

Our approach at Craig-yr-Hesg



An extension to Craig-yr-Hesg quarry was approved by the Minister for Climate Change in October 2022, following a public enquiry held earlier that year. Early works for the extension area (see map below) are now underway, with our quarrying operations permitted to continue until 2049.

We are committed to being a good neighbour and want to develop constructive dialogue with local people. Our aim is to take a proactive role, working to ensure the benefits of our operations to the local community can be fully realised.

As part of this, it is important that we share more information about our approach at Craig-yr-Hesg quarry so that local people have the facts. We want to give reassurance that the strict quarrying regulatory regime and the extensive in-house measures in place mean that our operations pose no risk to people or property.

Overleaf we have set out more detail on key aspects of our operations and how any potential impacts of our activities are managed.

Map key

-  Craig-yr-Hesg quarry
-  Approved future extraction area



Craig-yr-Hesg quarry with approved extension area

Air quality

The potential air quality and dust hazards from quarries are well known and understood and are addressed through stringent regulatory controls. At Craig-yr-Hesg quarry these controls are integral to both the planning and environmental permitting regimes under which the site operates and ensure the local community remains protected.

Fugitive, or nuisance dust, is managed by a range of measures including the use of bowsers, sprinklers and wheel washes to minimise dust, plus the creation of screening bunds and new woodland along the extension area boundary. These measures were agreed with Rhondda Cynon Taf County Borough Council (RCT) as part of a Dust and Particulate Management Plan and Dust Monitoring Plan for the whole site. This will be reviewed at regular intervals during our operations.

In addition, RCT carries out air quality monitoring beyond the quarry boundary. Part-funded by Heidelberg Materials, this covers the measurement of levels of fine particulates, including PM10s and PM2.5s. The data is collected from a location in Garth Avenue, Glyncoch, and highlights low average levels of particulate matter. The data is available for public review at: www.airquality.gov.wales/air-pollution/site/RHD7#latestdata

Previous air quality monitoring carried out by both us and RCT showed that the fine particulates levels have been less than half both the short-term and long-term UK standards set to protect human health.

For more information see: www.rctcbc.gov.uk/EN/Business/LicencesandPermits/Pollutionrelatedlicences/RelatedDocuments/RCTCBC2023ProgressReport.pdf



We are aware that there has been speculation among members of the local community linking quarrying with possible health risks including Respirable Crystalline Silica (RCS) dust and/or silicosis. In response to whether people living near a quarry could be at risk from RCS, information on the IMA-Europe AISBL safe silica website states that this is not the case saying that:

“ The body is only impacted by inhaling high levels of RCS over many years, meaning that only people working in the direct vicinity of industrial processes are at risk. There is a natural background level of RCS in the air, but the levels are so low that it poses no risk – and a quarry / factory / plant near you does not increase levels of RCS beyond that natural background level.

Living near a quarry does not put you at any risk of getting cancer.

Independent studies conducted notably in the UK by the government health and safety laboratory, HSL, on behalf of the Health and Safety Executive (HSE) confirm that quarrying does not have any significant impact on air quality outside the quarry boundary. Furthermore, there is no evidence to suggest any link between quarrying and lung disease among members of the general public who live nearby. ”

More information about RCS can be found at the IMA-Europe AISBL safe silica website: www.safesilica.eu

Blasting

The UK has very strict regulations controlling blasting, with modern techniques designed to minimise vibration and air over pressure (AOP). Conditions within our planning permissions impose limits on ground vibration in terms of peak particle velocity (PPV) and include measures to control AOP. Operating within these standards, as we do at Craig-yr-Hesg and all our quarries means that there is no risk to people or property.

The ways in which blasts are experienced can be shaped by several factors including geology, vibration, air pressure, frequency and even the weather. For example, AOP can be responsible for the noise associated with blasts – and it is often the movement of air and not vibration that is ‘felt’. Similarly, low cloud can exaggerate blast sound, while fissures in the rock can change the way in which vibration from a blast dissipates.

Independent research carried out by authorities around the world into vibration levels has helped to formulate safe blasting criteria. The British Standards that we, like all UK quarry operators work to, are:

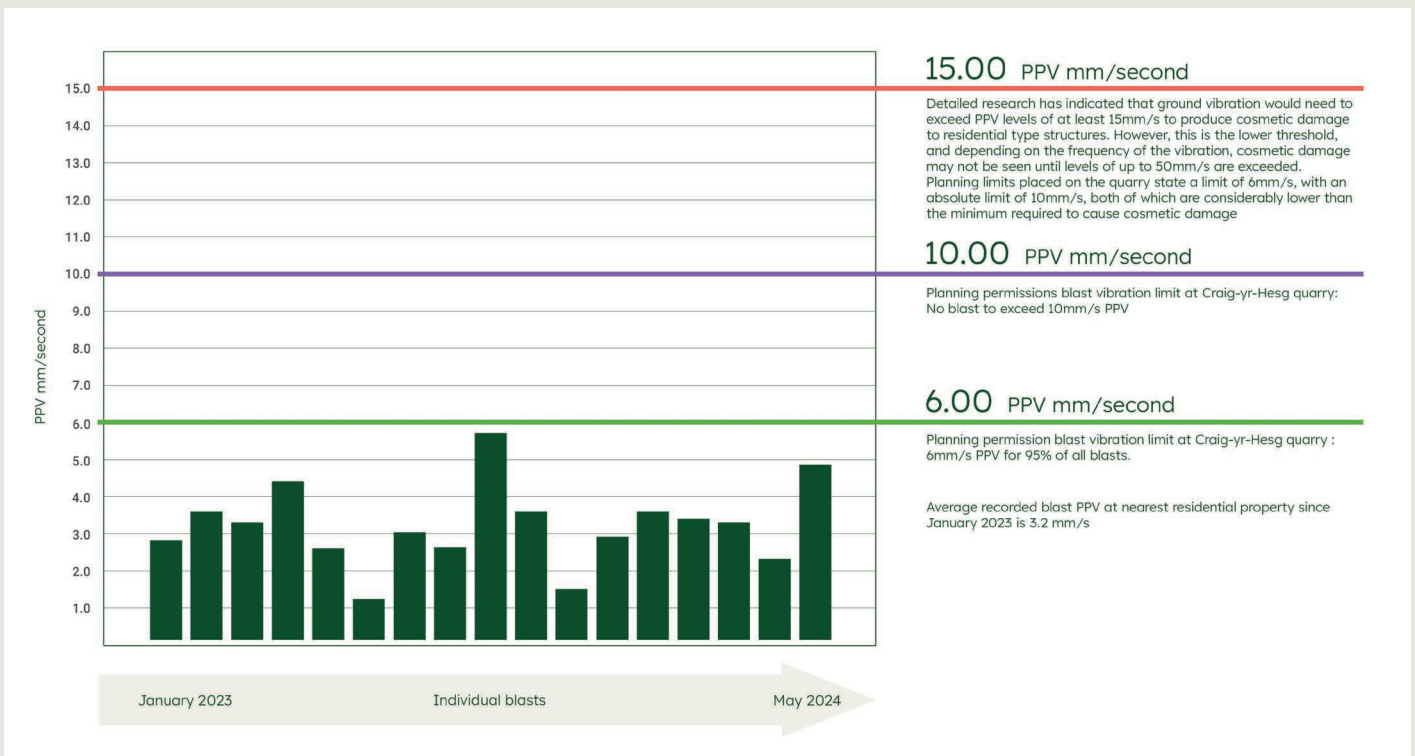
- BS 5228 Noise and Vibration Control on Construction and Open Sites;
- BS 6472 Guide to Evaluation of Human Exposure to Vibration in Buildings;
- BS 7385 Evaluation and Measurement for Vibration in Buildings.

Vibration

As set out in the diagram below, extensive studies have indicated that ground vibration would need to exceed PPV levels of at least 15mm/s, on what is a logarithmic scale, to produce cosmetic damage to residential type structures.

However, this is the lower threshold, and depending on the frequency of the vibration, cosmetic damage may not be seen until levels of up to 50mm/s are exceeded. Our planning conditions state a limit of 6mm/s PPV for 95% of blasts and a limit of 10mm/s for all blasts, both of which are considerably lower than the minimum required to cause cosmetic damage.

We have set up a WhatsApp group to inform people of the times of blasts at Craig-yr-Hesg. To sign up send a WhatsApp message to 07875 139481.



Blasting record at Craig-yr-Hesg quarry

Noise

Noise from quarry operations is also regulated and carefully monitored. As per guidance from the Welsh Government (Minerals Technical Advice Note 1 [MTAN1]) limits on noise from our operations are set at six selected locations, or receptors, in the vicinity of Craig-yr-Hesg quarry. The daytime limits relate to background noise levels, with a maximum limit of 55 dB LAeq (time average sound level over one hour). At night, between 19.00-07.00, the noise level from quarry operations cannot exceed 42 dB LAeq at any of these receptor properties.

Noise from operations within the quarry extension area will be mitigated by the installation of screening landforms. Ensuring that the quarry benches have a minimum height of 7m will also provide further noise attenuation. Noise levels for temporary operations, such as those associated with the construction of the screening bunds, are set at a limit of 67 dB LAeq, with this restricted to a maximum eight-week period in any calendar year.

The impacts of noise will be mitigated through the implementation of a Noise Management and Monitoring Scheme approved by the Local Planning Authority (LPA), in this case RCT. The scheme comes into effect with the start of soil stripping works within the extension area, with noise monitoring taking place biannually for the following two years at each of the six locations referenced above. After this the frequency of noise monitoring at Craig-yr-Hesg will be agreed with the LPA.



Traffic and transport

For us, extending the quarry is about maintaining secure supplies of aggregates for use in construction. This means that extracted volumes and associated HGV movements will remain at similar levels to today.

On average there are around 70 deliveries leaving Craig-yr-Hesg a day, representing 140 HGV movements. Our studies have indicated that this is around 1.2% of all week-day traffic on Berw Road.

The majority of quarry-related HGVs travel to and from a southerly direction via the B4273, A4223 and A470.

We have previously carried out improvements to the quarry access, developing a new two-way access road.



Protecting the environment

Our planning conditions at the site require both a Species Protection and Habitat Management Plan and a Tree and Woodland Management Plan, approved by the local authority, RCT. These submitted schemes have been designed to provide natural screening, noise attenuation, a physical barrier and a wildlife/ecological corridor.

Over 3,000 new trees will be planted on the main screen bund and around the eastern and northern boundaries of the extension area. We have also already put up 20 bat and bird boxes as well as 50 dormice nesting boxes.

Soils and overburden removed during the phased extraction of the extension area will be stored for use throughout the progressive restoration, which will see quarry faces in worked out areas restored to enhance the ecological and landscape value of the site.

Additionally, Heidelberg Materials has committed to allocating 15 per cent of all our active quarry sites as space for nature by 2030. Our plans at Craig-yr-Hesg are guided by this and aim to enhance fauna and flora, including protecting and enhancing wildlife corridors and promoting natural woodland regeneration as well as the natural regeneration of grassland.

We have also been recognised for our national and international Quarry Life Award. This scientific and educational competition takes place every three years and aims to raise the awareness of the ecological value of extraction sites and share best practice. See www.quarrylifeaward.com

Our Biodiversity Action Plan (BAP) for Craig-yr-Hesg can be viewed online via our community website: www.heidelbergmaterials.co.uk/craigyrhesg

Restoration

We are well known for delivering exemplar restoration schemes and restoration at Craig-yr-Hesg will see the quarry returned to nature.

As mentioned previously, soils will be stored for use in restoration planting to reflect the existing pattern of the woodland and quarry benches and faces will be progressively restored during phased extraction.

The overarching approach is to deliver biodiversity uplift through the creation of a mosaic of woodland, grassland and heathland, reflective of the area's character.



Our quarry

Craig-yr-Hesg quarry has been operating since 1885. It contributes more than £2 million a year to the local economy and employs a team of 22 at the site, while a further 60+ maintenance engineers and HGV drivers depend on it for their livelihood.

The approved quarry extension for a further 10 million tonnes of aggregate will secure ongoing supplies. The extracted stone has a high polished stone value, which means that it has a very high skid resistance, making it the ideal choice for use on principal roads and motorways and it is used across south Wales and beyond.

We actively support local initiatives and programmes which benefit the community and environment. Moving forward we want to set up a quarry liaison group to further develop on-going dialogue with the local community.

Our aim is that membership of the group would be made up of representatives from the local community, local elected representatives and relevant council officers, as well as ad hoc representation from relevant statutory and non-statutory bodies as appropriate.

If you are interested in representing your community on this group, please do get in touch with us at: craigyrhesgquarry@uk.heidelbergmaterials.com

More information

More information on our operations at Craig-yr-Hesg, including FAQs are available on our community website: www.heidelbergmaterials.co.uk/craigyrhesg – link via the QR code below.

A Welsh language version of this handout is also available on our community website.

