

Memorandum of Understanding

Health Service Executive

Environmental Protection Agency

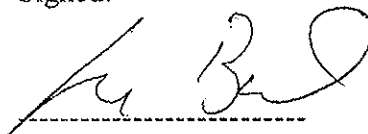
The objective of this Memorandum of Understanding is to set out areas of mutual responsibility and shared purpose between the Environmental Protection Agency and the Health Service Executive and to set out the framework for mutual co-operation in achieving their respective objectives.

Signed:



Dr. Stephanie O'Keefe
National Director
Health and Wellbeing Division
Health Service Executive

Signed:



Laura Burke
Director General
Environmental Protection Agency

Date:

1.5.2015

Date:

1/5/2015

1. Introduction

In recognition of their mutual commitment to protect human health and the environment this Memorandum of Understanding (MoU) establishes a co-operative framework between the Health Service Executive (HSE) and the Environmental Protection Agency (EPA). In recognising each organisation's respective statutory responsibilities and obligations, the HSE and the EPA shall endeavour to co-operate closely particularly in relation to the following:

- Developing stronger and more robust approaches to understanding and promoting the essential role that protecting the environment plays in improving the health of the population;
- Protecting people from threats to their health and wellbeing;
- Implementation and enforcement of the different legislative areas identified in this MoU;
- Co-ordination and consultation on national and EU technical positions, working groups and meetings;
- Agreement and implementation of joint and complementary actions in accordance with the goals of the *Healthy Ireland Framework for Improved Health and Wellbeing 2013 -- 2025*, the *National Radon Control Strategy 2014-2018*, and the *HSE three year implementation plan for Healthy Ireland (pending publication)*.

1.1 Environmental Protection Agency

The EPA is an independent public body established under the Environmental Protection Agency Act, 1992. The EPA has responsibilities for a wide range of licensing, enforcement, monitoring and assessment activities associated with environmental and radiological protection.

The EPA's mission is "*To protect and improve the environment as a valuable asset for the people of Ireland. To protect our people and the environment from the harmful effects of radiation and pollution.*" Under its environmental protection mandate, EPA delivers direct and indirect benefits to human health through a number of its responsibilities. These include controlling emissions from licensed facilities; maintaining a supervisory function over local authorities with regard to the provision of 'safe and secure' drinking water; monitoring ambient air quality in Ireland; monitoring radioactivity levels in food, soil, air and water and regulating the use of ionising radiation. Other activities with relevance include licensing release of GMOs; reporting bathing water quality; action on radon; and funding a significant programme of research in the Environment & Health area.

1.2 Health Service Executive

The HSE is the single national body responsible for the provision of health and personal social services to the population. It is the largest public or private sector organisation in Ireland.

The HSE's Health and Wellbeing Division was established in mid 2013 arising from new governance arrangements for the health service. The work of the Division is focused on helping people to stay healthy and well, reducing health inequalities and protecting people from threats to their health and wellbeing.

The HSE has statutory and non-statutory responsibilities for the management of environmental impacts on human health. This work is led by the following sub-divisional areas of the HSE's Health and Wellbeing Division; Environmental Health, Public Health and Emergency Management services. This work is carried out in cooperation with many other agencies such as local authorities, the Food Safety Authority of Ireland (FSAI) and the EPA.

2. Purpose of Memorandum of Understanding

The HSE and EPA jointly affirm their commitment, in the interest of the protection of human health and the environment to develop effective working relations so as to ensure that the best possible service is delivered. This MoU provides the framework required to facilitate cooperation between the two agencies in the area of Environment, Radiological Protection and Health.

The memorandum does not override the statutory duties and powers of either organisation. The memorandum expresses a convergence of will between the parties, indicating an intended common line of action, rather than a legal commitment.

2.1 Operational Liaison

The HSE and EPA will appoint designated contacts for implementation of the MoU and they shall meet jointly on a biannual basis (minimum) to agree work programmes, review progress of working groups established by them and generally monitor and review the implementation and effectiveness of this MoU. This forum shall be known as the *HSE/EPA Co-ordination Group* and it shall be held in either the HSE or EPA offices or teleconference, as appropriate. The members of the Group shall as a minimum be two Directors of the EPA and the Assistant National Directors for Environmental Health and Public Health of the HSE; with additional members included as required.

The Group will prepare a report on an annual basis outlining the effectiveness of the implementation of the MoU and setting out recommendations for further opportunities for co-operation if relevant.

Where appropriate, representatives from each organisation will refer such matters to higher management within each organisation, for consultation and direction in line with the respective organisational policy for each body.

2.2 Principles of Cooperation

The two organisations recognise that their strategies can be most effectively implemented on a collaborative basis and so agree to cooperate on the following:

- areas of common purpose and joint agreed work programmes
- educational and personnel exchange programmes for relevant personnel
- joint programmes that will enhance the environment and health of the population
- conjoint research programmes including research award schemes
- arrangements for the exchange of data between both parties
- scientific/medical/technical co-operation and linkages between both parties

- joint guidance on Environment and Health issues of mutual concern
- working groups / committees to assist both parties to deliver on their objectives.

The main areas of common purpose between the HSE and the EPA are listed below and are also described in more detail in Appendix 1. These areas shall be the focus of the cooperative approaches outlined above.

Main areas of common purpose between the HSE and the EPA:

- Promotion of Environment, Health and Wellbeing
- Water and Drinking Water Quality
- Regulation of Industrial, Waste, Ionising Radiation and Other Activities
- Air Quality
- Major Emergency and Incident Response
- Environment and Health Research to Support Policy
- Persistent Organic Pollutants (POPs)
- Radon as an a Environmental Health Hazard

Working Groups may be established in these areas in accordance with terms of reference to be agreed by the HSE/EPA Coordination Group. Where appropriate these working groups may, by agreement, include other relevant organisations. The output, duration and terms of reference of each group will be periodically reviewed by the HSE/EPA Coordination Group. The HSE and EPA may from time to time agree to establish further working groups or make other arrangements to examine additional matters of common interest.

2.3 Memorandum of Understanding Review

This MoU will be valid for four years after which time the Group shall initiate a review of its operation. An earlier review of the MoU may be requested by the National Director of Health and Wellbeing, HSE or the Director General of the EPA on foot of the review of the annual progress report of the HSE/EPA Coordination Group, emerging issues or in order to allow for additional opportunities to build on existing cooperative efforts.

2.4 Confidentiality/Intellectual property

The rights of the two organisations to restrict information regarded as confidential under each organisation's relevant legislation will be respected at all times.

Both parties shall maintain full right title and interest in any intellectual property right in any work product developed solely by them under this memorandum.

Appendix 1: Areas of Common Purpose

1. Promotion of Environment, Health and Well-being

Health impacts from the environment are not only about protecting citizens from harmful environmental conditions (pollution). It is critical to also recognise the benefits to health and well-being that accrue from a high quality environment with clean air, safe waters and flourishing green & blue spaces. When ecosystems are maintained in good condition they provide direct health benefits: a growing body of evidence demonstrates the value of contact with nature in the prevention/treatment of conditions including stress, depression and obesity. National ambitions on sustainable development are closely aligned to the goals in Healthy Ireland to 'increase the proportion of people who are healthy at all stages of life'.

EPA Role

EPA's wide-ranging programmes of environmental monitoring and regulation are driven by the vision to achieve a clean, healthy and well protected environment that supports a sustainable society and economy. Through other activities including guidance, knowledge & advocacy roles; and through targeted research funding, the EPA takes a proactive approach to supporting sustainability and well-being. Future EPA State of the Environment reporting will highlight this topic, and conferences will be organized with HSE from time to time to stimulate debate & action in the area.

HSE Role

The work of the HSE Health and Wellbeing division is focused on helping people to stay healthy and well, reducing health inequalities and protecting people from threats to their health and wellbeing. It also encompasses the Environmental Health Service which protects the health of the population by taking preventative action including the enforcement of legislation in relation to environmental and lifestyle determinants of health.

2. Water and Drinking Water Quality

The current HSE/EPA Drinking Water Liaison Group develops guidance and joint policy on drinking water related issues. It is intended that the group's role will be expanded to include broader water quality areas including Water Safety Plans, Water Framework Directive, and septic tanks (including on-site waste water treatment systems).

The EPA has an Environmental Enforcement Network (NIECE) which includes HSE representatives who attend steering group meetings. The network is a valuable forum for exchange of information between its multi-agency memberships.

EPA Role

The EPA is the responsible agency for the enforcement of drinking water quality standards in Ireland it also reports on drinking water and bathing water monitoring results. The EPA maintains the EDEN system to collect the results. Many of the samples are analysed in the HSE public analyst's laboratories. The EPA interacts with the HSE formally under Regulation 9 of the *EU (Drinking Water) Regulations 2007*, where there is a potential danger to human health and on other

public health issues relating to drinking water and water quality. The EPA is also responsible for monitoring radioactivity levels in drinking water, bottled water and seawater.

HSE Role

- The HSE works together with Water Services Authorities in the provision of safe and secure drinking water through local Water Liaison Committees
- Through Public Health disease surveillance the HSE may identify water as a source of infection or contamination and threat to public health
- The HSE Environmental Health Services, Health and Wellbeing Division, undertakes water sampling programmes as part of their food safety responsibilities that may identify problems with drinking water quality
- The HSE Environmental Health Service, Public Analyst Laboratories and official Microbiology Laboratories act as agents of the Water Services Authorities for the purposes of sampling and testing of drinking water and bathing water
- The 2007 drinking water regulations require each Water Services Authority (WSA) to immediately investigate any exceedance of a drinking water parameter and to notify the EPA. The HSE advises when the public health risk assessment shows there is a potential danger to human health. Regulation 9 obliges both the WSA and the EPA to consult with and get the agreement of the HSE with respect to any remedial action and measures to protect public health
- Under Infectious Disease Legislation the Medical Officer of Health has responsibility and authority to investigate and control notifiable infectious diseases and outbreaks some of which may be waterborne.

3. Regulation of Industrial, Waste, Ionising Radiation and Other Activities

Licensed activities are required to conform to best practice and all licenses, authorizations and permits are routinely monitored to ensure ongoing compliance with requirements. In carrying out the regulatory functions the EPA must have regard to the protection of human health and the environment.

EPA has statutory responsibility for regulating the use of ionising radiation with particular responsibility for workers and members of the public and HSE has important responsibilities in terms of patient protection. Both HSE and EPA have a shared commitment to ensuring that risks arising from the use of sources of ionising radiation in a medical context are kept to a minimum.

EPA Role

The EPA is responsible for regulating activities that have significant polluting potential. Specific responsibilities encompass:

- Industrial Emission Directive (IED) Licensing
- Waste and IPC Licensing
- Waste Water Discharge Authorisation (Licences and Certificates of Authorisation)

- Emissions Trading
- Contained use and deliberate release of Genetically Modified Organisms
- Volatile Organic Compounds permits
- Dumping at Sea permits
- The use of ionising radiation

HSE Role

The HSE are required to be notified of license applications and reviews by the EPA. The HSE informs the licensing process with regard to environment and health, with the purpose of promoting and protecting human health. HSE contributions are made using a broad range of knowledge and skills including: knowledge of the interaction of licensed facilities and local communities and their facilities; a knowledge of local environmental conditions and vulnerability including water, air, soils, industry and residential mixes; assessment of public health nuisance; assessment of risk to human health including vulnerable groups; and advocacy for an environment that promotes health and wellbeing.

4. Air Quality

The Air Quality Health Information Working Group was established in December 2010 to further collaboration in the area which began when both organizations were on the National Emergency Taskforce on Volcanic Ash in 2010. Met Éireann, the DECLG and Dublin City Council are also members of the working group. This group will de facto become the standing working group on air quality between the HSE and EPA under this MoU.

EPA Role

The EPA is the competent authority for EU and Irish air quality legislation and has overall responsibility for the co-ordination of ambient air quality monitoring in Ireland in accordance with EU Directives. It manages the National Ambient Air Quality Monitoring Network, with some stations operated directly by the EPA and some by other bodies. The EPA is also responsible for monitoring radioactivity levels in air.

HSE Role

- The HSE is one of the prescribed bodies in the Air Quality Standards Regulations 2011 (SI 180 of 2011)
- The HSE works with the EPA and other agencies to implement the CAFÉ (Clean Air for Europe) Directive, to advocate for clean air, to alert the general public and vulnerable groups to air quality issues, and to ensure agency preparedness for emergency response
- The HSE responds to air quality issues on a case by case basis when there are particular health concerns, developing public health information and advice on preventive measures and communicating the risk to key health and other professionals and to the public

- The HSE Environmental Health Service and Public Analyst Laboratories act as agents of the Local Authorities for the purposes of sampling and testing air quality. This includes operating air quality stations for the Air Quality Monitoring Network.

5. Major Emergency and Incident Response

Ireland's Major Emergency Management Framework attaches lead responsibility to the relevant government department and agency depending on the nature of the event. For major emergency events arising from environmental and radiation incidents (excluding malign CBRN events) the lead government department is the Department of Environment, and the lead agency is the relevant local authority/authorities. This concept also recognizes that there are multiple support agencies involved depending on the incident.

The National Emergency Plan for Nuclear Accidents (NEPNA) provides a framework for the national response to large-scale radiological incidents. Lead responsibility for NEPNA lies with the Department of the Environment, Community and Local Government, with other Government Departments and Agencies, including the EPA and the HSE assigned specific roles and responsibilities. The arrangements outlined in this Memorandum of Understanding shall not alter those outlined under the NEPNA.

Environmental and radiation incidents of significant consequence for the EPA & HSE can also occur which while not triggering the activation of major emergency plans or NEPNA across the main response agencies still require the immediate attention and cooperation of the HSE and EPA. It is important that the two agencies cooperate in the response to such events and joint operating procedures shall be developed for response to such emergencies and incidents arising in water, air or land quality.

Animal/Human Health Protocol

The primary responsibility for human health investigations lies with the HSE Health and Wellbeing division; and for the animal health primary responsibility lies with the regional veterinary office of the Department of Agriculture, Food & the Marine. Other relevant bodies are invited to participate in these investigations; for example where environmental factors are considered to be involved, the local authority or the EPA may be invited to join the investigations. A protocol is in place for the investigation of serious animal and/or human health problems.

EPA Role

The EPA has a MoU with the Department of Environment, Community & Local Government which sets out the arrangements between the Local Authorities and the EPA for environmental emergency management.

For radiation emergencies, the EPA's roles are to:

- Provide advice on the potential consequences of radiation emergencies and on protective measures to be taken.
- Provide an on-call emergency service for the receipt and rapid assessment of information in support of response to radiation emergencies.

- Provide radiological protection advice, including advice on the results of dosimetric assessments.
- Organise the collection of environmental, foodstuffs, drinking water and other samples by appropriate national organisations and provide for their analysis.
- Cooperate with the HSE in the preparation of protocols for decontamination, population monitoring and population protective actions.
- Support the HSE in organising medical triage and treatment of potentially exposed persons through implementation of the relevant international conventions on international assistance.
- Support the HSE in organisation of training and exercises for HSE staff on response to radiation emergencies.

HSE Role

The HSE is the lead government agency for major emergencies arising from infectious disease and biological events. Additionally the HSE is one of the three principal response agencies, along with the Department of Environment and An Garda Síochána, who plan for, and respond to, major emergencies in accordance with the Major Emergency Management Framework. Inherent in this interagency cooperation are joint policies, procedures, training and exercises. As part of the framework these three agencies try to work with other stakeholders and responders to ensure other roles are understood and incorporated within relevant procedures and training.

If requested by the EPA, HSE will assist in incidents where there is a need for:

- Identification of the population exposed (those injured; those potentially harmed who may need health surveillance; and those who are unharmed or who may experience transient effects and who need full information)
- Assessment of the risk to public health (both the acute and chronic toxicant effects due to exposure to a noxious substance)
- Risk Communication and guidance to key health professionals and to the public;
- Toxicology advice
- Networks with HPA etc.

6. Environment and Health Research to Support Policy

Research in this area has an important role to play in enhancing human health through a healthy environment. By developing expertise and establishing a knowledge base, activities and policies with environmental impacts can be managed to guard against undue negative effects on human health. The EPA Health Advisory Committee will provide broad-based guidance on the content and direction of EPA research funding activity on this area.

EPA Role

Environment and Health is recognised as an important topic under the EPA research programme. Maximum value is realised from this work when there is close co-operation between the EPA and the public health bodies in terms of strategic planning.

Future research linkages which are to be fully scoped could include input by HSE into the EPA research programme including scoping and steering research and, where appropriate, the HSE will facilitate data provision to researchers working on environment-health projects.

Noise and vibration are assessed from traffic and licensed sites and in environmental impact assessments as well as nuisance complaints for compliance with national and European standards. The World Health Organisation has issued recommendations with regard to community noise. Research on noise perception and background noise effects on human health in differing environments is of mutual interest.

EPA is a member of the European Commission's Euratom Programme Committee (Fission configuration) and will provide HSE with relevant updates on the committee's activities. Euratom is a complementary research programme, under Horizon 2020, for nuclear research and training, including in the areas of radiation protection and development of medical applications of radiation.

HSE Role

The HSE is participating in a European biomonitoring study called Democophes. This is the first European wide biomonitoring project which, if successful may lead to further European biomonitoring studies. The purpose of Democophes is to test whether human biomonitoring can be performed in a coherent and harmonized fashion throughout Europe by means of commonly developed protocols, strategies and scientific tools. The study consists of 120 mother and child pairs per country being sampled for four chemicals in hair and urine. The chemicals are cadmium, cotinine, mercury and phthalates.

The EPA and HSE will explore the potential for a joint development, management and funding of an Environmental Research awards scheme.

7. Radon as an Environmental Health Hazard

Both the EPA and the HSE have a role to play in protecting the public from the health effects of radon.

The joint RPII/ HSE protocol on high radon levels sets out the responsibilities of each organization in dealing with high radon levels in homes and workplaces. This protocol sets out a graded approach to ensure that the homeowners, employers and, where appropriate, other public bodies are informed and advised regarding the risk from radon and the actions required to reduce this risk.

The EPA and the HSE have joint responsibility, with other relevant government departments and agencies, for ensuring that people in Ireland are protected from the harmful effects of exposure to radon through the successful implementation of the National Radon Control Strategy (NRCS). The NRCS sets out 48 measures to reduce the exposure of the Irish population to radon gas. The EPA and the HSE have joint responsibility with for the delivery of a number of these measures that address public and environmental health.

EPA role

The EPA role includes:

- Raising awareness of the risks from radon.
- Managing an accredited radon testing service.
- Providing advice and information to householders, employers, schools and other stakeholders as set out in the joint protocol on high radon levels.
- Effective implementation of the measures assigned to the EPA under the NRCS.

HSE role

The HSE role includes:

- Providing advice and information to householders, employers, schools and other stakeholders as set out in the joint protocol on high radon levels.
- Promoting healthy behaviour with regard to radon.
- Implementation of those measures that address public and environmental health as set out in the NRCS.

8. Other Areas of Potential Common Interest/Purpose

The coordinating group under this MoU will agree and keep under review interactions between the two agencies across a number of other areas of common interest and may, as required, set up working groups with defined terms of reference and timeline, to develop procedures or protocols to support cooperation in these areas. Examples of these additional areas of common interest are-

8.1 Chemicals and Contaminants

Under the national Persistent Organic Pollutants (POPs) Regulations (SI 235 of 2010), the EPA is the competent authority for the purposes of the EU POPs Regulation (850/2004). Under SI 235 of 2010, the HSE is listed as a public authority concerned for public health issues. In relation to POPs, there are four specific Polycyclic Aromatic Hydrocarbons (PAHs) that are listed as POPs under the 1998 Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants. The HSE Dublin Public Analyst Laboratory is the appointed National Reference Laboratory for PAHs and carries out analysis of PAHs in a wide range of foodstuffs. HSE have supplied PAH monitoring (in food) information in 2010 for the purpose of reporting to the Commission.

The EPA is preparing a national implementation plan on POPs which will involve stakeholder consultation including public authorities listed under SI 235 of 2010 including HSE. The EPA is also a competent authority (with others including the Health and Safety Authority and the Department of Health) under the Chemicals Act 2008 for the purposes of the REACH Regulations (EC 1907/2007) and the Detergents Regulations (EC 648/2004).

8.2 Dioxin Monitoring

The EPA link with the FSAI regarding the routine environmental dioxin surveys. The Environmental Health Service carries out food monitoring activity under the terms of a Service contract with the FSAI. The FSAI are also undertaking a dioxin human milk study in conjunction with the State Lab. A report is published annually by the EPA on dioxin levels in milk.

8.3 Climate Change

Climate change impacts are projected to increase in the coming decades and during the rest of this century. Uncertainties remain in relation to the scale and extent of these impacts, particularly during the second half of the century. Predicted adverse impacts include more intense storms, increased likelihood of river & coastal flooding and adverse impacts on water quality. There is a requirement for a coordinated approach from the health and environment sectors in assessing and preparing for the climate change impacts (e.g. link to emergency planning, water supply, food supply and safety, vector control, and social protection).

8.4 Environmental Impact Assessment/Health Impact Assessment

The HSE acts as a statutory consultee with regard to Environmental Impacts Statements for Planning and Development and Waste and Integrated Pollution Licensing. HSE will contribute on updating the national guidance for all EIAs and Strategic Environmental Assessment. The Role of HIA in the regulation of industrial and waste activities is being explored by the EPA and may lead to additional areas of cooperation.

8.5 Sustainability

This area incorporates the growing area of resource efficiency (estate management, etc.); reducing the carbon footprint of our activities; and considering environmental impacts of medical prescriptions.

Addendum to HSE / EPA Memorandum of Understanding - December 2015

Section 2.2 of the HSE / EPA MOU provides for conjoint research programmes including joint research programmes. Appendix 1, Section 6 commits the parties to exploring the potential for the joint development, management and funding of an Environmental Research awards scheme.

The HSE & EPA have agreed to collaborate on a joint research call and identified two projects for funding. To provide for the efficient governance of these projects and to avoid duplication of effort the parties agree that the projects will be managed by one agency, the EPA, and be overseen by a steering group with representatives from both agencies.

Programme Management

The EPA, in consultation with the HSE and the Grantee, will establish a steering committee to provide advice to the research team and the EPA-HSE on the overall direction and approach of the project and to provide an external view of the research. The steering committee will also advise on the contents and structure of the final report.

Where a steering committee has been established, the principal investigator and the project participants will be required to attend and present results from their research at regular (usually 6-monthly) meetings involving the Steering Committee and the EPA & HSE. These meetings will be organised by the EPA and the principal investigator.

Governance and Payment of Award

For EPA HSE JOINT Research Calls the EPA is responsible for making all payments directly to the Grantee. For this purpose the HSE agrees to forward to the EPA, an advanced payment equal to 35% of the total grant award, following receipt of an appropriately signed acknowledgement letter and subject to the EPA (a) applying the funding only for the research purposes for which it is provided and (b) the EPA ensuring the appropriate governance arrangements are in place for the oversight and administration of such funding. Thereafter payments are conditional on submission of standard approved financial and technical progress reports for the project to the EPA and HSE. Both sets of reports must be submitted on 28th January and 28th July each year. An amount equal to 15% of the total grant aid related to the project completion costs will be retained in all cases pending satisfactory completion of the project.

Please find attached:

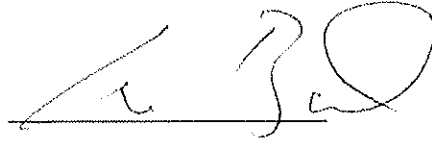
1. a copy of the Terms and Conditions for EPA Research Calls;
2. a copy of the EPA Research Programme Guide for Applicants
3. a copy of the EPA Research Programme Guide for Grantees

4. a copy of the application form for each of the successful proposals
5. Templates for the following
 - a. Letter of offer
 - b. Notification of Grant award
 - c. Acknowledgement of receipt of grant award

Signed:



On behalf of HSE



On behalf of EPA

Date

4/12/2015

4/12/2015

