

ARROW 10

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Written submission to the Issue Specific Hearing on the revised draft DCO

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The following alterations and additions to Schedule 2 of the revised draft DCO are requested.

Treatment of mine shafts and depths of excavation

12. -(2) Below a level of 65 metres AOD, no abstraction of water or excavation shall take place within **an agreed stand-off** horizontal distance of any mine shafts until or unless the shafts have been adequately sealed in accordance with details to be first submitted to and approved in writing by the County planning authority in consultation with the Environment Agency and Coal Authority. **The stand-off distance shall be agreed in writing with the Environment Agency on the basis of a quantified assessment of likely groundwater inflows from the untreated mine shafts, and shall in any case not be less than 25 m.** The sealing methods shall prevent against the transmission of water between any mined and the proposed mineral excavation and landfill formation.

Reason: The 25 m standoff distance has not been derived from a quantified estimate of groundwater flow into the excavation. The amendment ensures that the stand-off distance is sufficient to mitigate against high volumes of groundwater inflow to the excavation, and that surface water treatment and management systems will have sufficient capacity to manage groundwater abstraction volume and quality.

Reason: Removal of the words 'below a depth of 48 m AOD' ensures that any linkages to workings above this elevation which may be linked via the mine shaft(s) or other pathways will also be treated.

Regulatory Context: in accordance with Article 4 of the Water Framework Directive and Schedule 3 of the Flood and Water Management Act (2010).

Water management and monitoring

13. —(1) No development, including dewatering activity, shall commence until a scheme for the management and monitoring of groundwater and surface water levels, **precipitation**, water abstraction, groundwater quality site drainage **and site discharges** has, following consultation with the Environment Agency, been submitted to and approved in writing by the County planning authority. **The scheme**

shall be informed by a quantified water balance for the site and quantified predictions of dewatering impacts.

Reason: To ensure that there is a complete record of all aspects of the site water balance, to allow potential and/or actual impacts to be properly identified and assessed. To ensure that the predictions of dewatering volumes and quality are sufficiently robust to allow the development of treatment and drainage infrastructure of sufficient capacity and technical capability to treat and safely discharge the required water volumes.

Regulatory context: in accordance with Article 4 of the Water Framework Directive and Schedule 3 of the Flood and Water Management Act (2010)

Review of Waste Density

36. —Within one month of the anniversary of the date of this Order and at annual intervals thereafter until the end of Restoration, the Undertaker shall provide to the County Planning Authority a review of the density of the filled void space and an assessment of the risk of basal heave.

Reason: To ensure that the water density will be sufficient to counter hydrostatic forces during the late operational and post operational phases, when groundwater underdrainage ceases, thereby avoiding the possibility of basal heave.

Regulatory context: To ensure compliance with Section 109 of the NPPF -

'The planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.

To ensure compliance with section 3.1 annex 1 of the landfill directive

A landfill must be situated and designed as to meet the necessary conditions for preventing pollution of the soil groundwater or surface water and ensuring efficient collection of leachate as and when required according to section 2. Protection of soil, groundwater and surface water is to be achieved by the combination of a geological barrier and a bottom liner during the operational/active phase, and by the combination of a geological barrier and top liner during the passive/post closure phase.