

Collection: Coal mine water treatment

The Coal Authority's work to treat mine water has directly:

- protected and improved over 350km of rivers
- protected several important regional aquifers
- enhanced biodiversity and provided local amenity land

Why do we need coal mine water treatment?

When a coal mine closes, the pumps that were used to keep the water out of the mine while the mineral was extracted are switched off and removed.

Over time the water level recovers within the mine and picks up naturally occurring minerals from the rocks, such as iron. This can coat river beds, stopping plant growth, causing wildlife to move on as they no longer have food.

How do we treat coal mine water?

Typically mine water is brought to the top of a cascade structure. Water flows down these steps, which mixes in air.

The air encourages the dissolved iron in the water to become solid.

The water then flows into lagoons where the iron has time to settle at the bottom for removal.

The remaining finer iron particles are filtered out when the water passes through a series of reed beds.

[How we treat coal mine water](#)

Press release: Company fined £80,000 for polluting brook with hazardous chemical

Firth Rixson Metals Limited has been ordered to pay a fine of £80,000 after pleading guilty to polluting a watercourse in Glossop.

The Environment Agency prosecuted the company after over 600 litres of a solution of hydrochloric acid, caustic soda and water polluted nearby Shelf Brook.

This had a significant impact to the brook, resulting in 199 dead brown trout within a 500 metre stretch, with invertebrates also affected over two kilometres. The fins and eyes of the fish were noted to have a burnt appearance.

Member of the public reported incident

A member of the public initially reported the pollution in Shelf Brook to our Incident Hotline in April 2015.

Officers attended the area and found dead fish. Samples taken from the brook and a drain leading from the Firth Rixson Metals site into the brook were found to contain a highly alkaline liquid, made up of various metals, at elevated levels.

As part of Firth Rixson Metal's manufacturing process, an acid scrubber was used. Hydrochloric acid emissions were neutralised with caustic soda. Below the scrubber was a waste tank in a plastic containment bund.

Environment Agency launched investigation

The Environment Agency investigation identified a valve had been left open. This allowed water into the scrubber unit and the automatic dosing equipment had continued to add caustic soda. Staff failed to respond properly to alarms and a pump, which should have returned the solution, failed to activate.

This resulted in a highly alkaline solution overflowing from the containment bund, which entered the nearby drain to the brook. The company had failed to cap the drain, despite recent advice from local authority inspectors.

Pollution had significant impact

In sentencing, District Judge Davison said Firth Rixson Metals Ltd had allowed a state of affairs to exist which led to the incident.

Mark Easedale, Environment Manager for Greater Manchester, said:

This pollution incident had a significant impact on Shelf Brook, killing brown trout, which are a key indicator species of good water quality. The sentencing sends out a very clear message to anyone whose recklessness and negligence causes serious pollution to the environment. We will not hesitate to take action against polluters.

Our staff work 24/7 to protect people and wildlife from pollution incidents and we encourage people to report such incidents to the Environment Agency's Incident Hotline on 0800 80 70 60.

Firth Rixson Metals Ltd pleaded guilty to causing a water discharge activity

not under and to the extent authorised by an Environmental Permit contrary to the Environmental Permitting (England and Wales) Regulations 2010.

Notice: PE28 3BS, Envar Composting Limited: environmental permit issued

The Environment Agency publish permits that they issue under the Industrial Emissions Directive (IED).

This decision includes the permit and decision for:

- Operator name: Envar Composting Limited
 - Installation name: Envar Composting Facility
 - Permit number: EPR/GP3930DF/V003
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Consultation outcome: Aviation EU Emissions Trading System: proposed amendments to UK legislation

Updated: Government response and final stage impact assessment published

This consultation will cover UK implementation of the agreed amendments to the Aviation EU Emissions Trading System (EU ETS). The amendments to be implemented are:

- to extend the existing Intra-European Economic Area (EEA) scope for the Aviation EU ETS until 31 December 2023
- to introduce simplified procedures for operators emitting less than 3,000 tonnes of CO₂ per annum on intra-EEA flights; and
- to extend the exemption for non-commercial operators emitting less than 1,000 tonnes of CO₂ per year until 2030

The consultation will be of particular interest to aircraft operators, aerodrome operators, verifiers, other participants in the EU ETS and environmental groups. This consultation is not limited to these stakeholders; any organisation or individual is welcome to respond.

Our impact assessment estimates the reduction in compliance costs for

aircraft operators, the reduction in the environmental benefits of Aviation EU ETS, and the reduction in government auction revenues between 2017 and 2023, as compared to a scenario where the EU and UK legislation was not amended. Consultees are invited to submit any additional evidence or other relevant information on the impacts of the policy option assessed in our impact assessment.

The measures proposed in this consultation are without prejudice to future decisions on the UK's future relationship with the EU on the EU ETS.

Postal Addresses

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Respondents in Northern Ireland, Scotland, and Wales are requested to copy their responses to:

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By email: Climate.Change@daera-ni.gov.uk

By post:

Climate Change Unit

Environmental Policy Division

Department of Agriculture, Environment and Rural Affairs

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By post:

Carbon Trading and Climate Risk Branch

Department for Environment and Rural Affairs

Welsh Government

Floor 1 East Cathays Park

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**[News story: Environment Secretary
backs release of Beavers in Forest of](#)**

Dean

Beavers are set to be released in the Forest of Dean in plans confirmed by the Environment Secretary and the [Forestry Commission](#) today.

The project will see two adult beavers and two kits released into a 6.5 hectare secure enclosure to help improve biodiversity and build dams and ponds from next year.

This could be the first of many such schemes. [Government guidance](#) published today sets out a new [framework](#) for assessing applications for further trial releases across England.

Environment Secretary Michael Gove said:

The beaver has a special place in English heritage and the Forest of Dean proposal is a fantastic opportunity to help bring this iconic species back to the countryside 400 years after it was driven to extinction. The community of Lydbrook has shown tremendous support for this proposal and the beavers are widely believed to be a welcome addition to local wildlife.

The project is an example of the wider approach we are taking to enhance biodiversity, become the first generation to leave the environment in a better state for future generations and deliver on our plans for a Green Brexit.

Scientists believe the beavers may be able to hold back enough water to help with flood alleviation for Lydbrook by quickly constructing natural dam structures and creating new habitat.

The Environment Secretary will visit a similar scheme run by the Devon Wildlife Trust in December where he will see first-hand the new dams, pools and other dramatic changes that have resulted from releasing two beavers on a 200 metre stretch of waterway in North Devon.

Kevin Stannard, Forestry Commission Deputy Surveyor for the Forest of Dean, said:

Our proposal to introduce captive beaver in to the Forest of Dean has strong backing from the local community and we are developing the project with the fantastic support from Environment Secretary Michael Gove.

We will continue our detailed planning including designing a robust fence to keep the beaver enclosed; securing healthy, disease-free beaver and collecting data from the monitoring of the water flow in the brook. We will continue to give updates as the project

develops.

The proposal put forward by the Forestry Commission and approved by ministers has been granted full licence approval by [Natural England \(NE\)](#). This assessment has been key to ensuring the enclosure will be secure and NE will consider further applications for possible trial releases on a case by case basis, in line with the new guidance published today.

All the beavers will be fully tested for disease before they are released and a management plan will be put in place to make sure the enclosure remains secure. The Forestry Commission will also closely monitor the ecology and hydrology of the scheme throughout the trial which will help to understand the longer-term impacts and benefits to the local environment.

The project is being financed by the Forestry Commission as part of its normal operation activities supported by Forest Holidays.

Timeline of events:

- Beavers were driven from England 400 years ago
- They were reintroduced in Devon in 2015 for trial
- The FC sought SoS approval for further trial in Forest of Dean, this was granted on 22nd September
- The FC submitted an application to Natural England on 23rd October
- The beavers will be released in spring 2018