

Staveley with Ings Parish Council

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EIR Requests
United Utilities Legal Services
Grasmere House
Lingley Mere Business Park
Warrington
WA5 3LP

Comments as follows:

Green: UU response

Blue: Parish Council initial observations

Dear Sirs

Environmental Information Regulations Request

Thank you for the response to our EIR Request EIR/ID124/21/22/Staveley Parish Council. On behalf of the Parish Council, I would be grateful if you would clarify some issues in connection with this response and provide further information on others related to it. I would be happy to receive the response as part of the original enquiry or for it to be considered as a separate response. (Numbers refer to our previous request to assist cross-referencing)

Item 1: Sewage exceedance from manholes in Staveley

1.1 Please check and confirm the detail given with your original records. Manhole SD 479 73 803 did not exist prior to mid-2016/17 so it would not be possible for exceedance to occur prior to this.

Our previous responses have been simplified. The manhole SD 479 73 803 did exist, however before the Non Return Valve (NRV) was installed into the main sewer, flooding was recorded from SD47973701 up until May 2016. The NRV was installed to protect a property against the flooding. Through the installation of the NRV to SD 47973803 the surcharges have moved from SD 479 73 701 to SD 479 73 803, a distance of some 18 metres.

This is not correct the manhole was specifically installed to house the non return valve in approx. May 2016 . I witnessed the installation of SD479 73 803 . Please see attached Google photo of the future location of SD479 73 803 in January 2009 and the road survey by Spacial Data in January 2014 which also clearly identifies the site of the future manhole . Google photo of the completed manhole dated July2016 is also attached. The matter is also detailed together with other information in UU CON29DW UU Ref 966404 dated 25/9/2013.

There is no doubt that the work was successful in protecting property .However it does highlight that in UU records may be incomplete /inaccurate possibly due to the fact that these emergency inspections are carried out at times of intensive activity due to multiple failures under heavy rainfall conditions. This will /may result in under reporting of incidents and hence incomplete data submitted to EA and others

1.2 In addition, there are a number of other manholes along Kendal Road and on Gowan Terrace which have suffered sewage exceedance prior to February 2020 which have not featured in your

schedule. Please explain why these are not included. It is understood that original records will cover all manholes in accordance with OFWAT requirements.

United Utilities operational teams respond to reports of flooding at specific locations. The majority of reports which United Utilities has received report flooding from the manhole SD47973701 & the new manhole SD 47973803. It is important that residents report all instances of flooding in Staveley to ensure that all incidents are recorded and investigated appropriately. We do acknowledge that the sewer system may have been flooding from other locations in the Staveley area at the same time previously. On response to incidents being reported at SD47973803 the operational teams now check the manhole SD47981009 situated at Gowan Terrace.

Bit confused now SD47973803 is now a new manhole. I understood that Utilities were required by OFWAT to seek out adjacent manholes & also report on them . We need to sort manhole drawings with numbers for identifying exeedences and agree a procedure with UU

1.3 In relation to the frequency and Public Health issues of sewage discharges across footpaths and roadways please explain fully your justification for the classification of Category 4 for all incidents in the village.

All category four incidents have been classified by the Environment Agency. If you require further information on how pollution incidents are assessed and categories determined, please contact the Environment Agency.

Do EA classify the actual incident or is it UU . We could ask EA to classify the category for a typical and regular incident for the manholes at Cadrigg Fold and Gowan Terrace

Item 2: Issues relating to the WWTW for Staveley

2.1 Please provide details of all upgrades and additional facilities that have taken place at the WWTW since 1997 when the Local Environment Agency Plan South Cumbria reported that 'at Cartmel and Staveley the STW's are constantly overloaded leading to a permanent discharge of partially treated storm sewage. The principal cause is infiltration of groundwater into the sewers. This permanent storm sewage discharge is causing aesthetic problems because of sewage litter in the river and is also causing localised pollution.'

The Wastewater Treatment works at Staveley was upgraded in 1997 and was completed 1999. The work involved a complete rebuild, including a new inlet with a new screen, new secondary treatment and an enhancement to the primary and final settlement tanks. Two new storm tanks with auto returning pumps were also added to the process.

We are compliant with our permit conditions and have not had any specific or statutory Quality drivers from the EA to meet enhanced discharge improvements.

None then! A lot has changed in Staveley since 1997!. We do need a conversation with EA to fully understand permitted discharges ,monitoring of the system overall and the response to failures

(See highlighted section)

1. Based on the photos supplied, it appears the problem is due to the ingress of surface water; if it is groundwater infiltration then repair to the pipelines would be a solution.
2. Looks like there is a need for serious discussion with the EA.

2.2 What is the frequency and volume that UU is allowed to discharge into the River Kent from the WWTW at any one time either from settled liquid in the tanks or as an emergency overflow?

Our permits to discharge are not based on volume or frequency but based on the requirement to pass forward a specific rate of incoming flow received at the inlet through to full treatment (12.9l/s) prior to spill into the storm tanks. The storm tank volume must then be fully utilised before there is a spill to the watercourse.

We are exposing gaps in the permissions here and in government (Ofwat) legislation/requirements. This was discussed with Tim Farron. It may need reinforcing. SENS will also wish to pick this up. UU statement regarding their permit to discharge is correct and it is an EA matter; Ofwat deal with financial rather than environmental issues.

2.3 You have indicated that spillage from the WWTW into the River Kent is monitored by an Event Duration Monitor (EDM). While it is understood that the information may be limited prior to 2018, please provide all information on discharges to the river after January 2000 as requested? From 2018 to the present, please provide the duration data for all spills on an individual basis and the total duration of spills on a monthly basis.

As per our previous response we do not hold any information on spill frequency and volume prior to the installation of the EDM monitor, the data we hold, we have issued.

We have considered this request for information under the Environmental Information Regulations 2004. We do not hold the information in the format requested from 2018 to the present date. It would be a burden on resources to provide this information as it involves a large amount of complex data analysis and interpretation. We believe that this request falls under Regulation 12(4)(b) of the EIR 2004 Regulations as manifestly unreasonable. You have been provided with the official data shared with the Environment Agency. We have considered the public interest test in reaching this decision.

What if any information has been passed to EA . Is it worth a discussion with Rivers Trust/EA on the extent and format of information which should be available if UU are unwilling to be helpful on this issue

2.4 Please provide details of any flow, rainfall monitoring and digital modelling of the network, carried out by UU both at the WWTW and the village combined system.

We have considered your request under the Environmental Information Regulations 2004 and believe that this falls within the following exceptions, Regulation 12(4)(e) (internal communications), Regulation 12(5)(c) (intellectual Property Rights) and Regulation 12(5)(e) (Confidentiality of commercial or industrial information) of the EIR 2004 Regulations.

The modelling requires a specialist software tool. The data fed into the software tool, can only be used internally by United Utilities and/or approved external consultants under data licence agreements. These experts have relevant business knowledge and qualifications to interpret the data from the software. This enables the business to assess current and future risk. We have considered the public interest test and believe that if disclosed may be interpreted incorrectly and provide misleading information. The information is commercially sensitive and disclosure would affect commercial and third party confidentiality.

We may have missed something but I can't see what commercial confidentiality exists. Are we being 'fobbed off'?

Presumably this means that they are unwilling to release any information which will make them vulnerable to bad publicity or potential penalties from EA or others.

There are agreements/procedures set up/ negotiated between the Govt and all water authorities which are probably very complex and allow both parties to extract themselves from difficult positions. We must be careful to not get involved but stick to simple principles like we do not want sewage in our streets/ rivers which will retain the support of the Media Public and Politicians. What we are actually talking about is getting investment to correct an issue important to this community and the National Park

When we understand the extent to which the problem and potential solutions have been evaluated you will be in a better position to understand UU's responses and discuss possible future actions. Suggest we rephrase the question as follows:

1. Has a comprehensive flow and rainfall survey been carried out for the Staveley sewerage catchment?
2. Has a digital model of the catchment been prepared and verified with the above data?
3. If such a model has been prepared, has it confirmed the known flooding?

These questions do not ask for sight of UU's internal communications or impinge any intellectual property rights. Digital modelling as referred to above is a process commonly employed by all water and sewerage companies and asking whether or not this work has been done is no more a matter of confidentiality of commercial or industrial information than asking if a sewer repair has been carried out.

Item 3a to 3d: Link between the WWTW capacity and pipe restrictions in Staveley

3.1 Whilst you may not currently have complete input data for flow into the WWTW, it is clear the flow regularly exceeds treatment capacity. Can you confirm that without the pipe work restriction (which it is agreed causes sewage flooding within Staveley village) there would be increased raw sewage discharge volumes into the River Kent?

Any funded project would account for any detriment at the treatment works, and mitigate as part of the designed solution.

Interesting! I wonder if they fully understand the implications here – it seems far too easy an answer. Not a direct answer to a direct question, a slightly baffling answer.

3.2 Additionally, it has been confirmed that the WWTW accepts foul waste from other sources by tanker for processing. Please provide the frequency and volume of these deposits and their sources along with the permit or licence conditions pertaining to these discharges.

We do not take imports at Staveley. We do tanker sludges away from the site as part of the normal site operations.

This is not what we saw. Need to check back for a date and time. Perhaps we can ask if they have records of this event.

It has also been observed that these deposits have an immediate and visual, detrimental effect on river water quality when a load is suddenly discharged even under summer low rainfall conditions. What specific procedures are in place to regulate these and to monitor river water quality on a regular basis? Specifically what evidence do you have that it is safe to bathe in the River downstream of the WWTW?

As described above, we do not accept sewage imports at Staveley. Any queries about river quality in regards to bathing should be addressed to the Environment Agency and Local Authority. The discharge to the River from the WWTW is compliant with the current permit conditions.

Back to the weakness of the permissions on river discharge. No wonder it is currently causing a lot of concern nationally. Again SENS may well be interested.

Item 4 and 5: Surface water infiltration and flood plain issues

4.1 We acknowledge the efforts made to stem infiltration into the system. We are aware however of the vulnerability of both exceedance and contamination in the flood plain downstream of the river crossing. Please provide evidence that the pipe and manholes across the flood plain between the village and the WWTW are checked, indicating the monitoring frequency and outcomes? You have indicated that you have no data of exceedance. Please advise whether this has been considered with Natural England, the EA and the LLFA as part of the proposed flood defences in the village.

The manholes downstream across to the WWTW are not routinely checked. In response to recent concerns, we have recently lifted a couple of the covers and found some minor infiltration which we will be rectifying in the very near future. We are also aiming to complete a connectivity and CCTV survey in the coming weeks, as well as installing sealed manhole covers to provide additional protection to the sewer network from river flooding.

We are aware of the EA's flood scheme through Staveley and we will continue to work closely with them on their proposals, to ensure no detriment on the operation of all our infrastructure in Staveley.

Perhaps if 'routinely' had been omitted this would be more accurate!

Do we know anything further about the CCTV and connectivity survey - what would the latter involve or is it just looking in the manhole?

Not quite what we are looking for regarding coordination on flood management

We will monitor the manholes to see which have been found/lifted. Any CCTV better done in Summer when water levels are low.

The connectivity and CCTV survey will be a significant step forward. We need to ask to see the results as it may show where excessive amount of water are entering the system and whether or not the local council can do anything about it.

Liaising with the EA on their flood protection proposals will also be important which is what we are trying to do.

Item 6 to 8: Impact of development on the failing waste system

We acknowledge that you may have a statutory obligation to provide a sewage connection. This, however, cannot be in conflict with your primary statutory obligation to provide a supply system

with long term resilience as regards population growth, changes in consumer behaviour and managing the impacts of environmental pressures. At the moment the problem of sewage flooding in Staveley, which has been on-going for many years, is recognised by UU but no detailed plans have been put in place to rectify the fundamental problem or provide recommendations which will prevent an unacceptable situation deteriorating further. It is recognised that in the rural environment particularly, where topography climate and waterways influence the solution, capital projects have problems responding as quickly as developers would wish.

We request that UU makes a statement specifically related to Staveley about its commitment to resolve this problem, identifying timescales and the consequences of adding known and anticipated additional load including seasonal population variation onto the existing sewage network? This should take into account the known infiltration issues related to the flood plain in the village as well as the SSSI issue of white clawed crayfish, use as a bathing location and a high amenity classification location. This would provide a constructive statement of intent to be shared with our partners. As such it would significantly assist the planning process, encourage alternative solutions to be found at local level and contribute to a strategic and coordinated approach to wider flood management planning.

This is not currently categorised as a high priority need, across the business and our external regulators, and therefore there is no investment planned in the foreseeable future. Resources are focussed on where there is confirmed environmental damage and property flooding.

Presumably 'environmental damage and property flooding' come from AMP7? But if no-one monitors following incidents, how do they know about environmental damage?

There is no evaluation in relation to the first sentence in our question .

For UU, priority will be based on the type and frequency of flooding - surface or foul water flooding, roads, pavements or houses flooded and how often - once a year, once in 10 or 20 years etc. The external regulator will be the EA who will look at the permitted discharge and possible river pollution. You may be able to make a case if you can show that critical issues are being missed. I think you may already have pursued the public health angle.

6.1 We have significant concerns about the capacity of the WWTW to handle both peak dry weather flow and under storm water conditions. We request that you provide UU's assessment of the current dry weather flow from the community served by the WWTW along with the assumptions used for this purpose. Please also provide the measured peak flow to the works during dry weather and demonstrate clearly the system capability to handle 'flow to full treatment' and meet the parameters identified under EA Guidance for Water Companies and environmental permits for storm and for emergency overflows. Please ensure this is an up to date assessment taking into account recent permissions for developments in the village. This 'flow to full treatment' assessment should also take account of likely future contributions to the system.

The current DWF to site is measured by a certified flow device and data reported to the Environment Agency as per our permit requirements against which flow compliance is monitored. Our permitted DWF is 754m³/day. The table below shows our reported measured DWF over the past 5 years.

Measured Flow (Q90 Jan-Dec) m³/day

| 2016 | 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|------|
| 704 | 704 | 604 | 640 | 500 |

The measured DWF is shown in the table above. The permitted flow to full treatment is 1112m³/day. We are required to pass this flow forward to treatment at peak flows, then fill the storm tanks, prior to spill to the environment, whilst maintaining treatment to our permitted end of pipe standards. As reported to the Environment Agency and available on public record, this site is compliant with the permitted flow, spill and treatment requirements.

Note the self-reporting mechanism in place here

In terms of the future position, unless directed by the Environment Agency through a future statutory water quality driver, the permitted flow to full treatment is not expected to change. The forecast DWF is calculated from the predicted increase in population assessed including the local development plan growth projections, to 2035 using industry standard per capita consumption assumptions and where appropriate measured trade effluent volumes and area specific modelled infiltration rates. **If local infiltration rates are not available business defaults approved by the EA are used.**

This would seem to be a critical issue – are the infiltration rates used appropriate? (see highlighted section above)

As far as we are aware a plan doesn't exist to 2035. There seem to be a number of scenarios built into this but maybe it's the best they can do?

The population is forecast to increase from 1378 to 1476 by 2025 with no further evidence of increase in the local council development plan beyond 2025. Hence the forecast DWF for the Staveley WwTW is calculated to be 783m³/d. This is a risk to our current permitted DWF but may not manifest as development build out rates, assumptions on per capita usage **and infiltration may be incorrect.** UU will continue to track the performance trend in measured and report DWF to assess future growth impact.

Current projections don't go beyond 2025. These population figures seem low; it may be useful for us to check them out.

All this is somewhat irrelevant unless we fully understand what these figures mean. I think DWF means dry weather flow rates but I don't know the parameters for this. I also don't know whether these are average rates per day when it is dry or an annual average. There are 2 issues here. Firstly under dry weather conditions is the WWTW and pipework system able to cope with the volume of sewage waste. The answer is the pipework system probably is as we have seen no evidence of spills during dry weather. As far as the WWTW is concerned my view is that it probably isn't able to cope with peak flows (either natural or by phantom dumping). The only evidence we have of this is when I saw foul water from dump tanks discharging into the river from the separate outlet after what I believe was a tanker depositing waste. I have not seen this since. Perhaps these are now declining? However historically UU records show significant numbers of discharges annually. We do not know when these occurred and/or whether it was "dry weather". It seems UU may not have these records either.

The second issue is what happens under heavy rainfall. UU are required to take this into account. We know that neither the pipework nor the WWTW cope. As far as discharges in the village are concerned most of the community want this dealt with. We do not know whether all discharges are identified in UU records or indeed whether they have been allocated to the correct category identified by EA or who allocates them to this category. It seems that we need to pursue this with EA and find out just what is permitted/agreed and whether UU are meeting their Statutory obligations

As far as the WWTW and system are concerned if the assessment on acceptance of new development is based purely on the population calculated DWF then it is unacceptable. We all know it rains and and waste water is a combined system It appears this is the principal technical issue to be addressed. The additional surface water load already imposed on the system at Crookfield could perhaps be reviewed to provide some short term relief

UU's comment above suggests that no further development should be permitted in Staveley as things stand. (see highlighted point above)

6.1 Would you please provide complete drawings for sewage pipework giving pipe routes and diameters for the system indicating Manhole References and AOD information including invert and ground levels? This will permit our teams to provide more accurate comprehensive feedback to UU on known exceedance.

Sewer and network Information in relation to a specific property can be requested through our Property Searches team.

We may wish to do this.

See earlier notes on reporting . We need proper drawings showing manhole numbers if we are needed to help report issues to UU.

Pipe network drawings would be useful to help in understanding the origins of the flooding problem. It may be possible to see the map information at UU's office in Kendal. However the connectivity and CCTV surveys noted above may be of greater importance so best to await their outcome.

6.2 Finally, at a recent discussion with Parish Council representatives, Nick Walls presented slides of UU's assessment of the impact of an alternative, local suggestion to alleviate the problem of sewage discharge. The Council would be grateful for a copy of these, please.

Whilst we have carried out modelling, a solution has not been finalised; and to share such information would be misleading.

This is very strange. The conclusions seemed finalised when presented.

We handed Nick a corrected version of the option at the site meeting . Is this being looked at

Through-out this document there appears to be some ambiguity as to the current situation and exactly what UU has done and disclosed - need to nail the facts down. Next gather incontrovertible evidence, photographs etc. to highlight, flooding type, location and frequency, public health issues (i.e. substantial deposits of sewer debris, frequent discharges of raw sewage into the river with visible floating sewage debris.