Corporate report: Scrutiny of Radioactive Waste Management: annual report 2015 to 2016

The Environment Agency and Office for Nuclear Regulation's (the nuclear regulators) joint publication about their scrutiny of RWM's work relating to geological disposal of radioactive waste.

The nuclear regulators provide regulatory advice to RWM about implementing geological disposal.

This report explains what the regulators looked at and the main comments provided to RWM. It also highlights areas for RWM to improve.

RWM is making progress towards being an organisation capable of holding an environmental permit and nuclear site licence for a geological disposal facility.

The regulators will make sure that any future geological disposal facility meets their high standards for environmental protection, safety, security, radioactive waste transportation and safeguards.

For more information email the Environment Agency at geological.disposal@environment-agency.gov.uk.

Research and analysis: Effects of run-of-river hydroelectric power schemes on small in-stream animals

This project explored the effects of existing run-of-river hydroelectric power (HEP) schemes across England and Wales on communities of small freshwater animals (macroinvertebrates). The research found a very small but statistically significant reduction in the proportion of invertebrates of different families (called evenness) after the HEP schemes were built. It's unclear whether a change in evenness is ecologically important or just a reflection of adaptation to changing conditions.

The aim of the study was to see whether macroinvertebrate communities associated with HEP schemes have changed in a different way from unaffected but similar sites over the same time period. The research highlighted the wide variability in invertebrate communities in streams and rivers at a given

site over time and between sites at the same time. The study also demonstrated the value of looking at as many sites as possible to detect the presence or absence of effects from site-based interventions where other drivers of change may be present.

Research and analysis: The early stages of implementing geological disposal: regulatory use of geoscientific information

This study reviewed how regulatory bodies in 5 countries have used geological information to make decisions on proposals for the geological disposal of higher activity radioactive waste. The report's findings on the use of generic site safety assessments, site-specific investigations and pre-permitting discussions will inform the Environment Agency's preparations for any geological disposal facility that might be proposed or developed in England.

The review considers lessons learnt from radioactive waste disposal programmes in France, Finland, Sweden, Switzerland and the USA, all of which are at different stages of development. These countries have similar regulatory regimes to the UK and represent a range of geological environments.

Research and analysis: Understanding eel and fish behaviour to improve protection and passage at river structures

This project studied the behaviour of fish and eels to find better ways to protect them at flood control structures, weirs, hydropower sites and other intakes.

The study showed significant impacts of some river structures on migrating eels, but also that understanding eel behaviour at such structures and

intakes in relation to flow could help improve their passage.

News story: New app to report Asian hornet sightings

The nation's smartphones are the latest weapon in the fight to prevent the spread of the Asian hornet, thanks to a new app which has been launched today.

People will be able to use the free app – called Asian Hornet Watch – to quickly and easily report possible sightings of the invasive species and send pictures of suspect insects to experts at the National Bee Unit.

While Asian hornets pose no greater risk to human health than a bee, they are a threat to our native honey bees, which is why it is important to quickly contain them.

By using the eyes and ears of smartphone users, we can more quickly identify any Asian hornet nests in the UK and eradicate them before they have the opportunity to spread.

Biosecurity Minister Lord Gardiner said:

> This innovative new app is designed to be easy to use and allows people to report quickly any possible sightings of Asian hornets, which will help us to halt their spread.
>
> This invasive species poses a threat to our native honey bees and we must do all we can to encourage vigilance – this new technology will advance this.

The interactive app, developed by the Great Britain Non-native Species Secretariat and the Centre for Ecology and Hydrology, will also make it easier for people to judge whether an insect may actually be an Asian hornet; with pictures available of other insects that it could be confused with and helpful information about their size, appearance and the times of year they are most likely to be spotted.

If there is a sighting of the Asian hornet, the government's well established protocol for eradicating the species will kick quickly into action: This was the case in Gloucestershire last Autumn, when bee inspectors rapidly tracked down and destroyed an Asian hornet nest, containing any further outbreak.

There are fears the pest could reappear this spring, so members of the public are being urged to report any sightings quickly to again allow inspectors to

intervene. Asian hornets can be distinguished from their native counterparts by their abdomens, which are entirely dark except for a single band of yellow – native hornets' abdomens are predominantly yellow.

Martin Smith, Public Affairs Manager at the British Beekeepers' Association, said:

> This new app launched today by Defra is a welcome addition to current reporting methods that have enabled beekeepers and members of the public to report possible sightings. The key to containment is catching outbreaks as early as possible and allowing fast tracking of the insects back to their nest. We will certainly be encouraging all our 25,000 beekeepers to install the app and use it if they see what might be an Asian hornet near their hives.

Asian hornets arrived in France in 2004 and have since spread across large areas of Western Europe. It was discovered for the first time in the British Isles in Jersey and Alderney last summer.

The native European hornet is a valued and important part of our wildlife, and queens and nests of this species should not be destroyed.

Notes to editors

1. The 'Asian Hornet Watch' app is available to download from the Apple and Android app stores.

2. The Great Britain Non-native Species Secretariat is a joint venture between Defra, the Scottish Government and the Welsh Government to tackle the threat of invasive species. More information can be found on their website http://www.nonnativespecies.org/home/index.cfm

3. Members of the public can also report sightings by email to alertnonnative@ceh.ac.uk with a photo or on the Non-native Species Secretariat website.

4. For details on the appearance of an Asian hornet please can be found on Bee Base guide or the non-native species identification guide.