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WYLFA NEWYDD

Our application for a Construction Water Discharge Environmental Permit

June 2018

How Horizon will manage water during construction

Horizon Nuclear Power is proposing to build and operate Wylfa Newydd, a new nuclear Power Station on Anglesey.

During construction, surface water (mainly in the form of rainwater) and sewage will need to be collected, treated, monitored and discharged into local watercourses or the sea.

Water will also need to be removed from cofferdams. These are enclosures in or next to the sea which are pumped dry to allow the construction of infrastructure, such as the cooling water intake channel.

Horizon needs an Environmental Permit from Natural Resources Wales (NRW) to discharge water into the sea and watercourses.

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Our application for a Construction Water Discharge Environmental Permit

Sources of water

There will be a number of different sources of water within the Wylfa Newydd Development Area during construction that will need to be managed, treated and discharged. These are described below.

Surface water

Rainwater falling on parts of the site prepared and cleared of topsoil for construction has the potential to run off, picking up sediment and contaminants from the soil. A Sustainable Drainage System will be installed to collect this surface water run-off from across the site. It will be directed to settlement ponds to remove sediment and suspended solids, before the cleaned water is discharged into local watercourses and the sea.

Deep excavation and cofferdam construction

Parts of the main plant building will be embedded in the ground, and infrastructure such as the cooling water intake will need to be constructed in the sea. During construction, collected water (rainwater, groundwater and any seawater seepage into the cofferdams) will be pumped to sediment treatment systems before the cleaned water is discharged at sea.

Concrete batching plant

Rainfall falling within the concrete batching plant will be collected for use in the concrete production process, with any excess being taken off-site in tankers for treatment. Surface water run-off from the surrounding area will be collected, pH adjusted (if required) and settled to remove sediment, before being discharged to the sea.

Vehicle wheel wash

Vehicle wheels will be cleaned within designated areas. The waste water will be collected and passed through silt traps and oil interceptors, before going to a sediment treatment system and then being discharged to the sea.

Treated effluent

The main construction site will host an estimated maximum of 9,000 workers at peak. Sewage from the construction site welfare facilities will be treated in a dedicated waste water treatment works before being discharged to the sea. Based on modelling and other studies, this is predicted to quickly disperse with no adverse effects.

Our application to NRW

Horizon has applied to NRW for a Construction Water Discharge Activity Environmental Permit. Our application describes the work we propose to do to manage water discharge from the Wylfa Newydd Development Area during construction.

Our application includes:

- the findings of environmental risk assessments of water discharge activities on bodies of water in the vicinity of the Wylfa Newydd Development Area, and nearby European Designated Sites;

- how Horizon has assessed that water discharges into Tre'r Gof drains will have no significant effects on water quality at the nearby Tre'r Gof Site of Special Scientific Interest (SSSI); and

- a commitment to carry out monitoring and sampling of water, to demonstrate we are compliant with any limits imposed by NRW.

Next steps

Having submitted our application, NRW will conduct a public consultation and carry out its own assessment of the potential environmental impacts before considering whether to issue an Environmental Permit.

For more information visit our website at www.horizonnuclearpower.com where you can view a copy of our full application, together with the supporting documents.

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