

H/22/93920 Water's Edge, installation of outdoor swimming pool

Ecology response to email from applicant

The applicant mentioned in her email that an extended phase 1 ecological assessment has been carried out. If this was submitted, I cannot find it on Salesforce. This is unlikely to affect any of my comments to date but it would still be useful to see it.

Having spoken to the Environment Agency (EA), they have stated that there are two discharges associated with pools which need to be considered:

- i. Firstly, there is the drain-down water from the pool. I have been in touch with Electro Engineering who manufactures the UV treatment device. They have stated that the device reduces the need for chemical usage but a small amount of liquid chlorine or active oxygen is still recommended. Regardless of if chemicals are to be added or not, the EA has said that the drained water must not pass through the existing wastewater treatment plant on site as the volume and nature of the water will potentially damage the treatment capabilities of the plant for its prime function to treat domestic wastewater.

However, the solution to this would be, prior to discharge, to leave the pool water to stand in situ for 3-5 days after the last application of any chemicals which will give time for any chemicals to deactivate. The water can then be drained and dissipated through the adjacent garden before draining into the Hamble and should not have an impact on the integrity of the SAC and SPA. Can the applicant confirm that they'd be happy to take this approach? Apparently this is what many/ most pool owners in this situation do.

- ii. The second form of discharge is the filter backwash which is the wastewater generated by the cleaning of the filter (physical filtration) required upstream of the UV treatment device. Cleaning of the filter is a regular exercise (weekly or monthly). This backwash can be polluting as it accumulates pool dirt, cosmetic oils, other sediment etc and therefore needs to be disposed of correctly. Ideally this would be discharged to a foul sewer but there is not one within reasonable proximity to the property. Therefore, an alternative solution needs to be found.

The applicant can apply to the EA for a permit to discharge but there is no guarantee a permit would be granted. The applicant would need to demonstrate that the discharge could be treated by the treatment system proposed (manufacturer or a drainage engineer specialist to provide this confirmation). The EA also has a nine month backlog on permit applications. It is recommended the applicant contacts the EA as soon as possible about this.

A temporary solution to this, or if the discharge permit is not granted, is that the filter backwash is stored, for example in a tank, and regularly collected from site by a licensed waste disposal company (e.g. a company which empties septic tanks). The applicant will need to confirm that this is possible and an approach they are willing to take. Although not sustainable or cost effective in the long run, this should be an approach which satisfies the HRA to ensure no adverse effect on the integrity of the SAC and SPA. This method of disposal must continue indefinitely until an acceptable alternative is permitted.

The applicant has stated that the existing retaining wall is of sufficient height to retain the relocated spoil dug out to form the pool. Therefore, there any run-off with elevated sediment loading should be minimal.

Please let me know if you need any help with the HRA.

Sarah Boyd, Ecologist
28.11.22