

From the Parliamentary Under Secretary of State for Public Health  
Melanie Johnson MP



Sir William Stewart  
Chairman  
National Radiological Protection Board  
Chilton  
Didcot OX11 0RQ

Richmond House  
79 Whitehall  
London  
SW1A 2NS  
Tel: 020 7210 3000

22 July 2004  
rec'd 3/8.

Dear Sir William,

#### **NRPB EMF Guidelines**

I am writing today to welcome the publication of NRPB's new advice on limiting exposure to electromagnetic fields (EMF) that was published on 31 March 2004 (*Docs of NRPB Volume 15 No 2 2004*) updating their previous 1993 guidelines. I understand that NRPB will now follow the 1998 guidelines of the International Commission on Non-Ionizing Radiation Protection and I welcome the move towards a harmonised approach to limiting public exposure to EMF.

You have supported your new advice with a comprehensive review of recent scientific work and I note that the NRPB has drawn on advice from individual UK and international experts and from published comprehensive reviews by expert groups. I welcome the fact that your review has been informed by an awareness of the issues raised at open meetings organised by the Independent Expert Group on Mobile Phones and Health and that NRPB has also organised an open meeting to listen to public concerns about power lines. Government acknowledges that there is often a need to delineate the boundaries of scientific advice but it is fully supportive of the consultative approach to resolving issues that have wider societal impacts.

The main advance on the 1993 guidelines is the introduction of lower exposure restrictions for the public than for workers. You have explained that the reasons behind this change include the scientific uncertainties in the data and the wider variability in health status in the public compared with the working population. I believe this is a sensible approach. I am aware that the main industrial sectors implicated are mobile telecommunications and electricity transmission. The mobile phone industry already complies; it was content to adopt ICNIRP guidelines after the Stewart Report in 2000 as compliance did not incur significant additional cost. As you will be aware, central government, the local authorities and the industry have drawn up a *Code of Best Practice on Mobile Phone Network Development*. I believe this has been of considerable practical benefit to local decision makers.

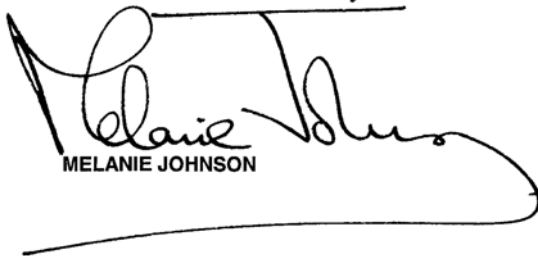
A similar approach could be adopted for power frequencies (power lines being one example), where the detailed costs and practicalities of implementation of the guidelines are arguably more complex. Officials from Government departments concerned are currently discussing pragmatic approaches to implementation with the main electricity transmission company.

The NRPB has also, at the request of the Department, looked carefully at the specific scientific question and the concern in the public mind about power frequency magnetic fields and childhood leukaemia. This is one of the current issues that has led the World Health Organization to formulate a draft precautionary framework on health protection. I am pleased to note that the NRPB has developed similar ideas in recommending that government should consider the need for further precautionary measures.

You will be aware that stakeholder meetings have already been piloted on the issues associated with power lines near buildings and NRPB has participated. These discussions have generated the proposal that the Department of Health lead this process forward through wider stakeholder discussions. In this way, it is hoped that collective approach can be owned by a range of participants including EMF public concern groups and industrial interests on the need for a precautionary policy and what that might entail. Other government departments would also be involved in this process particularly in view of the stated policy of developing 'brownfield' sites which may already be crossed by overhead power lines.

For your information our response to the guidelines is attached in an Annex below.

*Best wishes,*

  
MELANIE JOHNSON

#### **Interdepartmental response to NRPB Advice in March 2004**

- 1 Government welcomes the publication of new EMF guidelines from the National Radiological Protection Board (NRPB). Previous NRPB guidelines were issued in 1993 and we note NRPB's acknowledgement of the continuing development of the scientific understanding of EMF effects. The Guidelines apply to the EMF (electromagnetic fields) associated with power lines, mobile phones and a vast array of electrical and electronic equipment used in everyday life.
- 2 The NRPB draft guidelines were placed on its web site last year. This provided an opportunity for interested individuals and groups to submit comments. These responses included Government Departments, public concern groups and industrial interests. The NRPB has given consideration to these responses and we welcome this approach.
- 3 The new NRPB guidelines are more restrictive for public exposure than for occupational exposure because of the wider range of susceptibilities of the general public and their less controlled environment. This two-tier approach is similar to that of the International Commission on Non-ionising Radiation Protection (ICNIRP) Guidelines published in 1998. NRPB recommend using the ICNIRP levels in the interests of international harmonisation. The NRPB recognise that further reviews (eg WHO) and research programme results are expected over the next few years.
- 4 The NRPB guidelines incorporate a significant cautionary element but specifically do not take into account social or economic factors or the risks or disbenefits that may occur from action to limit exposure.
- 5 In 1999, Government agreed an EU Recommendation on public exposure (EC/519/1999) which advocated the use of ICNIRP levels but accepts the need for consideration of risks and benefits when implementing the guidelines.
- 6 Following publication of the Stewart Report on *Mobile Phones and Health* (2000), the mobile phone industry voluntarily adopted ICNIRP guidelines for public exposure to radio frequency fields. All cellular radio base stations comply with ICNIRP public exposure guidelines.
- 7 For all other sources the Government expects the NRPB guidelines to be implemented in line with the terms of the EU Recommendation, that is, taking account of the risks and benefits of action. Preliminary discussions have already taken place to identify what reasonable actions might be taken.
- 8 The occupational exposure guidelines have recently been incorporated in an EU Directive that will have to be transposed into UK law in 2008. The Government recommends that industry prepare for these new Regulations by adopting procedures to comply with the guidelines over the intervening period.

The Health and Safety Commission expects to undertake a consultative exercise on new Regulations in 2005/06.

- 9 At the start of the review process Government had asked the NRPB to consider where the scientific uncertainty might invoke the need for precautionary options appropriate for EMF protection. A precautionary approach has already been adopted for mobile phones technology (radiofrequency) following the Stewart Report. Government has recently engaged in preliminary stakeholder discussions to consider power lines and NRPB advice suggests that this process should be continued, focussing on the possible health effects of continuous low level exposure to power frequency electromagnetic fields.
- 10 The Government will be exploring further the practical applications of precautionary measures within a stakeholder engagement process. This will be the subject of wide consultation and will explore any risks and benefits arising in the same manner as a Regulatory Impact Assessment.