Environmental Chemistry and a Non-Toxic Environment

Taking action to improve healthcare by addressing the links with environment chemistry

June 1 2016 – Centre for Health Science, INVERNESS

"A non-toxic environment is a prerequisite for people's health. It is especially important to protect children and young people, since they are particularly susceptible to risks associated with toxins in the everyday environment" (Swedish Government)

The European Commission's Tender (ENV.A.3/ETU/2015/0027) stated: Many health problems, such as cancer, diabetes, neurological disorders and allergies, are on the rise in the EU. Hazardous chemicals are associated with these issues, with particular concern for the unborn child, young children and woman in the fertile age… There are numerous well documented cases of extensive damage to health and environment caused by the production and use of chemicals. Experience shows that despite early warning signals, it often takes a long time before these signals are picked up by societal institutions and even longer to react…

Damage and socioeconomic costs are often substantial, while time needed for remediation and restoration will be long."

'A Non-toxic Environment - Highlands & Islands – should this be our goal?

Some of the questions we'll be debating will be:

Do we need a strategy or action plan to reduce any chemical risk to children's and young people's health, raise awareness of existing chemicals regulations, detoxifying eco-cycles and reducing the risks of pharmaceuticals in the environment?

How can we work to reduce human (particularly children's) exposure to priority substances in products? What exposure to hazardous substances should we consider - food and personal care, household cleaning products, textiles and building materials?

Could we improve information using big data or analytics about priority substances in products to help inform consumer choices? Can we do more to influence the use of toxic chemicals across the globe through our networks?

To reduce emissions of pharmaceutical residues and other chemicals into the environment - do we need to develop and test new waste water treatment technologies? What other questions around this agenda should we be asking?

Time	Item	Speaker
09.00 for 09.30	Registration and refreshments	
What problems are we trying to solve?		
09.30	Welcome – setting the scene for a conversation on a non toxic environment route map – the EU's Environment Action Programme	Calum Davidson, Director of Energy and Low Carbon
09.35	What are Priority Chemicals? The policy landscape and opportunities for players in the environmental technology	Diane Duncan, Head of Low Carbon and Environmental Clean Technologies

09.55	Environmental protection and human health and wellbeing	Dr John Redshaw, Principal Specialist Scientist, SEPA
10.15	GOES Foundation: Impacts of priority chemicals on the wider water environment - Innovating into this space	Dr Howard Dryden, Chair and CEO
10.35	Coffee Break	
11.00	Biological processes for the removal of xenobiotics from wastewater	Dr Davide Dionisi, University of Aberdeen
11.15	An innovating NHS - Committing to work in partnership to affect environmental benefits and in turn better health	Dr Frances Hines, Director of research and Innovation, NHS Highland
11.35	Designing out pollution and waste - Sustainable Rural Communities	Allan Mason and Bess Homer Scottish Water
11.55	**Break out into discussion groups to answer some of the above questions**	
12.30	Lunch	
…Innovating to deliver solutions and influencing the international agenda		
13.30	Legal frameworks for contaminants of emerging concern	Dr Sarah Hendry, Centre for Water Law, Policy and Science, University
13.50	How pollutants get into the environment: detection, social attitudes and solutions	Profs Stuart Gibb, Environmental Research Institute, UHI and Ole Pahl, Glasgow Caledonian University
14.30	Environmental pollutants and antibiotic resistance	Dr Will Gaze, University of Exeter
15.00	Funding for Non Toxic Environment Projects	Richard Buxbaum, Scotland Europa
15.25	Coffee and Break Out groups **What actions/big data, societal benefit projects could the public sector and partners take forward collectively to help citizens make better choices for their own health and helping with the delivery of sustainable services for the region**?	
…research, policy and commercialisation		
16.10	Supporting the economic development landscape - Case Study: research in priority chemicals in the environment – a project update	Scotland's Centre of Expertise for Water (CREW) –- Dr Richard Allan
16.30 – 16.45	Q&A, Summary and Close	Diane Duncan