning Boards and Local Planning Authority for matters relating to wider public health

Environmental Permitting

Amongst other permits and consents, the development will require an environmental permit from the Environment Agency to operate (under the Environmental Permitting (England and Wales) Regulations 2010). Therefore the installation will need to comply with the requirements of best available techniques (BAT). PHE is a consultee for bespoke environmental permit applications and will respond separately to any such consultation.

Annex 1

Human health risk assessment (chemical pollutants)

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES

- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used

- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account

- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach[5] is used

[5] Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24

Cottam, Emma

From: Nicky Mchugh <Nicky.Mchugh@thameswater.co.uk>
Sent: 26 May 2015 14:34
To: Environmental Services
Cc: Devcon Team
Subject: The Planning Inspectorate - Western Rail link to Heathrow.

Dear Sir/ Madam,

In response to the above consultation Thames Water would like to comment as follows:

Thames Water has reviewed the proposed routes of the Western Rail Link to Heathrow and would like to highlight that all routes could affect public sewers (both foul and surface water), rising mains and pumping stations. Some of the pumping stations are currently private however it is expected the ownership of these pumping stations may be transferred to Thames Water in 2016. In addition some of the routes cross Thames Water land at Iver South Sludge Treatment Centre. Any plan to alter the network must be done in consultation with Thames Water.

Kind regards

Nicky.

Nicky McHugh
Development Planner
Thames Water Utilities Ltd, Maple Cross STW, Denham Way, Rickmansworth, WD3 9SQ
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Please note my hours are Tuesday to Friday 8am til 3pm

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