

Pollution of the River Beane from the Proposed Gresley Park Development

There is a risk of the Beane being polluted by contaminated surface water run-off from Gresley Park. The topology of Gresley Park suggests that all surface water flows will end up in the Southern corner of the site. It is proposed that an interception pond be located there which would attenuate these flows when they occur. From the pond, the overflow is all downhill to the Beane roughly where an Inner Level 1 (the highest) Aquifer Protection Zone exists. We do not know if a pump is to be installed in the pond. It should be and should discharge to the Aston Brook which bypasses the upper reach of the Beane River water abstraction sector. However, the Stevenage Brook could still pollute the lower Beane reaches and be subject to failure. Thus, a combination of high rainfall and some spillage event could lead to pollution reaching the Beane. This is why the area which includes Gresley Park has been declared a Level 2 Aquifer Protection zone requiring special attention. Any drainage from the Gresley Park pond leads directly to the high pollution risk part of the aquifer protection zone (level 1). Other drainage routes lead into the level 2 zone. The most likely possible event is a mechanical or power failure of one of the 3 sewage pumping stations which we understand are planned for the site. Spillage of diesel or other building chemicals during construction is also possible. Failure of a sewage pipe or a misconnection are also possible events. The upper part of the site is chalk which is probably fractured and leads directly into the chalk aquifer.

This is not a hypothetical risk since a recent pollution incident into the Stevenage Brook did reach the Beane River causing a notifiable pollution event. With the Gresley Park development, we would have a much faster route for pollution to reach exactly where water is currently abstracted.

I have not seen any risk assessment or a reference to the Environment Agency for an opinion in the documentation so far. Clearly this should be done urgently as a specialist view is needed.

I am well qualified to raise this point as a Chartered Member of the Institute of Water and Environmental Management.

Dr Alan D C Cantwell