Notice: RH17 6JH, Cuadrilla Balcombe Limited (EPR/AB3307XD/V005): environmental permit application advertisement

The Environment Agency consults the public on certain applications for waste operations, mining waste operations, installations, water discharge and groundwater activities. The arrangements are explained in its Public Participation Statement

These notices explain:

- what the application is about
- where you can visit to see the application documents
- when you need to comment by

The Environment Agency will decide:

- whether to grant or refuse the application
- what conditions to include in the permit (if granted)

Press release: Learn from others how best to protect people in the Calder Valley

Sixty flood wardens who volunteer to help protect people and their properties throughout the Calder Valley are being invited to an event to help them learn from each other.

Anyone who wants to get involved in supporting residents during a flood event, either as a flood warden or by volunteering for one of the charities or organisations which reduce flood risk in the community, can also come along to the event during the evening to find out how they can help.

Owners and employees from Calderdale businesses will also be welcome to drop in to get advice on how best to protect their premises from flooding.

The networking event, supported by the Environment Agency and Calderdale Council, will be held in the Waterfront Hall, at Hebden Bridge Town Hall, on Wednesday 23 May. It will be open to flood wardens between $5-6.30\,\mathrm{pm}$ and to

members of the local community between 6.30 -8.30pm.

There will be information stalls run by many organisations at the event including Yorkshire Water, Treesponsibility, Slow the Flow, Watermark Flood Fund and Community Foundation for Calderdale.

A team from the Environment Agency will be signing people up for their free flood warning service, providing information about flood defence schemes in the area and discussing what is included in the Calderdale Flood Action Plan.

Representatives from the Council's emergency planning, flood and housing teams will also be on hand to share information on Calderdale's multiagency flood response protocol, flood risk management strategy and role in recovery following serious flooding.

Jonathan Follows, Calderdale flood resilience officer with the Environment Agency, said:

This is the second time we have had an event of this kind in Calderdale.

Our flood wardens are invaluable to us as our eyes and ears on the ground. This is a great opportunity for them to share best practice so they can support each other.

They will have the chance to meet new people and learn more about the training opportunities and information that the Environment Agency can provide to help them in their role.

Katie Kimber, chair of the Calderdale Community Resilience Board, said:

We have eight flood groups throughout the Calder Valley and if anyone is interested in joining one as a flood warden or simply as a volunteer they can come along to our event and find out everything they need to know.

There will also be representatives from a wide range of voluntary and community groups who are keen to recruit new volunteers and will be happy to explain more about their projects.

Mark Thompson, director of Regeneration and Strategy at Calderdale Council, said:

We're extremely grateful for the work our flood wardens do in helping to keep our communities as safe and informed as possible.

If you or someone else you know has been affected by flooding, Calderdale's flood groups are a valuable support network that can offer you help and information before, during and after a flood.

This is a great chance to meet wardens in your area, find out more about what they do and discover some of the many ways in which you can get involved should you wish to do so.

As part of the event there will be information about resources available to flood wardens including handbooks and personal protective equipment; training on how to use the radio network to communicate with other wardens and using social media during a flood event, demonstrations on using sandbags and a chance to ask questions and raise any concerns.

If anyone is interested in becoming a flood warden or volunteer they can email: yorkshirefloodresilience@environment-gov.uk

Notice: DN15 ORA, Europa Oil & Gas 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 document for:

- Operator name: Europa Oil & Gas Limited
 Installation name: Crosby Warren Wellsite
- Permit number: EPR/GP3635MP/V003

Notice: LN11 9RA, Egdon Resources UK Limited EPR/HP3131JM/A001: environmental permit issued

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

This decision includes the permit and decision document for:

- Operator name: Egdon Resources UK Limited
- Installation name: Biscathorpe Wellsite
- Permit number: EPR/HP3131JM/A001

News story: Snake slithers through to tackle Dragon

The long, flexible — a type of robotic arm — was passed through a narrow hole in the 3-metre thick concrete around the core, then sliced through a $400 \, \text{mm}$ diameter vessel attached to the Dragon reactor core.

Contractors OC Robotics were called in by the Magnox team decommissioning Dragon when it became clear that removing the vessel, known as the Purge Gas Pre-Cooler (PGPC), would be a challenging task: one end was joined to the core in the high-radiation area behind the concrete shielding and several steel plates, while the other end extended outside the shielding.

title of video

The LaserSnake technology, developed by OC Robotics and TWI with R&D funding from the NDA, seemed perfect. Controlled from a distance by specialist operators, LaserSnake can squeeze through a small access hole, manoeuvre easily inside a very confined space and cut multiple layers with its high-powered laser. This allowed the work to be carried out inside the existing radiation shielding of the reactor.



In action at the Dragon reactor

Although LaserSnake had previously been deployed at Sellafield, the thick pipework, complex PGPC layout and limited access meant it was necessary to prepare 2 mock-ups which allowed comprehensive testing and rehearsals to take place before making the cuts for real.

In the end, less than 3 hours of actual cutting time were needed to free the PGPC from the reactor core.

NDA Head of Technology Melanie Brownridge said:

This is an excellent example of how early NDA R&D funding support enabled the technology to grow from an exploration of whether laser-cutting could actually be adapted for nuclear into a system that, with further funding and collaborative working, is now mature and being successfully deployed on a number of our sites.

Magnox Senior Project Manager Andy Philps added:

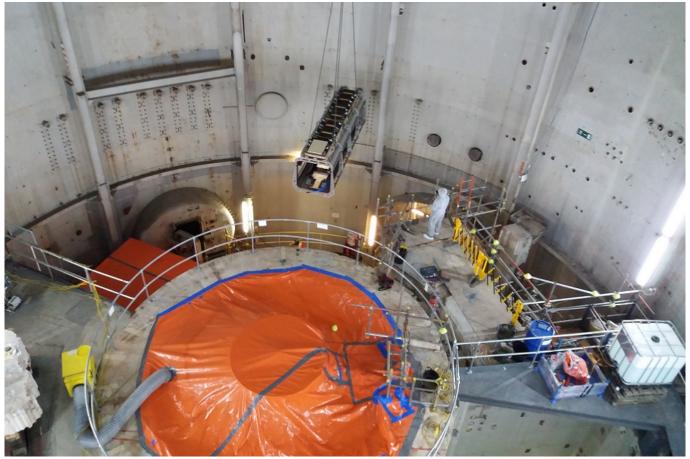
We believe this is the first time that laser-cutting technology has been deployed directly on the core of a nuclear reactor. The ability of the LaserSnake to carry out 'keyhole surgery' on the reactor core meant that the work could be carried out using existing protective shielding.

This has saved at least £200,000 and the radiation dose that would have accompanied building additional infrastructure, and saved four weeks on the programme's critical path. It has also enabled us to remove this component earlier than originally planned.

Adam Mallion, from OC Robotics, said:

The difficult environment of the external core of the Dragon reactor was an ideal challenge to show the full capabilities of laser-cutting technology and snake-arm robots. Cutting something as thick as the 400mm PGPC with its complex internal geometry had never been attempted before.

The deployment showed once again that the OCR LaserSnake system could be set up and deployed quickly and efficiently to contribute towards safer, cheaper and faster decommissioning of the plant.



LaserSnake and its housing are lifted into place at the Dragon reactor

Dragon, a prototype high-temperature reactor cooled by helium, was developed in the 1960s as a joint European project involving 13 countries. After opening in 1964, it operated until 1975 when it was closed and defueled before being put into a passive 'care and maintenance' regime.

In 2011, decommissioning began in earnest. All that now remains is the reactor core contained in a pressure vessel surrounded by the concrete biological shield, 7 steel containment plates and an outer containment building.

Under the current programme, it is expected that the reactor core will be removed by 2021 and the facility demolished to ground level by 2022.

Read more about LaserSnake's development