

Councillor Margaret Eames-Petersen- Hatfield Town Council

Submission for Brett Quarry appeal on Nov16th 2021

For Inspector Appeal Nov 16-26

“Save our water sources and park” -a uniquely bad location for a quarry, in Herts

1. **My name is Margaret Eames-Petersen**, Hatfield Town Councillor and previously County councillor for Hatfield North. I speak on behalf of Hatfield Town council . I also work in public health as a head of public health intelligence, and was previously a Senior lecturer on Epidemiology and medical statistics .

This proposed quarry site is located in my ward. I wish to speak against it, because in 2021, (with drought warnings from Affinity water) it is imperative to protect our water sources in Hertfordshire (the chalk aquifer) and to save our only public park in Hatfield, threatened by this quarry.#

2a) The Ellenbrook Country Park was promised by Arlington, in a s106 agreement in 2000 , Salisbury village and Hatfield new Garden village (over 5000 houses) were built in 2000 on the old British aerospace site,-with very small back gardens- because of the promised access to Ellenbrook Country Park behind their houses

The park also provides the **important Greenbelt divide** between Hatfield and St.Albans.

My residents feel betrayed by Arlington breaching their promise of the park by inviting a quarry on this land.

2b) . The blue and red patches on the first map show Ellenbrook fields, Hatfield first public park. The red patch is the proposed quarry site. The white rectangle at the bottom right marked Ellenbrook is UH sports fields, with 2,000 student residences and Salisbury village further to the right.

3a). The next map shows that all three new sand & gravel quarries proposed for Herts mineral plan are located in Hatfield. This is unreasonable and disproportionate. The active Cemex Hatfield quarry is shown in yellow, and Furzefield & Coopers Green Lane sites 2 and 3 are the Cemex proposed quarries – shown in pink next to the A1 (M).

3b) However the Aerodrome quarry is the most dangerous. You will see it is located on a residential road, and bus route, running between St Albans and Hatfield. The proposed entrance is dangerous, but worse **it lies over the bromate plume, the worst pollution of a chalk aquifer in Europe.**

3c). The emerging mineral plan mentions an alternative quarry site -the **preference site at Olive's Farm in East Hertfordshire** of greater capacity, which would be a far safer site for the success of the mineral plan.

4. You have heard already **about the extent of the bromate plume – Hertfordshire's environmental disaster shown on the third map**. This shows how the plume has not been contained, and has spread >20 km, under Essenden to the New North River, Broxbourne and Hoddesdon ,with concentrations greater than 10µg/l, WHO max level for drinking water.

5. We need to protect Hertfordshire's current water sources. You have heard from Dr Rivett how the LMH under Ellenbrook fields is protecting East Herts & Hatfield from further pollution. This is a **unique site for the bromate remediation**, and should not be lost. The quarry disruption and removal of the LMH is dangerous to changing the bromate flow in the area. The remediation of the bromate is paramount in 2021, and should not be compromised..

6. **Public health**-this slide shows the history of how the leak occurred and **contaminated Hatfield's drinking water** supply until the water in Bishops Cleeve WPS (BRWPS) was tested in 2000, It was found to be **20x over the WHO limit**- in 2000 and so had to be shut. It is thought Hatfield's drinking water may have been contaminated since 1980, but without earlier measurements we are unsure, how long residents were drinking the contaminated water.. This means there was an exposed population (approx. 28,000) in Hatfield who drank bromate contaminated water from **1980-2003** when the water pipe diversion was completed, then sourced from S.Mimms.WPS (in place of BRWPS) .**Bromate is thought to be carcinogenic if drunk (with some papers published from USA) causing thyroid, and kidney morbidity and mortality,**

The **polluting of the water was not made public in 2000** and even up to the public Inquiry of 2008, little was publicised in Hatfield, for residents themselves to investigate the possible side effects on their health (Some may have died, without knowing). A "quick investigation" by SAHSU, at Imperial College in 2008, seemed to show no excess mortality in Hatfield, but this may not have allowed enough time to see longer term effects. .

Our county Public Health dept analyst was asked to investigate rates of thyroid and kidney disease in Hatfield in 2018, (among those exposed 1980-2003 ,and still living in Hatfield) Some higher rates of thyroid disease were found in 2019, from GP data. The rates were slightly higher than average, However the denominators were not restricted to the exposed population, The whole population of 2019 were used, ,so the rates calculated will have been diluted, compared to the true rate in the exposed population , This implies there is a higher rate of thyroid disease, than was calculated, but with Covid in 2020.21, no further work has yet been conducted.

However Hatfield residents are entitled to know the full story ,It seems very unfair that this quarry could be allowed and **could risk contaminating Hatfield's water supply yet again.** .

7. Slide 7 shows the borehole data with bromate (orange and yellow rings) surrounding the dig site, of the quarry.This gives a strong indication that the plume already is likely to lie under and inside the boundary of the actual quarry dig site, which make breaching the stipulated EA conditions very likely from the outset.

8) Because **remediation between 2008-18 did not reduce the bromate concentration at BRWPS , a second remedial plan is being drawn up.** **The map on slide 8 shows the highest concentration of bromate in the plume** in the north of Ellenbrook fields, near Astwick manor. This would be a prime site for the essential remediation but the quarry could jeopardise this.

9)Slide 9 spells this out, -with three different local sites with different concentrations of bromate Remediation would be most effective at the highest concentration site. It could also be in the old Hatfield quarry site.

10 The location of the plume depends on rainfall and the rate of pumping at Bishops Rise WPS. Slide10 shows how the plume lies under the North east side of the quarry site.. **Roestock WPS in Colney Heath** (which supplies S.Mimms) **lies only 0.9 miles from the edge of the plume** – this currently supplies Hatfield with clean drinking water, Removal of the LMH and less permeable backfill is likely to interfere with aquifer flow and could cause this source to become contaminated.

11.. In conclusion this quarry poses other serious health hazards.

a) University of Herts students inhaling silica dust (causes lung disease) **whilst playing on their sports field;** right next door to the quarry.

b) 2000 students living in residences only 350m away- who currently take exercise in the park

c) Three housing estates Salisbury village, Ellenbrook and Smallford are very closeby.(>10,000 people)

d) diesel fumes with PM 2.5 from the extra 164 quarry lorries on the A1057; (and other residential Hatfield roads) -see Appendix 1

e) loss of Hatfield first public park with its weekly **park run for 300 participants**, use by schools, cyclists and dog walkers. Removal of the LMH and backfill with impermeable clay & hardcore raises a serious flooding risk to residents, besides disturbing the flow of the bromate to Bishops rise.

12. Hatfield needs this public park in Covid19 and beyond. Please do not risk the drinking water of Hatfield being contaminated with carcinogenic

bromate again. Affinity water have taken out a private agreement with Brett due to the recognised risks of bromate pollution. The EA conditions are almost certainly going to be breached from the start. Why risk the Herts Mineral Plan failing, when there is an alternative site without bromate producing more sand & gravel, not near housing, located on road more suited to HGV , the A414.

Thank you for listening –

MEP Nov 16h 2021

Appendix 1 : HTC response to Brett Quarry 2nd Application