

Memo

Department of Health and Wellbeing

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Our Ref: 551413

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Application Number: 22/01170/MAF

Proposal: Re-opening of Horn Crag Quarry for the purpose of releasing a proven, locally distinctive building stone resource.

Location: Horn Crag Quarry, Off Fishbeck Lane, Silsden, Keighley, West Yorkshire.

Ref: Hydrogeological Assessment Horn Crag Quarry by Hafren Water Ltd dated January 2021

Further to your consultation about planning reference 22/01170/MAF Environmental Health now has the following water quality comments.

The Hydrogeological Assessment by Hafren Water Ltd submitted in support of this application indicates that a private water supply exists “adjacent to the quarry.” The supply is served by a “catch pit to collect water discharging from the sandstone.” The report confirms that the proposed extraction area “lies within the presumed groundwater catchment for the water supply.” Groundwater contours presented on drawing 3080/HIA/04 show that groundwater flows “to the west, towards the spring collection chamber.”

It is noted in the report that “The proposed development has the potential to impact upon the extant water environment in terms of water volume and water quality.”

In relation to the potential impact of the development on water volume the report states “All mineral extraction will be undertaken above the watertable. Consequently, impacts to the existing groundwater flow regime or groundwater levels are not predicted. An existing borehole will be used to provide information on seasonal water level variation to provide better control on the base of the quarry extension.”

With regard to the potential impact of the development on water quality the report states “Impacts upon water quality may potentially occur due to the accidental release of contaminants, or the generation and subsequent mobilisation of fines. Both of these can

be mitigated effectively by identifying a suitable location for any storage tanks, limiting the area allocated for refuelling and by the adoption of best practice methods and good site housekeeping measures.”

The report concludes “the proposed works will not impact adversely upon the wider water environment and the continued viability of the spring collector water supply located to the west of the site.”

Council records indicate that unauthorised quarrying activities took place at the site during the 1980’s. At that time, a joint investigation carried out by Yorkshire Water and Environmental Health in response to pollution of the abovementioned private water supply, identified the presence of “siliceous matter” in the water, leading to the conclusion that there was “a high probability that existing quarrying activities have led, directly, or indirectly to the pollution of the springs.”

It is understood that in 1983 the former County Council served a “stop notice and an enforcement notice.” The subsequent cessation of quarrying activity resulted in a “marked improvement to the water supply.”

It is not known whether pollution prevention/control measures to protect the private water supply were part of the 1980’s quarrying operation. Given the pollution which arose from quarrying activity at that time, it is considered likely that “re-opening” the site will increase the risk of further pollution incidents.

Documents in the historical archive also indicated that there are a “number of borehole/licensed abstractions in the Hang Goose area to the east which abstract from the sand stone (follifoot Ridge Grit) which could be adversely affected by the quarrying operation.”

In formulating this response Environmental Health has taken full account of the professional conclusions reached by the competent person who has prepared the Hydrogeological Assessment, and we agree that pollution prevention/control measures would be necessary should planning permission be granted. However, it is not possible to determine, with any degree of certainty, whether or not the pollution prevention/control measures recommended, will be effective in protecting the supply. Should the measures prove to be ineffective after quarrying has commenced, it could result in the pollution of potable water and the loss of supply to at least six households.

It can be determined from historical records that following the cessation of quarrying activity in the 1980’s, the water quality of the supply improved. We can confirm that no further complaints, in relation to the supply, have been made to this department since.

Environmental Health are aware that several applications were made in the 1980s for quarrying. It is noted that all were refused, and each included a reason for refusal based on a high probability of pollution of potable water supplies. This is still considered to be the case. We therefore recommend refusal of this application.