News story: Businesses trading timber urged to prepare for change

Firms will need to take action ahead of the end of the transition period.

Growing an organic partnership

A unique postgraduate course in Organic Farming is celebrating its 20th year at Scotland’s Rural College (SRUC).

Statistical data set: Statistics on TB in Non-Bovine Species

Statistics on incidents of TB in domesticated non-bovines and wild animals.

Detailed guide: Importing animals, animal products, and high-risk food and feed not of animal origin from non-EU countries to Great Britain

Where you can import to Great Britain, getting the right licence and the border checks your import must pass at border control posts.

Scottish partnership identifies Covid-19 RNA traces through waste water monitoring

Scientists at the Scottish Environment Protection Agency's (SEPA) have successfully pinpointed fragments of coronavirus' ribonucleic acid (RNA) in local waste water samples across the country.

SEPA was among the first European agencies to begin this exploratory work back in May, with the backing of Scottish Government and Public Health Scotland (PHS), alongside Scottish Water, CREW (Centre of expertise for Waters) and academic partners from the University of Edinburgh's Roslin Institute and Heriot Watt University.

The aim was to detect fragments of the virus' RNA – a genetic footprint which can be measured in waste water even after the virus has begun to breakdown. The World Health Organization has said there is currently no evidence that coronavirus has been transmitted via sewerage systems.
Analysis on samples from across Scotland has now identified traces in waste water from 12 health board areas. The results have been shared with PHS and areas with positive RNA findings are consistent with the areas known to have confirmed Covid-19 cases.

One such example is Aberdeen, where SEPA's analysis demonstrates how the prevalence of the virus in waste water samples is mirroring cases in the population. At the beginning of August, SEPA analysed a sample from the Aberdeen area which was positive for Covid-19 RNA. This was consistent with an increase in positive cases in the areas.

On SEPA's request Scottish Water increased the sampling rate to four times a week to provide more information, and over the following three weeks there was a gradual decline to below the level that concentrations can be detected with sufficient accuracy. Sample results remained at the same level until the end of September when they began to rise again, reflecting PHS data on known cases.

Sample results across the rest of Scotland, including in the Central Belt, continue to be consistent with PHS information on cases in the community. SEPA has made data available for all samples analysed at https://informatics.sepa.org.uk/RNAmonitoring/

Since May SEPA and partners at the Roslin Institute have been refining analysis methods to lower the concentration of RNA that can be reliably detected.

Testing is conducted on incoming waste water samples collected by Scottish Water and its operators at 28 public waste water treatment works across the

country, covering all 14 NHS Scotland health board areas. Most locations are tested weekly, but this can be increased when local outbreaks are apparent. Samples are representative of waste water from between 40-50 percent of the Scottish population and, in combination with community testing, are helping Scotland understand the prevalence and distribution of the virus.

SEPA continues to work with academia and public health officials to understand how this monitoring can be best used to support Scotland's response to the pandemic.

Terry A'Hearn, SEPA CEO, said:

"As Scotland's environmental watchdog and as a public agency, we remain proud to be playing our part in the national effort to combat coronavirus.

"Our scientific capabilities and expertise in designing and implementing monitoring networks made us ideally suited to delivering this trial and the results we are seeing demonstrate its scientific validity.

"Central to the delivery of this project has been our partnership working Scottish Water and the University of Edinburgh's Roslin Institute, and we will continue to work closely together to refine our techniques and understanding.

"We've received support from across the public sector, agencies and institutions – including a donation of specialist kit from Science and Advice for Scottish Agriculture – demonstrating how Scotland is coming together to find ways of tackling this virus."

SEPA is also assisting UK government scientific advisors, who are engaging with the research community to investigate how waste water monitoring can be used to track the transmission of coronavirus.
Environment Secretary Roseanna Cunningham said:

"In order to manage the coronavirus pandemic, it is vital that we continue to develop our understanding of it, and I welcome this UK-wide programme of research and the development of waste water monitoring to help build our knowledge base.

"SEPA and Scottish Water have translated this experimental programme into a comprehensive, Scotland-wide monitoring network. The early data is already providing our public health experts with new information, which complements the wider population testing programme to give a more robust picture of the prevalence of Covid disease in Scotland. I look forward to the programme providing further, valuable data over the coming months to support our fight against the pandemic."

Scientists at The Roslin Institute have been working with Scottish Water and SEPA to develop robust methodologies for detecting and measuring SARS-CoV-2 genetic material in wastewater. Funding from the Centre of Expertise for Waters (CREW), which is supported by Scottish Government, has allowed scientists in Scotland to work with academic colleagues across the UK to keep pace with international developments in the rapidly expanding field of

wastewater epidemiology.

SEPA’s response to the COVID-19 pandemic can be found at coronavirus.sepa.org.uk.

Ends