

Neighbourhood Forum Community Action Plan (1)

Reducing Sewage Pollution at Whitburn

June 2021



Whitburn Neighbourhood Forum

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The Community Action Plan and supporting documents are subject to review, amendment and/or alteration should new evidence/ information come to light.

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This plan takes into account the comments submitted to the draft neighbourhood plan as part of the Whitburn Neighbourhood Plan Regulation 14 consultation (Feb 2021) and advice from AECOM.

Foreword

This action plan has been produced by Whitburn Forum to address, at a strategic level, the problem of sewage pollution that exists in the Whitburn Neighbourhood Area.

This document can be regarded as an adjunct to the Whitburn Neighbourhood Plan sewage policy.

The objective of this plan is to

Reduce Sewage Pollution at Whitburn

It is recognised that this objective will only be achieved by working with other stakeholders, including neighbouring areas.

The Whitburn Neighbourhood Plan seeks to address the issue at a neighbourhood level as follows:

Large volumes of sewage are discharged into the environment each year from the sewage system that serves the Whitburn Neighbourhood Area¹. These discharges are causing environmental damage to the foreshore of the Whitburn coastline² and the bathing waters at Marsden³ (Part of the designated neighbourhood area) due to sewage pollution. These discharges contravene the Urban Waste Water Treatment Regulations 1994⁴ and the European Union (EU) Urban Waste Water Treatment Directive 1991 (91/271/EEC)⁵.

This policy supports and builds upon the following emerging South Tyneside Local Plan policies⁶:

NE6:Flood Risk and Water Management

Where applicable, development proposals will be expected to be designed to mitigate against urban creep and adapt to climate change, taking account of flood risk

¹ See Annex A of Sewage Policy supporting document

² See Section 2 of Sewage Policy supporting document

³ Marsden bathing waters have failed to achieve Blue Flag status for the last 5 years. [Bathing water profile \(data.gov.uk\)](#)

⁴ Available at <https://www.legislation.gov.uk/ukxi/1994/2841/contents/made>

⁵ Available at https://ec.europa.eu/environment/water/water-urbanwaste/legislation/directive_en.htm

⁶ Available at [Emerging Local Plan - Pre-Publication Draft Local Plan consultation - South Tyneside Council](#)

f) Taking, where appropriate, a coordinated approach to flood risk management as this can increase the viability of creating new infrastructure to a surface water body or existing surface water sewer to avoid discharge to a combined sewer.

and

NE7:Protecting Water Quality

New development that discharges into a watercourse or is adjacent to a watercourse or discharges to ground will be required to incorporate appropriate water pollution control measures and consider opportunities to reduce detrimental impacts including

i) Contributing towards achieving good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status.

Policy

The net increase in wastewater generation should be considered as appropriate in new development, as well as the impact the development may have elsewhere in the sewage and drainage network. Development will be supported where it is demonstrated that its surface water drainage will not add to existing site runoff or cause any adverse impact to neighbouring properties and the surrounding environment⁷.

Developers are required to consult as appropriate with the relevant water authority on sewage and drainage infrastructure, including on any Section 104 requirements.⁸ Developers are strongly encouraged to commence pre-application discussions with the water authority at the earliest possible opportunity, and the Forum will seek evidence from developers that such engagement has taken place in cases where it is required.

Any new direct connection to the Whitburn primary sewer network of new developments and/or expansion to existing developments will be permitted subject to rigorous analysis that there is sufficient capacity in

⁷ See South Tyneside Core Strategy 2007 policy EA5 Environmental Protection, EA6 Planning for Waste (clause c) available at [Local Development Framework - South Tyneside Council](#)

⁸ See Section 104 of the Water Industry Act 1991 (at <https://www.legislation.gov.uk/ukpga/1991/56/contents>) See also <https://www.water.org.uk/wp-content/uploads/2020/02/SSG-App-B-Procedures-v1-251019.pdf>

the local sewerage system and that the new connection will not increase the risk of the system discharging extra volumes of sewage into the Whitburn storm interceptor system or directly into the environment from Marsden Combined Sewer Overflow.

New developments will be supported where it is demonstrated that the network can accommodate the additional demand for environmentally sound sewage disposal either in its existing form or through planned improvements to the system⁹ in advance of the construction of the development, or can be provided in time to serve it.

All development is encouraged to incorporate Sustainable Urban Drainage (SuDS)¹⁰, with run-off rates no greater than greenfield sites and designed, where possible, to contribute towards the landscaping and biodiversity of the development and with provision made for future maintenance. The hierarchy of discharge option preference is:

1. Soakaway or other infiltration system;
2. Discharge into a watercourse;
3. Discharge to surface water sewer;
4. Discharge to combined sewer.

Proposals which allow surface water drainage into the combined sewer system will only be supported if the developer can demonstrate that the proposal is unable to make proper provision for surface water drainage to ground, watercourses or surface water sewers. The surface water drainage provision should be designed to prevent additional flows to the Whitburn storm interceptor tunnel or the Marsden Combined Sewer Overflow.

For major new developments the Lead Local Flood Authority is to be consulted in relation to surface water. All developments are strongly encouraged to have appropriate regard to existing and emerging relevant local evidence, including South Tyneside's Surface Water Management Plan, Flood and Coastal Risk Management Strategy,

⁹ See South Tyneside Core Strategy 2007 policy EA6 Planning for Waste (clause c) available at [Local Development Framework - South Tyneside Council](#)

¹⁰ See South Tyneside Core Strategy 2007 policy ST2. Sustainable Urban Living (clause d) available at [Local Development Framework - South Tyneside Council](#)

Strategic Flood Risk Assessment and Preliminary Flood Risk Assessment.¹¹

Supporting text

For over 20 years the Whitburn Neighbourhood Area has suffered from sewage pollution which has had a damaging effect on the coastline and bathing water of the neighbourhood area. In light to moderate rainfall sewage is pumped from the Whitburn Storm Interceptor Tunnel through a long sea outfall at Whitburn Steel into the North Sea, with an average of almost 500,000 tonnes discharged each year¹². This sewage pollution affecting Whitburn was identified in a European Court Judgement (case C301/10¹³) which remains extant.

Sewage also spills, during rainy periods, from a Combined Sewer Overflow at Marsden where the designated bathing water is located. (In 2020, 13 pollution risk warnings were issued for this bathing water¹⁴).

Analysis has shown that these discharges are taking place almost every time it rains¹⁵ as the rain pours in to the antiquated combined sewer network, vastly increasing the volume of sewage flows. This analysis has been made available for developers to use as a benchmark to conduct their own rigorous analysis to support their applications.

It is important that the neighbourhood plan looks to address this issue as sewage collection and treatment is a material planning consideration.

New development in the neighbourhood area will be supported where it is designed in a way that flows of sewage from the development are not discharged to local watercourses and the North Sea and it can be demonstrated that the development will not lead to an increase in the

¹¹ Available at <https://www.southtyneside.gov.uk/article/36339/Flood-risk-management>

¹² Over the last 24 years an average of 472198.7 tonnes of sewage was pumped to sea at Whitburn (Figures supplied by the Environment Agency) See Annex A of Sewage Policy supporting document

¹³ Available at

<http://curia.europa.eu/juris/document/document.jsf?text=&docid=128650&pageIndex0&doclang=EN&mode=lst&djr=&occ=first&part=1&cid=419039>

¹⁴ DNA analysis on the water samples showed that both human and seabird sources are contributors to reduced water quality at Marsden. [Bathing water profile \(data.gov.uk\)](#)

¹⁵ See section 2 of Sewage Policy Supporting Document – Analysis of the Whitburn sewage system.

volumes of sewage entering the Whitburn Storm Interceptor Tunnel or from the Marsden Combined Sewer Overflow.

Approval from the Local Lead Flood Authority is required for drainage designs for surface water.

SuDS are required by national policy for major development

Environment Agency consents would need to be applied for if new outfalls to ordinary watercourses are proposed. The Environment Agency will likely require consultation and possibly permits applied for if new outfalls to main rivers are proposed.

Section 104 of the Water Industry Act 1991 provides a mechanism for newly-constructed private sewers and pumping stations to be 'adopted' by the water authority, who will then maintain them at their own expense. A developer may make pre-application enquiries with the water authority to confirm ownership of assets on completion and during the design phase to satisfy planning conditions.

Whitburn Forum intend to continue to work with other stakeholders to reduce the current levels of sewage pollution in the Neighbourhood Area and a Community Action Plan¹⁶ has been prepared to work outside the remit of the Neighbourhood Plan and address sewage pollution at a strategic level.

¹⁶ See Neighbourhood Forum Community Action Plan (1) Reducing Sewage Pollution at Whitburn.

Legal Basis for Community action Plan (See also the Legal Opinion - Annex B)

a) Urban Waste Water Treatment Directive 1991 and The Urban Waste Water Treatment (England and Wales) Regulations 1994

The objective of the Urban Waste Water Treatment Directive 1991 (UWWTD) is to protect the environment from the adverse effects of urban waste water. It deals with the collection, treatment and discharge of domestic waste water, mixtures of waste water, and waste water from certain industrial sectors.

It has been confirmed by the ECJ in Commission v United Kingdom (the Whitburn case) that the objective pursued by the UWWTD goes beyond the mere protection of aquatic ecosystems and seeks to conserve man, fauna, flora, soil, water, air and landscapes from any significant adverse effects of the accelerated growth of algae and higher forms of plant life that results from discharges of UWW.

The UWWTD requires waste water from public sewers, urban waste water treatment works and certain industrial sectors to be collected and treated to certain standards in any area that generates the water pollution equivalent of an agglomeration with a population equivalent of over 2000 people. More stringent treatment is required for especially sensitive water areas that demand a higher level of protection. The UWWTD also provides for the monitoring of such discharges.

The Urban Waste Water Treatment (England and Wales) Regulations 1994 (the 1994 Regulations) implement the UWWTD (with very few changes) into law in England and Wales.

Regulation 4 of the 1994 Regulations sets out the requirements for collecting systems.

There are three main types of collecting system:

1 Surface water drainage that collects rainwater run-off from roads and urban areas. (These drains usually discharge directly to local surface waters.)

2 Foul drainage that collects domestic waste water from premises. Rainwater is not collected.

3 Combined sewerage that collects rainwater run-off and waste water from domestic, industrial, commercial and other premises.

Regulation 4 supplements the general duty imposed on sewerage undertakers to provide a sewerage system under section 94 of the WIA by requiring sewerage undertakers to ensure that they provide collecting systems that satisfy the requirements in Schedule 2 by the dates required in Article 3 of the UWWTD.

Regulation 4(4) adds to section 94 WIA a duty to ensure that UWW entering collecting systems is, before discharge, subject to treatment provided in accordance with Regulation 5 of the 1994 Regulations to ensure that:

1 plants built in order to comply with that regulation are designed (account being taken of seasonal variations of the load), constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions

2 treated waste water and sludge arising from waste water treatment are reused whenever appropriate and

3 disposal routes for treated waste water and sludge minimise the adverse effects on the environment.

b) The Conservation of Natural Habitats and Species Regulations 2017 (as amended) (the 'Habitats Regulations') and CJEU cases C-293/17 and C-294/17.

The Conservation of Natural Habitats and Species Regulations 2017 (as amended) (the 'Habitats Regulations') apply to this plan, together with relevant Court of Justice of the European Union judgements made before that date. The relevant rulings by the Court of Justice of the European Union are the 'Dutch Case' (C-293/17 and C-294/17) and 'People Over Wind' (C-323/17),

The UK remains a signatory to the Ramsar Convention, so the application of the HRA process to Ramsar sites also continues. Parts of the following sites are within the 6km Zol and /or are hydrologically connected to the Neighbourhood Area.

- Northumbria Coast Special Protection Area (SPA);
- Northumbria Coast Ramsar Site; and
- Durham Coast Special Area of Conservation (SAC).

c) The National Planning Policy Framework

The overarching objectives of the NPPF relative to conserving and enhancing the natural environment are outlined at paragraphs 170, 180 and 181.

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

(e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans¹⁷

180. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.

181. Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants.

¹⁷ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

d) The National Planning Policy Framework and relevant planning practice guidance.¹⁸

Wastewater:

Plan-making may need to consider:

- the sufficiency and capacity of wastewater infrastructure
- the circumstances where wastewater from new development would not be expected to drain to a public sewer
- the capacity of the environment to receive effluent from development in different parts of a strategic policy-making authority's area without preventing relevant statutory objectives being met

The Framework expects local planning authorities to plan for the development and infrastructure required in their area, including infrastructure for wastewater. They should work with other providers, such as water and sewerage companies, to assess the quality and capacity of infrastructure and its ability to meet forecast demands

A key sustainability objective for the preparation of Local Plans and Neighbourhood Plans should be for new development to be coordinated with the infrastructure it demands and to take into account the capacity of existing infrastructure. New development should be coordinated with the infrastructure it demands and to take into account the capacity of existing infrastructure.

National Planning Policy Guidance sets out the role that the planning system has in relation to wastewater and sewage infrastructure. It states that good design and mitigation measures can be secured through site specific policies for allocated sites and through non-site specific policies on water infrastructure and protecting the water environment.

For example, they can be used to ensure that new development and mains water and wastewater infrastructure provision is aligned and to ensure new development is phased and not occupied until the necessary works relating to water and wastewater have been carried out. Local planning authorities can use planning conditions and / or obligations to

¹⁸ [Water supply, wastewater and water quality - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

secure mitigation and compensatory measures where the relevant tests are met.

Planning obligations can be used to set out requirements relating to monitoring water quality, habitat creation and maintenance and the transfer of assets where this mitigates an impact on water quality¹⁹

Considerations that apply in areas with inadequate wastewater infrastructure²⁰

The preparation of plans should be the focus for ensuring that investment plans of water and sewerage companies align with development needs. If there are concerns arising from a planning application about the capacity of wastewater infrastructure, applicants can be asked to provide information about how the proposed development will be drained and wastewater dealt with. Applications for developments relying on anything other than connection to a public sewage treatment plant will need to be supported by sufficient information to understand the potential implications for the water environment.

When drawing up wastewater treatment proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This will need to be done in consultation with the sewerage company of the area.

The timescales for works to be carried out by the sewerage company do not always fit with development needs. In such cases, local planning authorities will want to consider how new development can be phased, for example so it is not occupied until any necessary improvements to the public sewage system have been carried out.

¹⁹ Paragraph: 019 Reference ID: 34-019-20140306

²⁰ [Water supply, wastewater and water quality - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

e) Town and Country Planning (Development Management Procedure) (England) Order 2015 (as per the Tyne and Wear Validation List 2019)

The Tyne and Wear Validation List 2019 outlines what information is required in planning applications.

Drainage Assessment – Foul Water

When is this required?

All major development as set out in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

What information is required?

Confirmation that capacity exists both on and off site in the sewerage network to serve the proposed development. Where capacity doesn't exist, the assessment should include information on what infrastructure needs to be upgraded and how this upgrade will be delivered.²¹

²¹ https://www.gateshead.gov.uk/media/6692/Tyne-and-Wear-validation-list-2019/pdf/Validation_of_Planning_Applications.pdf?m=636970634485030000

f) Recent case law demonstrating the duty of planning authorities

Barratt Homes Limited v Dwr Cymru Cyfyngedig (Welsh Water) [2009] UKSC136 ²²

The Supreme Court noted that, since the building of a development requires planning permission under the Town and Country Planning Act 1990, planning authorities are able to make planning permission conditional upon the public water authority first taking steps to ensure that the public sewer can accommodate any increased flow.

The use of planning system to impose Grampian conditions as being the appropriate means of dealing with this problem was affirmed in this Welsh Water's decision.

²² <https://www.supremecourt.uk/cases/docs/uksc-2009-0038-judgment.pdf>

g) Legal Opinion

This is a summary of the legal advice obtained regarding the role of the Local Planning Authorities

1. I am asked to advise on the extent to which Local Planning Authorities (“LPAs”) are entitled to independently assess the likely impacts on the sewerage network of new proposed developments, and in particular the extent to which they can take a contrary view to the relevant sewerage undertaker.

2. In summary, case law and policy are both eminently clear that there is nothing in law or planning policy requiring LPAs to defer to sewerage undertakers. LPAs are perfectly entitled to form their own view of likely impacts on the sewerage system based on the available evidence.

3. In the particular case of the Tyneside area, it is in my view simply incorrect to say that it is not within the relevant LPAs’ remit to question the local sewerage undertaker (Northumbrian Water)’s strategy towards its network, or the capacity of its infrastructure. This assertion, made in a Sunderland City Council meeting on 4th November 2020, is plainly incorrect as a matter of law.

Evidence Base for Community Action Plan

a) Lack of sewage treatment capacity.

The sewage treatment site at Hendon, Sunderland, is the waste-water (Sewage) treatment works that is designated to treat current waste water levels from the Sunderland North area (this includes the waste water from the Whitburn Neighbourhood Area).

Combined sewers convey wastewaters for treatment at the sewage works, and also take away rainwater to prevent flooding. During rainfall, the rain dilutes the wastewater in the sewer. Combined Sewer Overflows (CSOs) are the safety valves on the system, ensuring that Sewage Treatment Works are not overwhelmed. CSOs discharge into watercourses. The wastewater discharged from CSOs during rainfall events is the same dilution as the wastewater treated at Sewage Treatment Works.

The whole network of CSOs in the Sunderland North, Whitburn, Cleadon and East Boldon regularly discharge untreated sewage into the local watercourses during moderate rainfall.²³

Issues specific to Whitburn

There are capacity issues specific to the sewage collection and treatment system in the Whitburn Neighbourhood area.

Untreated sewage is regularly pumped from Whitburn Steel pumping station (which does not have any method of sewage treatment apart from screening)²⁴ via the Long Sea Outfall (LSO) directly into the North Sea at Whitburn. (See Annex A). The LSO receives flows from ten identified CSOs under conditions specified in a discharge permit.

Northumbrian Water has a consent to discharge screened storm

²³ <https://bit.ly/2LzfiNJ>

²⁴ Consent to Discharge 245/1207 Sec6(a) states: The discharge shall not be comminuted or macerated to achieve the standard.

sewage (245/1207 issued by the Environment Agency) at times of heavy flow due to rain / snowmelt from the LSO. The storm sewage is combined sewage, a mixture of surface water and domestic waste that includes excrement.

The UK Environment Agency state that:

discharge from the Whitburn LSO can only be triggered by high amounts or intense rainfall or from snowmelt. Whitburn LSO will only operate once rainfall has exceeded the capacity of the sewers and then exceed the operating capacity of the interceptor tunnel. It requires enormous volumes of rainfall to trigger the discharge.

This statement is roughly in line with the view of the European Court of Justice who in 2012 found that failure to treat urban wastewater cannot be accepted under usual climatic and seasonal conditions, as otherwise the Urban Waste Water Treatment Directive (91/271) would be rendered meaningless.

In 10 months of a relatively dry 2018²⁵ (553 mm rainfall for the year²⁶) over 370,000 tonnes of untreated sewage were discharged from Whitburn Steel pumping station directly into the North Sea at Whitburn.²⁷

In 2019 rainfall in the North East of England increased to 750 mm rainfall and 760,993.50 tonnes²⁸ of untreated sewage were discharged from Whitburn Steel pumping station directly into the North Sea at Whitburn.

In the first 6 months of 2020 a modest 282 mm of rain was recorded at the nearest weather station to Whitburn (Fulwell weather station) and 149,557.50 tonnes of untreated wastewater were discharged

²⁵ 2018 only had 60% of the normal average rainfall. In 2018 there were approximately 147 days in England in which 1 mm or more of rain fell. This was the fewest number of days since 2010, when there were 143. <https://www.statista.com/statistics/610677/annual-raindays-uk/>

²⁶ Rainfall registered at Fulwell Recording station as supplied by Environment Agency

²⁷ In a letter of 22 March 2019 to the Environmental Enforcement section of the European Commission, the United Kingdom confirmed that in 2018 there were 376,593 m3 discharged in 17 spills from the Long Sea Outfall at Whitburn

²⁸ See Annex A - Figures supplied by the Environment Agency

The 15-minute interval rainfall figures for the area for the first 6 months of 2020 (Relevant excerpt included in supporting documents) have been plotted against the discharge figures for the Long Sea Outfall at Whitburn and the following table produced.

In 2020 the Long Sea outfall discharged 460,000 tonnes of untreated sewage into the Northumbria Coast Special Protection Area.

| Date | Rainfall Period Hours | Rainfall mm | Average Rainfall per Hour | Volume discharge m3 | Volume m3 per mm rain |
|---------|-----------------------|-------------|---------------------------|---------------------|-----------------------|
| 9/1/20 | 12.75 | 14.8 | 1.16 | 17850 | |
| 9/2/20 | 16 | 18 | 1.12 | 22869 | |
| 13/2/20 | 10.5 | 10.6 | 1.00 | 10650 | |
| 15/2/20 | 19.75 | 19.4 | 0.98 | 55993.50 | |
| 24/2/20 | 6 | 11.4 | 1.90 | 22209 | |
| 12/6/20 | 17.5 | 18.2 | 1.04 | 19986 | |
| | 82.50 | 92.40 | 1.12 | 149557.50 | 1618 |

The UK Met office use the following to describe rainfall:

Light = less than 0.5 mm/hr, Moderate = 0.5 to 4 mm/hr, Heavy = more than 4 mm/hr

Results

92.40 mm of rain fell during the first 6 months of 2020 during the periods leading up to and during discharge operations for a total of 82.5 hours.

The maximum hourly rainfall during these 6 months fell on 15/02/20 between 17.45 and 18.45 when a cumulative total of 5 mm of rain fell during that hour as follows:

15/02/2020 17:45:00 1.2mm
15/02/2020 18:00:00 1.8 mm
15/02/2020 18:15:00 0.4 mm
15/02/2020 18:30:00 1.6 mm

This is the only hour of the 82.5 hours when the rain could be classed as anywhere near as heavy enough to trigger a discharge.

The remaining 72.5 hours did not generate the enormous volumes of rainfall that the Environment Agency regards as necessary to trigger the discharge.

The average rainfall during these rainy 82.5 hours was 1.12 mm per hour. (Moderate rainfall)

For every 1 mm of rain that fell, 1,618 tonnes of untreated wastewater were discharged into the North Sea.

This failure to treat urban wastewater under what can be considered as usual climatic and seasonal conditions is not in compliance with either the UWWTD (91/271) or the Urban Waste Water Treatment (England and Wales) Regulations 1994

What effect do the flows from Whitburn exert on the UWW collection and treatment capacity for the rest of Sunderland?

The flows from Whitburn travel along to the North Side of the River Wear, then over the Wearmouth Bridge, and along the South side of the river to ostensibly travel for treatment at the WWTW at Hendon. The flows from Whitburn exert pressure on the system during rainfall causing combined sewer overflows on the route to the STW to overflow.

A manhole at Seaburn (6702), which is part of the Whitburn system, was identified in 2013 as liable to flood due to capacity issues. To

relieve pressure a new connection to manhole 5609 was constructed to connect 6702 to the storm interceptor tunnel in 2015.

This new connection has been shown to have been made without the required variation of the discharge permit. NWL have now (in 2021) been required by the Environment Agency to apply to vary the conditions of the permit. This matter is ongoing.

In 2018 CSOs spilled 478 times for 1750 hours into the River Wear. They are downstream and are thus affected by the flows from Whitburn.

| CSO | Number of Spills | Duration of Spills(Hours) |
|--|-------------------------|----------------------------------|
| Bishopwearmouth CSO Silksworth Row (Park) 108 | | 561.8 |
| Gill Cemetery & Vaux Yard CSOs-(Same permit number as Bishopwearmouth CSO Silksworth Row (Park)) | | |
| Hay Street CSO (SU056) | 16 | 15.0 |
| Bodlewell Lane, Sunderland | 51 | 215.8 |
| Sunderland CSO ST Peters Way | 51 | 101.9 |
| Sunderland SPS Wellington Lane | 16 | 22.5 |
| Deptford PS CSO | 63 | 315.8 |
| Sunderland SPS Low Southwick | 49 | 93.5 |
| Sunderland SPS Pallion | 72 | 175.0 |
| North Hylton CSO | 26 | 237.3 |
| Queens Road, Sunderland | 26 | 11.8 |

In 2019 these CSOs discharged untreated sewage into the River Wear 554 times for 1680 hours.

| CSO | Number of Spills | Duration of Spills(Hours) |
|--|-------------------------|----------------------------------|
| Bishopwearmouth CSO Silksworth Row (Park) Same permit number as Gill Cemetery & Vaux Yard CSOs | | |
| Gill Cemetery & Vaux Yard CSO (SU061) | 86 | 254.0 |
| Gill Cemetery & Vaux Yard CSO (SU061) M3 | 8 | 5.09 |
| Hay Street CSO (SU056) | 26 | 36.0 |
| Bodlewell Lane, Sunderland | 64 | 261.5 |
| Catherine St & Priestly Tce CSOs | 45 | 46.8 |
| Sunderland SPS Wellington Lane | 36 | 67.0 4 |
| Deptford PS CSO | 74 | 242.8 |
| Sunderland SPS Low Southwick | 92 | 420.8 |
| Sunderland SPS Pallion | 70 | 97.8 |
| North Hylton CSO | 26 | 241.75 |
| Queens Road, Sunderland | 27 | 17.25 |

These regular discharges of untreated flows are counter to the UWWTR which allows for discharges only in exceptional circumstances.

The capacity issues at the Hendon STW

There exists limited data on the capacity of the Hendon Sewage Treatment works. From the data that does exist it can be shown that light rainfall causes the Hendon Sewage Treatment works to overflow and routinely discharge untreated wastewater directly into the North Sea via the 310 m overflow pipe.

Between 7th May and 2nd October 2003 measurements of the volumes of discharges from the 310 m overflow pipe were recorded using a flow monitor. These measurements have been compared with rainfall for the period and the following summary prepared.

The total volume of untreated wastewater discharged into the North Sea during the monitoring period (149 days) was 418,184.9 tonnes.

Discharges happened on 39 separate days. During the 149 days that flows were measured rainfall was recorded as falling on 66 days.

The total volume of rainfall was a moderate 234.8 mm and there were 28 days of the 66 days of rainfall when rainfall for the whole day was recorded at less than 1 mm. Rainfall over 1 mm per day was therefore recorded as falling on 38 days.

The discharges at Hendon were made on days when rainfall was as low as 0.2 mm. (on 6th August 2003, 0.2 mm rain fell and 156.7 tonnes of untreated wastewater were discharged).

More recent studies of the Hendon STW have shown the following results.

Between 1st April 2017 and 31st March 2018 the Hendon treatment works overflowed sewage into the North Sea on 124 separate days. The total rainfall was a moderate 664 mm for the period. (Note the quote from NWL below when they applied for the permit)

Between 1st April 2018 and 31st March 2019 the total rainfall for the area was a relatively light 484 mm yet the Hendon treatment works overflowed sewage into the sea on 89 days of that year.

Between 1st April 2019 and 31st March 2020 the total rainfall for the area was 776 mm and the Hendon treatment works overflowed sewage into the sea 178 times for over 646 hours that year, allowing an estimated 3.2 million tonnes of untreated sewage to pollute the Northumbria Coast Special Protection Area. These regular discharges of untreated flows into the receiving waters are not made in exceptional circumstances and are counter to the UWWTR.

Conclusion

The whole of the Sunderland Waste Water Treatment system, including Whitburn, fails to comply with the UWWTR as WwTW should be capable of collecting and treating all flows in 'ordinary' conditions, taking account of seasonal variations .

b) Contraventions of European and UK Environmental laws.

The Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC)²⁹ was encompassed in UK law almost word for word under the Urban Waste Water Treatment (England and Wales) Regulations 1994

This discharge of untreated sewage in such large volumes at Whitburn is in contravention of UWWT Directive 91/271/EEC of 21 May 1991 and the Urban Waste Water Treatment (England and Wales) Regulations 1994.

The objective pursued by Directive 91/271 goes beyond the mere protection of aquatic ecosystems and seeks to conserve man, fauna, flora, soil, water, air and landscapes from any significant adverse effects of the accelerated growth of algae and higher forms of plant life that results from discharges of urban waste water.

Both pieces of legislation declare that urban waste-water entering collecting systems shall, before discharge, be subject to secondary treatment or an equivalent treatment. The United Kingdom has been proved to have failed to fulfil its obligations regarding the Whitburn Steel pumping station under that directive as per ECJ Case C301/10 - European Court of Justice.³⁰

The finding of this judgement refers directly to the lack of capacity in the Sunderland sewage treatment system as follows:

*43. First, footnote 1 must be read in the light of the general objective of the Directive, which is to ensure a high level of environmental protection. It would be absurd to accept that untreated waste-water may be discharged into the environment as a matter of course, in the absence of **exceptional circumstances**, simply because a collecting system or a treatment plant has been designed with insufficient capacity.*

²⁹ <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1991L0271:20081211:EN:PDF>

³⁰

<http://curia.europa.eu/juris/document/document.jsf?text=&docid=128650&pageIndex0&doclang=EN&mode=lst&d ir=&occ=first&part=1&cid=419039>

Assessment of the remedial work completed to bring about compliance with the UWWTD

£10 million pound was spent in 2017 on remedial action to the Whitburn Waste-Water system in an attempt to bring about compliance with the UWWTD. The money was spent on two large storage tanks (only a third of the recommended increased capacity was constructed) for foul sewage and to remove surface water from the system. The UK authorities have submitted figures to the EC for discharges from the outfall at Whitburn that indicate that 149,557.50 tonnes of untreated wastewater were discharged in the first 6 months of 2020. (This volume would have been considerably more had the surface water not been removed from the system).

The Environment Agency concluded that the investment improved performance stating:

Based on the 2 years and 6 months of data from when the system came fully on line in 2018 until the end of June 2020, the average number of spills per year is currently running at 20. This is despite the fact that 2019 was a very wet year characterised by intense rainfall and there was 26 spills which is still less than the previous 10 year average. We believe this represents very good performance especially taking the rainfall conditions into consideration.

It is of note that the European Commission puts forward factors such as the frequency and the volume of the overflows to show that there has been a failure to fulfil obligations under Directive 91/271. Contrary to what the United Kingdom fears, it does not propose a strict 20 spill rule but points out that, the more an overflow spills, particularly during periods when there is only moderate rainfall, the more likely it is that the overflow's operation is not in compliance with Directive 91/271.

The remedial work has not brought the system into compliance with the UWWTD as the EC have stated in October 2020:

Given the continued elevated level of spills since December 2017, both in terms of frequency and quantity, the Commission is of the opinion that the main elements of the judgment of the Court in case C- 301/10 with regard to Whitburn have not been met.

c) Effect of discharge of sewage on the coastline and foreshore

Evidence of untreated sewage coming ashore causing damage to the Sunderland/ South Tyneside foreshores can be found in numerous Sunderland Council Beach Reports going back many years. (Less debris is apparent since macerating of the sewage began)

Beach Inspection Report 12 on 31/08/2011, for example, states that 9 Bags Plastic strips & Sewage litter removed 70% plastics, 30% Sewage litter.

Beach Inspection Report 3 on 23/01/2013 states:

130+ full sanitary items 200+ part sanitary items, 200+ plastic strips. Removed by Resorts staff. Reported: EA:1080139 NW:13N02834 DC - Assistant Resorts Manager.

Photo of Whitburn Rock Pools 22nd February 2019



d) Sewage Pollution as a contributor to climate change.

Seagrasses can absorb more carbon up to 40 times faster than terrestrial forests and these ecosystems become sources of CO₂ emissions when they are degraded or destroyed. A major driver of seagrass decline is nutrient pollution from sewage.

A study has shown that 90% of the seagrass meadows in the UK have been lost to pollution. Locally the seagrass meadows in the nearby River Tyne estuary have been devastated by sewage flowing from nearby Combined Sewer Overflows.³¹

³¹ <https://bit.ly/3bHG7db>

h) Effect of discharge of sewage on the Recreational Water Environments within the coastal waters of Whitburn.

How can sewage cause harm to public health in South Tyneside?

Untreated sewage includes faeces and urine and contains bacteria, viruses (including coronavirus), toxins, pharmaceutical residues and microplastics. Urine from infected rats that occupy the sewer system extensively in South Tyneside can cause Weil's disease, a form of leptospirosis. More and more antibiotic resistant bacteria are being found in sewage. Untreated sewage also causes the eutrophication of the receiving waters. (Causes marine life to die).

Micro-organisms can enter through the oral route (ingestion), through the eyes, ears and nose or through an open wound. Alarmingly, with certain pathogens it takes only one viral particle to cause an infection. Infections can even be contracted from the aerosol spray blown from the water's surface as micro-organisms are contained within the minute water droplets that are unsuspectingly inhaled. Pathogens don't all die off quickly in the marine environment either, indeed some pathogens can survive for long periods of time, such as hepatitis A, which can survive for up to 100 days in saltwater.

In the United Kingdom, notification of infectious diseases is a statutory duty for registered medical practitioners and laboratories, under the Public Health (Control of Disease) Act 1984 and the Health Protection (Notification) Regulations 2010.

Some of the notifiable organisms found in sewage.

- Campylobacter
- Salmonella
- Salmonella typhi
- Listeria
- Cryptosporidium parasite
- Hepatitis A, B, C, delta, and E viruses
- Shigella
- Vibrio cholerae
- SARS-COV-2

Other unpleasant pathogens found extensively in sewage.

Escherichia coli or E. coli
Adenovirus
Norovirus
Rotavirus

Recent epidemiological studies show a close relationship between contact with polluted waters and the incidence of gastro-intestinal, eye, ear, nose and throat infections or irritations and respiratory symptoms. This is a recognised problem for surfers, kite surfers, windsurfers, sailors, kayakers and wild swimmers. Even the dog walkers, joggers and walkers who all enjoy the access to South Tyneside's beaches throughout the year are at risk from sewage pollution.

What are the Public Health responsibilities of the local authority and is Public Health a Material Planning consideration?

Local authorities have important and wide-ranging public health functions, for example under the Public Health (Control of Disease) Act 1984. This legislation adopts an 'all-hazards' approach and provides South Tyneside Council with the necessary powers to control human health risks arising from infection or contamination of any form including chemicals and radiation.

Statutory duties for public health were conferred on local authorities by the Health and Social Care Act 2012. Local authorities (and directors of public health acting on their behalf) now have a critical role in protecting the health of their population, both in terms of helping to prevent threats arising and in ensuring appropriate responses when things do go wrong.

Health considerations are capable of being material planning considerations. This is recognised in the NPPF which includes the following statement at paragraph 91.

91. Planning policies and decisions should aim to achieve healthy, inclusive and safe places

Section 12 of the Health and Social Care Act 2012 imposes a duty on local authorities to take appropriate steps to improve the health of the people who live in their areas. Whilst the courts have yet to consider the impact of this new duty in general and in relation to the planning system in particular, there can be no real doubt that it has relevance to planning decision making in that it reinforces the need to consider whether there

are health implications associated with planning decisions. Again, once health implications have been identified as material to a planning decision, the weight to be attached to this material consideration is a matter for the decision maker.

The health implications of exposure to the levels of sewage pollution regularly discharged into the River Wear and on to the beaches of South Tyneside must be a Material Planning Consideration with respect to future developments as, without an improvement in sewage treatment capacity, more development will bring about an inevitable increase in sewage pollution.

Bathing water testing.

The bathing water testing system cannot be regarded as a suitable metric for compliance with the UWWTD as it gives only a snapshot of water quality for one moment in time in one place, normally far removed from the discharge source. Sampling is only done up to 20 times in the summer months. The bathing waters in our part of the North East of England have only been sampled 3 times in 2020 due to Covid.

The EA mentions Seaburn and Roker bathing waters to the South of Whitburn as both resorts still have blue flags. They fail to mention South Shields and Marsden bathing waters to the North of Whitburn. South Shields beach lost its blue flag in 2019 due to high bacteria levels. Marsden has no blue flag either due to the constant high levels of bacteria in the water.

The bathing water quality testing for Whitburn is rarely carried out when it is raining or shortly after a rain event when discharges are more likely. Research into the testing regime at Whitburn during 2018 and 2019 demonstrates that the time elapsed between taking the sample and testing it was 21 hours and 24 minutes. (Samples are taken from the North East to Exeter)

The bacteria in the sample do have a die-off rate, but no rate of die-off is specified in the EU Bathing Water Directive, 2006/7/ EC nor does the EA compensate for this.

South Tyneside Council are aware of reports of Bathing Water sampling at South Shields and Marsden provided by the EA that identify the

significant risks to the environment and to public health that exist due to the levels of sewage pollution in the sea.

The EA will confirm that the beaches at South Tyneside do not conform with the highest standards required by the Bathing Water Directives and do not benefit from the Blue Flag status due to high levels of bacteria in the sea water.

No testing is ever done during the winter months of October to April, although both beaches in South Tyneside are used extensively throughout the year.

During the sewage treatment process at Hendon STW, NWL provides tertiary treatment of sewage (UV treatment) only during the summer months (when the bathing water is tested). NWL turns off UV treatment at Hendon (and Howdon) sewage treatment works during the winter months when no bathing water testing takes place. UV treatment is not a requirement of the UWWTR but is a proven method of killing bacteria and viruses contained in sewage. Treated effluent from Hendon and Howdon STWs is therefore more likely to contain pathogens in the winter months.

Effects of high bacteria levels in the sea off South Tyneside.

At levels of less than 40 Intestinal Enterococci colonies (IE) per 100ml seawater there is an average probability of less than one case of gastroenteritis in every 100 exposures.

At levels of greater than 500 Intestinal Enterococci colonies (IE) per 100ml seawater there is a greater than 10% chance of gastroenteritis per single exposure.³²

Environmental Agency water samples history: Marsden, Seaburn - Sunderland, South Shields³³

20th August 2018

| | | |
|---------------|---|--|
| Bathing Water | Intestinal Enterococci colonies per 100ml | Escherichia Coli colonies per 100ml seawater |
|---------------|---|--|

³² WHO Guidelines for Safe Recreational Water Environments - Volume 1 <https://bit.ly/2SByHyl>

³³ <https://environment.data.gov.uk/bwq/profiles/data-samples.html?bw=ukc2204-05400,ukc230-0-05500,ukc2204-05300>

| | | |
|---------------|--------------|--------------|
| | seawater | |
| South Shields | 230 | 100 |
| Marsden | 973 | 3000 |
| Seaburn | Less than 10 | Less than 10 |

12th August 2019

| | | |
|---------------|--|--|
| Bathing Water | Intestinal Enterococci colonies per 100ml seawater | Escherichia Coli colonies per 100ml seawater |
| South Shields | 55 | 520 |
| Marsden | 1600 | 3200 ³⁴ |
| Seaburn | 250 | 410 |

Such levels of bacteria as shown in the above table can be attributed to the discharges of untreated sewage from the Long Sea Outfall at Whitburn combined with many other combined sewer overflows (CSOs) in the surrounding area which discharge in moderate rainfall. (Such as the CSO discharges from Marsden CSO Coast Road (A193) Redwell Lane which discharged 21 times for 54 hours in 2018).

The ecology of the foreshore in the Whitburn Neighbourhood area and the health and welfare of residents of Whitburn and visitors who use the coastal waters of Whitburn for recreation is at risk due to these levels of bacteria.

³⁴ See Annex A - 99930.00 tonnes of sewage discharged from Whitburn LSO between 11th and 12th Aug 2019

e) Presence of Coronavirus in untreated wastewater.

A recent worrying development regarding wastewater is the confirmation of the presence of the Coronavirus in untreated wastewater.

Researchers from The University of Queensland and Australia's national science agency CSIRO have successfully demonstrated the presence of SARS-CoV2, the virus which leads to the disease COVID-19, in Australian untreated wastewater (sewage).³⁵

A study is also now being run jointly in the UK and Spain, by Newcastle University and the University of Santiago de Compostela and supported by Northumbria Water and Labaqua. Newcastle University researchers said they began gathering data on coronavirus traces in sewage in England on April 23, 2020.³⁶

³⁵ <https://bit.ly/2XlBjSR>

³⁶ <https://bit.ly/2YUaozq>

Consultation with relevant authorities

What has the sewage undertaker said about their capacity to treat wastewater in Whitburn and Sunderland?

When Northumbrian Water Limited applied for the present discharge permits for Whitburn and Hendon STW they were at pains to point out:

The extra provision sought was needed only occasionally, during periods of heavy rainfall. NWL believed the new treatment centre at Hendon was capable of coping on all but a handful of days a year.

When recently challenged about the treatment capacity shortfalls that have been identified to exist presently they say:

"We have sufficient sewage treatment capacity."

Why do they say this?.

Because they are allowed to rely on permitted discharges of untreated wastewater to take place both before the flows reach the treatment works (via CSOs) and of the flows at the treatment works (via the 310m overflow pipe). These discharges are supposed to happen in exceptional circumstances only but, in practice, happen almost whenever it rains. So when it rains, NWL routinely disposes of untreated wastewater that they do not have the capacity to treat by discharging it into the river Wear and into the North Sea. This is the reason why they have no plans to increase sewage treatment capacity. They are under no pressure to do so.

As an NWL manager said recently, *"That's why we have CSOs"*.

Northumbrian Water has never been required to produce data to corroborate their statement that they have sufficient sewage treatment capacity. Nor have they rebutted the extensive evidence that they are not in compliance with the UWWTR as decided by the European Court of Justice in 2012 and confirmed by the EC in 2020.

Northumbrian Water Limited do not make planning decisions. That is the role of the LPA

What does the regulator say?

The regulator (The Environment Agency) has been asked to review the permits for the various CSO discharges that are discharging untreated wastewater into the River Wear and North Sea due to the copious amounts of evidence that discharges are taking place routinely in light rainfall. According to environmental law (UWWTR) discharges of untreated wastewater should only happen in exceptional circumstances. These regular discharges demonstrate a failure to comply with the UWWTR.

The EA have declared:

At this moment in time the Environment Agency are only resourced to review water quality permits where there are significant changes to a system, for example where they are part of an Asset Management Plan review or where we consider there is a potential environmental risk.

There is no NWL Asset Management Plan review, as yet, that has been produced with a view to increasing sewage treatment capacity in Whitburn / Sunderland to accommodate proposed new development. The EA have not definitively assessed the risk of environmental damage through CSO discharges into the River Wear or the North Sea. The EA cannot provide any evidence of any recent relevant reviews of the local sewage discharge permits.

The EA has also been challenged and provided with evidence demonstrating the continued failing performance of the Whitburn system since the 2017 remedial work. (760,000 tonnes of untreated wastewater discharged in 2019 and regular discharges in light rainfall in 2020)

They replied:

The upgraded system at Whitburn became fully operational in 2018 and there has not yet been sufficient time to fully assess its performance - this will take several years (at least 10) of data to fully establish with statistical confidence.

It is sufficient to say that the fact that 760,000 tonnes of untreated sewage were discharged at Whitburn in 2019 is deemed acceptable enough for the EA to delay assessment for 10 years gives a startling and worrying overview of the parlous state of resourcing at the EA.

It is also sufficient to say that, fortunately, the Environment Agency does not make planning decisions. That is the role of the LPA.

What is the position of South Tyneside Council (as the Local Planning Authority)?

South Tyneside Council have been presented with prima facie evidence that there does not exist sufficient sewage treatment capacity in the Whitburn / Sunderland wastewater treatment system to comply with the UWWTR. This noncompliance presents significant risks to the environment and to Public Health, breaches para 170 of the NPPF and causes justified public concern.

The Council is aware that capacity of physical infrastructure, e.g. in the public drainage or water systems, is regarded as a material planning consideration.

Their response of the council to concerns raised about the lack of sewage treatment is:

May I remind you that the Council is not responsible for sewage treatment or for licensing any discharges into the sea. This is the legal responsibility of Northumbrian Water and the Environment Agency respectively. Northumbrian Water confirm that sufficient capacity exists in their network and consistently advise the Council to this effect when they are consulted as a statutory consultee through the planning process. I have mentioned previously that case Law exists which confirms that developments cannot be refused a sewer connection by a sewerage undertaker on capacity issues – they would be required to make improvements in a timely manner to ensure capacity and to ensure they are complying with their legal duties under Sec94 of the Water Industry Act (Barratt Homes Limited (Respondents) v Dwr Cymru Cyfyngedig (Welsh Water) (Appellants)). Therefore in the context of your third question regarding projected housing growth, Northumbrian Water has confirmed they cannot refuse connections and would have to upgrade the existing sewerage network and treatment facilities to ensure that they continue to remain in compliance with the measures imposed on them by their regulators (the Environment Agency and Ofwat).

Northumbrian Water is the appointed water and sewerage undertaker for our region under the Water Act 1989. Their licence to operate is regulated by a number of government departments which include Ofwat (economic regulator) and the Environment Agency (responsible for the protection and

enhancement of the environment in England). We must therefore recognise them as the experts in drainage matters relating to the public sewerage network.

To reiterate, sewage treatment capacity that exists now for the Borough and improvements in capacity that may be required for new developments would fall directly under the responsibility of Northumbrian Water with the Environment Agency regulating discharges to sea, and not South Tyneside Council.

South Tyneside council may choose to recognise the sewage undertaker *as the experts in drainage matters relating to the public sewerage network* but case law and policy are both eminently clear that there is nothing in law or planning policy requiring LPAs to defer to sewerage undertakers. LPAs are perfectly entitled to form their own view of likely impacts on the sewerage system based on the available evidence.

OFWAT do not make planning decisions, nor are they a consultee in this planning application. The LPA may feel disinclined to question the sewerage undertaker's strategy towards its network or the capacity of its infrastructure but they are obliged to consider evidence of the environmental impact that results from the sewerage undertaker's strategy towards its network that is primarily due to the lack of capacity of its infrastructure.

The LPA may consider themselves not be in a position to perform an informed overview function of the sewage system but the role of the LPA is to consider all the evidence supplied, attach appropriate weight to the evidence and arrive at a well-considered and objectively justified decision.

The LPA do have a legal remit to consider all material planning considerations with respect to planning applications. Sewage treatment capacity is a material planning consideration. Public Health, in this instance, is also a material planning consideration due to the huge amounts of sewage pollution discharging untreated into the environment. The NPPF (para 170 - conserving and enhancing the natural environment) is also a material planning consideration. Justified public concern can be regarded as a material planning consideration.

The LPA have been provided with comments and objections to previous planning applications regarding the lack of sewage treatment capacity in the Whitburn / Sunderland area. The LPA have been provided with

evidence of the inordinate number of spills from CSOs , the huge volumes of untreated wastewater that is routinely discharged throughout the borough and the relationship of discharges to recorded rainfall for the periods whilst spills are taking place.

The LPA may not have access to relevant network data as the sewage undertaker denies such access but they now have access to data pertaining to the risks of environmental damage and risks to Public Health caused by insufficiencies in the network.

What it is important for the LPA to consider is the risks of possible harm to the environment and to public health that a lack of sewage treatment capacity may bring about. There has been enough data provided to consider the issue of sewage pollution to be a significant factor in planning decision making process. The sewage undertaker presents no data or other evidence to corroborate their claim that sufficient sewage treatment capacity exists.

For a legal opinion about the position the LPA seeks to take – see Annex B

Inconsistencies in the data supplied by statutory consultees

Research into sewage collection and treatment have uncovered significant concerns regarding the reliability of data as supplied by both Northumbrian Water Limited and the Environment Agency.

The Environment Agency have previously supplied incorrect data to members of the public and other public authorities such as the National Audit Office, the European Commission and a local council (Sunderland City) about the sewage discharge figures from Whitburn. They were under reporting the figures by 10% and were forced to revise these figures after a complaint was made.

Northumbrian Water have been found to have submitted incorrect sewage discharge figures for Hendon Sewage Treatment works (part of the Whitburn system). They were forced to increase their figures by 4,000 % after a complaint was made. (See Annex D)

Annex A

(As provided to the Commission by UK authorities)

Summary of data on spill events and volumes at Whitburn

| Year | Frequency of 'spills' at Whitburn | | | Total volume spilled to sea(m3) | Rainfall (mm) |
|------|-----------------------------------|---------------|---------------|---------------------------------|---------------|
| | Pump operations | 12 Hour Rule* | 24 Hour Rule* | | |
| 1997 | 208 | | | 295,200 | 271.5 |
| 1998 | 487 | | | 717,570 | 750.7 |
| 1999 | 285 | | | 709,290 | 624 |
| 2000 | 117 | | | 367,290 | 426 |
| 2001 | 310 | | | 561240 | |
| 2002 | 67 | 26 | 22 | 359,640 | 663.2 |
| 2003 | 56 | 23 | 20 | 387,450 | 692.6 |
| 2004 | 110 | 37 | 24 | 530,100 | 693.8 |
| 2005 | 96 | 27 | 21 | 542,070 | 693.8 |
| 2006 | 51 | 23 | 20 | 248,130 | 521.2 |
| 2007 | 75 | 25 | 23 | 478,620 | 529.4 |
| 2008 | 108 | 42 | 37 | 744,660 | 742 |
| 2009 | 93 | 34 | 27 | 762,300 | 609.8 |
| 2010 | 73 | 39 | 31 | 548.370 | 711 |
| 2011 | 11 | 9 | 9 | 163,620 | 503 |
| 2012 | 83 | 43 | 32 | 703.620 | 888 |
| 2013 | 62 | | | 580,672 | |
| 2014 | 38 | | | 439,959 | |
| 2015 | 55 | | | 651,959 | |
| 2016 | 61 | | 19 | 624,600 | |
| 2017 | 50 | | 19 | 569,221 | |
| 2018 | 43 | | 17 | 376,593 | 553 |

| | | | | | |
|------|----|--|----|---------|-------|
| 2019 | 75 | | 26 | 760,993 | 749.8 |
| 2020 | 65 | | 23 | 460,339 | 610.6 |

NB Guidance: Water companies: environmental permits for storm overflows and emergency overflows :³⁷ 12/24 Spill counting method

In general, a spill greater than 50m³ is considered significant.

Count spills using the 12/24 counting method:

1. Start counting when the first discharge occurs.
2. Any discharge (or discharges) in the first 12-hour block are counted as one spill.
3. Any discharge (or discharges) in the next, and subsequent 24-hour blocks, are each counted as one additional spill per block.
4. Continue counting until there's a 24-hour block with no discharge.

For the next discharge after the 24-hour block with no discharge, you begin again with the 12-hour and 24-hour block spill counting sequence.

³⁷ Counting spills: bathing and shellfish waters. <https://bit.ly/37aHBZt>

Annex B

Legal opinion as provided by Landmark Chambers in the matter of sewage pollution in South Tyneside (21.02.21)

OPINION

Introduction

1. I am asked to advise on the extent to which Local Planning Authorities (“LPAs”) are entitled to independently assess the likely impacts on the sewerage network of new proposed developments, and in particular the extent to which they can take a contrary view to the relevant sewerage undertaker.

2. In summary, case law and policy are both eminently clear that there is nothing in law or planning policy requiring LPAs to defer to sewerage undertakers. LPAs are perfectly entitled to form their own view of likely impacts on the sewerage system based on the available evidence.

3. In the particular case of the Tyneside area, it is in my view simply incorrect to say that it is not within the relevant LPAs’ remit to question the local sewerage undertaker (Northumbrian Water)’s strategy towards its network, or the capacity of its infrastructure. This assertion, made in a Sunderland City Council meeting on 4th November 2020, is plainly incorrect as a matter of law.

Factual Background

4. This advice is requested in the context of significant sewage spill incidents from the Whitburn Long Sea Outfall in South Tyneside into the North Sea. I understand that the LPA, South Tyneside Council, have been advised that they are not entitled to take into account the volume and frequency of spill incidents in their consideration of the planning merits of individual planning applications.

5. In a meeting of Sunderland City Council on 4th November 2020 concerning the separate Roker and Seaburn Sewerage System, the following was stated:

“As part of the planning application process the Local Planning Authority (LPA) consults with Northumbrian Water, the sewerage undertaker for Sunderland, on a range of development proposals that require a connection to the sewerage network.

Northumbrian Water assess the impact of the proposed developments on their assets and assess the capacity within their network to accommodate and treat anticipated flows arising from the proposed development. It must be noted that it is not within the remit of the LPA to question Northumbrian Waters strategy towards its network or the capacity of its infrastructure. The LPA does not have the legal remit or access to the relevant network data to perform an informed overview function.

Para 183 of the National Planning Policy Framework states that the focus of both planning policies and decisions should be on whether the proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate regulatory regimes). The planning process must assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by the responsible authorities. This principle is articulated in case law (Gateshead MBC v SSE [1995] 1 Env LR 37).”

6. As will already be clear from my introduction to this advice, I strongly disagree with this summary of the legal position. Moreover, it is clear from a detailed reading of the Gateshead case that LPAs are entitled to take into account the polluting effects of developments under consideration, notwithstanding the existence of an overlapping regulatory regime.

7. Finally, it is important to emphasise that sewage overflows in the Tyneside area have already been considered at the European level. In Commission v UK (Case C-301/10), judgment 18 October 2012, the Court of Justice of the European Union upheld the Commission’s infringement action against the UK for breach of the Urban Waste Water Treatment Directive 91/271/EEC in respect of combined sewage overflow in Tyneside.

8. On 21 October 2020, the European Commission wrote to local Tyneside resident Robert Latimer stating that:

“In their latest communication, the United Kingdom authorities reiterated that improvement works on the Whitburn Long Sea Outfall and St Peter’s Pumping Station were completed on 14 December 2017. According to the United Kingdom authorities, the system meets its design target of 20 spills per annum. The authorities went on to explain that this was despite the occurrence of significant storms in 2018, a very wet 2019 and a wet and stormy start to 2020. The figures provided by the United Kingdom authorities showed that there were 17 spills from the Whitburn Long Sea Outfall (LSO) in 2018, discharging a total volume of 376, 593 m³. In 2019, there were 26 spills from the LSO discharging a volume of 683,676 m³. In 2020, for the first six months of the year up to 30 June, the authorities informed us that there had been 7 spills, discharging 149,558 m³ from the LSO.

Given the continued elevated level of spills since December 2017, both in terms of frequency and quantity, the Commission is of the opinion that the main elements of the judgment of the Court in case C- 301/10 with regard to Whitburn have not been met.”

9. Thus in the Commission’s view, the UK remains in breach of the Urban Waste Water Treatment Directive in respect of spill incidents at Whitburn specifically.

Policy Framework

10. Paragraph 183 of the National Planning Policy Framework (“NPPF”) notes that (emphasis added):

“The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.”

11. Paragraph 183 is not however the only provision of the NPPF that deals with pollution, and it is a mistake to cite this provision in a vacuum. In particular, paragraph 183 is qualified by the following provisions of the NPPF:

(i) Paragraph 170 notes that planning decisions should contribute to and enhance the natural and local environment by, inter alia, “preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution” and “wherever possible, help[ing] to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans” (emphasis added);

(ii) Paragraph 180 notes that: “Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development”;

(iii) Paragraph 181 provides that “Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants” (emphasis added).

12. Planning Practice Guidance on Waste also notes the following (emphasis added):

“What is the relationship between planning and other regulatory regimes? The planning system controls the development and use of land in the public interest. This includes consideration of the impacts on the local environment and amenity taking into account the criteria set out in Appendix B to National planning policy for waste.

There exist a number of issues which are covered by other regulatory regimes and waste planning authorities should assume that these regimes will operate effectively. The focus of the planning system should be on whether the development itself is an acceptable use of the land and the impacts of those uses, rather than any control processes, health and safety issues or emissions themselves where these are subject to approval under other regimes. However, before granting planning permission they will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body. Paragraph: 050 Reference ID: 28-050-20141016 Revision date: 16 10 2014”

Legal principles

13. The leading case on the overlap between planning and pollution controls is *Gateshead MBC v Secretary of State for the Environment* [1995] J.P.L. 432. In this case, the Court of Appeal upheld a decision by the Secretary of State to grant planning permission for an incinerator on the basis that the pollution regulator would determine appropriate limits for emissions and that there would be no unacceptable environmental impact as a result.

14. However, what the Court of Appeal did not say was that the Secretary of State would not have been entitled to consider emissions at all, in light of an overlapping regulatory regime. Glidewell LJ noted at 43 (emphasis added):

“Mr Mole submits, and I agree, that the extent to which discharges from a proposed plan will necessarily or probably pollute the atmosphere and/or create an unacceptable risk of harm to human beings, animals or other organisms, is a material consideration to be taken into account when deciding to grant planning permission.”

15. The approach in these cases has subsequently followed in a number of other cases, including *R v Bolton MBC, Ex p. Kirkman* [1998] Env. L.R. 719, *R (Bailey) v Secretary of State for Business, Enterprise and Regulatory Reform* [2008] EWHC 1257 (Admin), and *Hopkins Developments v First Secretary of State* [2006] EWHC 2823 (Admin).

16. It is important to note that in each of these cases, it was held that while a planning authority was entitled to rely on overlapping pollution controls, it is not required to do so and could make its own assessment. Thus in *Hopkins*, a site promoter unsuccessfully challenged the refusal of permission for a concrete batching plant, on the basis that the necessary environmental permit would have ensured that the plant was operated in a way which led to no significant pollution. The High Court dismissed the appeal, because:

“...in appropriate cases planning authorities can leave pollution control to pollution control authorities, but they are not obliged as a matter of law to do so” [11] (emphasis added).

17. The judge explained in more detail at [14]-[15] (emphasis added):

“The alternative way in which Mr Wadsley puts his case in relation to dust is to say that, in view of the existence of the pollution control regime, the conclusion that dust would cause serious harm to the amenities was *Wednesbury* unreasonable. Under the 2000 Regulations the council in issuing a permit would have to impose conditions to ensure that the plant was operated in such a way that no significant pollution was caused; and pollution includes emissions which impair or interfere with amenities. It was therefore not open to the inspector to conclude, assuming, as he had to assume, that the pollution control regime would be properly applied and enforced, that dust emissions from the plant would or might seriously impair the amenities of the area.

15. This is an argument that is superficially attractive. But it is dependent on the underlying assumption that, in relation to the likely impact of pollutants to which the 2000 Regulations apply, primacy must be accorded to the judgment of the regulator above that of the planning authority. I can see no basis for such an assumption...”

18. *Hopkins* was followed in *Harrison v Secretary of State for Communities and Local Government* [2009] EWHC 3382 (Admin), where it was held that a planning decision-maker was entitled to reach its own view on the effects of a development and that it was open to an inspector to conclude that the use of the land would cause problems for local residents, notwithstanding the grant of an environmental permit.

19. While it is true that this line of cases pre-dated the present NPPF, as is noted in *Burnett-Hall on Environmental Law* (3rd edition 2012) at 7-129:

“The NPPF largely replicates the approach taken in the former PPS10 and PPS23 of requiring planning authorities to focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions which are subject to approval under pollution control regimes, which regimes should be assumed to operate effectively.”

20. In that regard, I note that para 122 of the 2012 NPPF (which *Burnett-Hall* refers to) largely replicates para 183

of the 2019 NPFF.³⁸

21. Thus I do not consider there to be any reason why the line of case law referred to above does not remain good law. The applicable planning guidance considered in those cases is materially the same as the present NPFF.

Analysis

22. In light of the above planning guidance and case law, I am firmly of the view that an LPA is perfectly entitled to form its own view of a given development's impacts on the sewerage network, on the basis of the information put before it.

23. While an LPA would, in most cases, be entitled to defer to a sewerage undertaker, it is by no means required to do so. In circumstances where a sewerage undertaker indicates that it does not have any concerns about the impacts of a proposed development, it is simply not the case (as a matter of law or policy) that the LPA must defer to the sewerage undertaker on that question.

24. While it is outside my remit to comment on the planning merits of new development in the South Tyneside area in general, from a legal perspective I would note that any evidence submitted to the LPA that contradicts Northumberland Water's assertions regarding sewerage capacity is likely to be a material consideration that cannot be disregarded by the LPA for the purposes of deciding whether to grant planning permission (although the weight to be given to that evidence is of course a matter of the LPA's planning judgment). I also note that wastewater treatment capacity in general is clearly a material planning matter.

25. I would also add that the fact that the European Commission takes the view that the UK has not complied with Case C- 301/10 in respect of Whitburn is also a material planning consideration, which the LPA is not entitled to ignore in its consideration of proposed new developments that will impact on the local sewerage network.

26. Do not hesitate to contact me if I can be of further assistance.

ALEX SHATTOCK

Landmark Chambers

ashattock@landmarkchambers.co.uk

21.2.2021

³⁸ "local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively."

Annex C

Map of Combined Sewer Overflows that flow into the River Wear estuary.

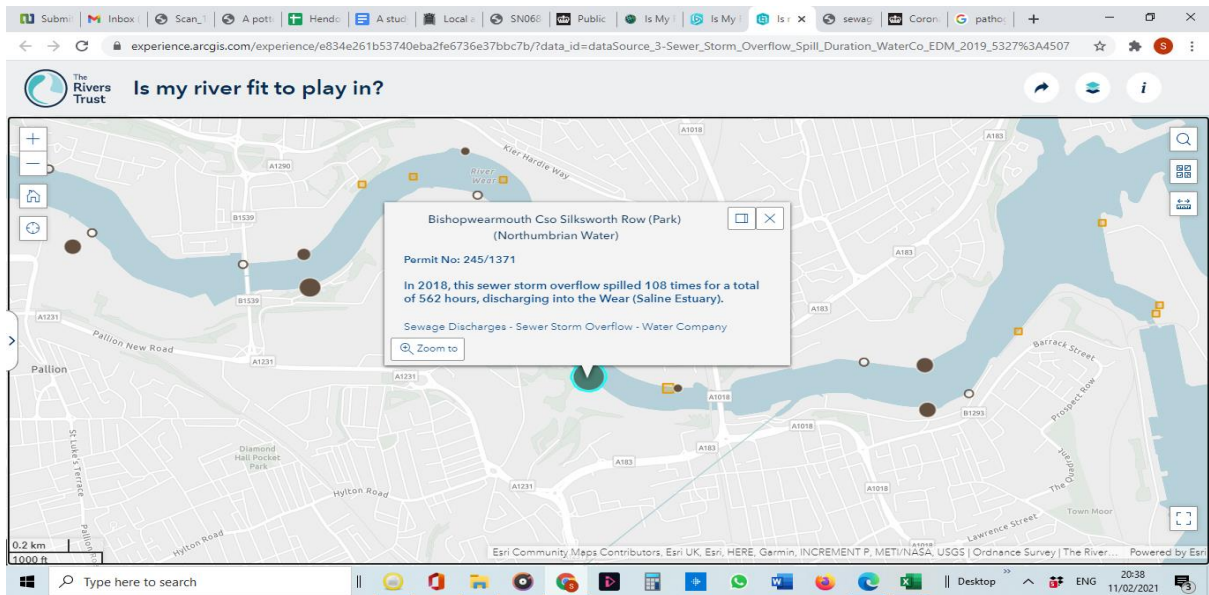


Image of seagulls feeding on human waste in the River Wear from the CSO (Galley's Gill) on 13th October 2020 (Recorded daily rainfall for 131020 is 4.2mm - light rainfall)



Combined Sewer 'Spill' data for 2020 pertaining to the River Wear

| Name of Combined Sewer Overflow | Permit Number | Number of 'spills' | Hours of Discharge | % of reporting period EDM operational |
|---------------------------------|---------------|--------------------|--------------------|---------------------------------------|
| Hendon Stw | 245/1213 | ? | 646 | |

Combined Sewer Overflows that protect the Hendon Sewage Treatment Works and discharge into the North Sea

| | | | | |
|--------------------------|----------|-----------|-----------|------|
| Cso Sunderland Gas Works | 255/1198 | 11 | 4 | 100% |
| Cso Grangetown | 255/1202 | 21 | 24 | 100% |
| Cso Salterfen | 255/1201 | 43 | 58 | 100% |
| Mainsforth Terrace Cso | 255/1208 | 3 | 2 | 94% |
| Total | | 78 | 88 | |

Combined Sewer Overflows that protect the Northumbrian Sewage Treatment Works and discharge into the River Wear

| | | | | |
|----------------------------------|--------------|----|-----|------|
| Houghton Le Spring Cso | EPRBB3899VA | 39 | 58 | 99% |
| Bourn Lea Ch087 | 245/1376 | 7 | 4 | 100% |
| Shiney Row Footbridge Cso | 245/1368 | 21 | 30 | 100% |
| 66 Ross Lea Cso | 245/1370 | 36 | 68 | 100% |
| Vivian Avenue Su013 | 245/1375 | 24 | 35 | 98% |
| Sedgeleth Stw - Cso Inlet | 245/1243 | 83 | 267 | 100% |
| The Meadows Cso (Ch78) | 245/1329 | 9 | 12 | 100% |
| Park Road Cso | NPSWQD009544 | 34 | 143 | 100% |
| Back Lodge Terrace Cso | 255/1207 | 43 | 114 | 100% |
| Bodlewell Lane Cso | 245/0983 | 39 | 102 | 89% |
| Cso At St Peters Sps | 254/1004 | 16 | 221 | 100% |
| Hay Street Cso (Su056) | 245/1374 | 23 | 15 | 100% |
| Gill Cemetery Cso (Su061) | 245/1371 | 59 | 161 | 99% |
| Priestley Crescent Cso | 245/1386 | 32 | 26 | 97% |
| Wellington Lane Sps | 245/1211 | 19 | 35 | 99% |
| Kier Hardy Way Cso (Su057) | 245/1373 | 12 | 5 | 95% |
| Deptford Sps | 245/1212 | 46 | 196 | 100% |
| Low Southwick Sps | 245/1209 | 65 | 207 | 100% |
| Queen Alexandra Bridge Cso & Sps | 245/0928 | 37 | 78 | 100% |
| Pallion Sps | 245/1210 | 39 | 54 | 100% |
| Pottery Lane Cso & Sps | 245/1171 | 28 | 201 | 100% |
| Ferryboat Lane Sps | 245/1208 | 8 | 66 | 93% |
| North Hylton Cso & Sps | 245/0938 | 28 | 72 | 100% |
| Golden Lion Pump Cso & Sps | 245/1169 | 27 | 98 | 100% |
| Cox Green Sps | 245/1218 | 6 | 48 | 100% |
| Stoney Lane Cso | 235/1928 | 5 | 2 | 100% |
| Princess Anne Park Cso | 245/1334 | 6 | 3 | 100% |
| Station Road Cso | 245/1284 | 58 | 91 | 97% |
| Manor Court Cso | 244/0940 | 72 | 305 | 100% |
| Browney Lane Cso | 244/1003 | 52 | 225 | 100% |

| | | | | |
|---|-------------|-----|------|------|
| Oakenshaw Cso | 243/1005 | 4 | 1 | 93% |
| Brancepeth Stw | 234/1024 | 133 | 2673 | 100% |
| High Waterhouse Farm Cso | 244/1018 | 33 | 163 | 100% |
| Esh Winning Cso Point A2 | 244/E/0307 | 26 | 99 | 95% |
| Hamilton Row Cso | 244/E/0308 | 34 | 106 | 100% |
| Stags Head Cso | 244/1015 | 30 | 61 | 100% |
| Fair View Cso(Der 142) | 244/1014 | | | |
| Tool Hire Cso | 244/0996 | 35 | 88 | 99% |
| Esh Winning Stw | 244/1026 | 23 | 341 | 99% |
| Ushaw Moor (Joyce Terrace & Deerness View)Stw | 244/E/0315 | 28 | 396 | 100% |
| Waterhouses Cso | EPRAB3691VY | 8 | 74 | 99% |
| Scout House Farm 1 Cso | 244/0998 | 23 | 147 | 100% |
| Scout House Farm 2 Cso | 244/1005 | 10 | 6 | 99% |
| Bleach Green Farm Cso | 244/0999 | 9 | 4 | 100% |
| Aldin Grange (North) Stw | 244/0991 | 75 | 560 | 100% |
| Aldin Grange Cso | 244/1004 | 37 | 104 | 99% |
| Deneside | 244/0959 | 28 | 35 | 100% |
| Witton Gilbert STW | 244/1027 | 20 | 263 | 10% |
| Witton Gilbert Cso | 244/0889 | 65 | 217 | 99% |
| Back Elm Street CSO | 244/E/0216 | 9 | 10 | 100% |
| Front Street Cso | EPRJB3292WB | 67 | 227 | 100% |
| Opposite No 16 Front Street Cso | EPRBB3899DP | 26 | 30 | 100% |
| Finings Ave Sps | 244/A/0528 | 23 | 50 | 100% |
| Quebec Sps | 244/A/0456 | 24 | 48 | 100% |
| Lanchester Cso | 244/0986 | 82 | 1016 | 100% |
| Lynwood House Cso (Der44) | 244/1021 | 66 | 190 | 99% |
| Railway St Cso | 244/0938 | 39 | 90 | 99% |
| Mount Pleasant Cso(Der41) | 244/1020 | 29 | 27 | 100% |
| Cricket Ground Holmside Lane Cso | EPRBB3496RP | 5 | 1 | 100% |
| Burnhope Sps | 245/A/0575 | 107 | 438 | 89% |
| South Moor Memorial Park Cso | 245/1179 | 29 | 292 | 100% |
| William Street Cso | 245/1266 | 2 | 1 | 100% |
| Hustledown Road Cso | 245/1257 | 24 | 24 | 100% |
| Cso Adj 40 Hollyhill Gdn | 245/1258 | 42 | 60 | 98% |
| Holyhill Gardens East Cso | 245/1075 | 67 | 226 | 100% |
| Durham Road Cso | 245/1076 | 1 | 0 | 100% |
| Nightingale Place Cso | 245/1311 | 60 | 194 | 99% |
| The Middles Cso | 245/1148 | 75 | 177 | 100% |
| 50 Woodside Gardens Cso | 245/1309 | 15 | 31 | 100% |
| Hustledown Stw | 245/1247 | 69 | 1094 | 100% |
| Craghead Cso Kimberley Gardens (no 24) Der082 | 245/1308 | 53 | 137 | 100% |
| Craghead Front Street (North)(New) | 245/1331 | 14 | 5 | 100% |
| Pelton Fell Road 3 Cso (Ch14) | 245/1314 | 51 | 111 | 100% |
| Pelton Fell Road Cso | 245/1335 | 29 | 72 | 93% |
| Cone Lane (Chester No 4_ Cso | 245/1328 | 4 | 2 | 100% |
| Hopgarth Gardens Cso | 245/1268 | 16 | 21 | 98% |
| Ash Meadows Cso | 245/E/0593 | 58 | 111 | 100% |

| | | | | |
|--|--------------|-----|------|------|
| Shields Road Cso | 245/1114 | 40 | 86 | 96% |
| Chester-le-street Stw - Cso Inlet | 245/1242 | 9 | 21 | 100% |
| Chester Le Street Stw - Storm Tank | 245/1242 | 48 | 523 | 100% |
| Pelaw Bank Cso (Ch57) | 245/1323 | 63 | 168 | 99% |
| Lindom Avenue Cso | 245/1379 | 31 | 306 | 100% |
| Herrington Cso West Park East (New) | 245/1301 | 5 | 3 | 100% |
| Church Street No26 Cso | NPSWQD008982 | 38 | 47 | 100% |
| Seaham Road Cso (Su35) | 245/1363 | 36 | 48 | 100% |
| Stanhope Close Cso (Su26) | 245/1356 | 40 | 77 | |
| | | | | |
| Dairy Lane Cso Su024 Sewer | 245/A/0520 | 4 | 5 | 97% |
| A690 Slip Road Cso (Su27) | 245/1357 | 11 | 8 | 97% |
| Gillas Lane West Cso (Su30) | 245/1359 | 26 | 31 | 100% |
| Warden Grove Cso | 245/C/0293 | 44 | 69 | 100% |
| Hetton Road Cso (Su33) | 245/1361 | 18 | 40 | 63% |
| Hetton Park Cso (Su34) | 245/1362 | 9 | 12 | 97% |
| Hetton Park Bowling Green Cso | 245/1364 | 17 | 23 | 99% |
| Hetton Le Hole Day Centre Cso | 245/1365 | 7 | 8 | 100% |
| Leamside Stw | 245/1271 | 101 | 1675 | 100% |
| West Rainon Stw Manhole No 21 Cso | 245/E/0505 | 3 | 1 | 100% |
| West Rainton Cso (Du081) | 245/E/0506 | 24 | 23 | 99% |
| Leamside Cso | 245/1295 | 5 | 10 | 100% |
| West Rainton Cso (Du085) | 245/E/0507 | 35 | 55 | 100% |
| Pithouse Lane Cso (West Rainton No.5) | EPRGB3599NT | 42 | 139 | 92% |
| Finchale View Cso | 245/1294 | 43 | 78 | 99% |
| Barkers Haugh Stw | 245/1245 | 84 | 1076 | 100% |
| Barkers Haugh Cso No 10 - Orchard Drive | EPRJB3293AU | 31 | 67 | 100% |
| Sands Syphon Cso | 245/0906 | 43 | 213 | 88% |
| Barkers Haugh Cso 8 - Freemans Place | EPRQB3897RB | 91 | 336 | 100% |
| Frankland Lane Cso | 245/1272 | 35 | 197 | 99% |
| Walkergate Durham Cso | EPRCB3097WP | 30 | 72 | 97% |
| Millburngate Cso | 245/1286 | 46 | 226 | 88% |
| Atherton Street Cso | 245/1321 | 2 | 1 | 100% |
| High Carr Road Cso | 245/1300 | 84 | 224 | 100% |
| Barkers Haugh Cso 5 - Prebends Bridge | EPRNB3092AL | 5 | 2 | 99% |
| Church Street Du026 | 245/1388 | 5 | 2 | 60% |
| Cathedral Banks Cso | 245/1336 | 2 | 1 | 100% |
| Elvet Syphon Cso | NPSWQD004521 | 26 | 83 | 86% |
| Durham City (Pelaw Wood No 1) Cso | 245/0914 | 35 | 98 | 100% |
| Laurel Avenue Cso | 245/1261 | 37 | 59 | 100% |
| Durham University Stw - Storm Tank | 245/1064 | 44 | 467 | 100% |
| Shincliffe (A177) Cso | 245/1285 | 8 | 6 | 100% |
| Shincliffe No 1 Sps & Cso (Sso Manhole No 2) | 245/E/0499 | 11 | 28 | 100% |
| Jubilee Place Cso | 245/1299 | 2 | 1 | 100% |
| Durham University Stw - Cso Inlet | 245/1064 | 45 | 609 | 100% |
| Browney Stw | 244/0985 | 70 | 914 | 83% |
| Front Street Cso | 244/0927 | 113 | 36 | 100% |

| | | | | |
|------------------------------|------------|----|-----|------|
| Sunderland Bridge Cso | 243/D/0368 | 49 | 107 | 100% |
| Sunderland Bridge Stw | 243/0976 | 29 | 671 | 100% |
| Nicky Nack Sps | 243/0933 | 20 | 22 | 100% |
| Attwood Terrace Cso (Se008) | 243/1002 | 8 | 3 | 95% |
| York Hill Sps (Se034) | 243/1010 | 1 | 1 | 100% |
| Mayfield Cso | 243/0972 | 61 | 172 | 100% |
| Tudhoe Mill Stw - Storm Tank | 243/0985 | 63 | 479 | 100% |
| Tudhoe Mill Stw - Cso Inlet | 243/0985 | 46 | 171 | 100% |
| Byers Green Sps | 243/0959 | 65 | 685 | 100% |
| Hall Farm Cso (Se037) | 243/0993 | 10 | 5 | 100% |
| Wear View A Cso | 243/0992 | 6 | 2 | 100% |
| Wear View B Cso | 243/0921 | 2 | 8 | 99% |
| Willington Stw | 243/0968 | 26 | 235 | |

Russell Place Cso (Rosedale Allotments) Rear

| | | | | |
|----------------------------------|-------------|-----|------|------|
| Victoria Street Cso (Wv068) | 243/1007 | 31 | 82 | 100% |
| Low Willington Park Cso | 243/0983 | 41 | 94 | 96% |
| Sunnybrow Sps | 243/D/0395 | 77 | 607 | 100% |
| Cso (Wv80) Disused Stw Hunwick | 243/0910 | 90 | 387 | 83% |
| Newfield Stw | 243/1015 | 41 | 150 | 100% |
| Gardner Avenue | 243/1025 | 4 | 3 | 97% |
| Hunwick Lane Cso (Wv70) | 243/0994 | 1 | 1 | 100% |
| Rough Lea Lane Cso (Wv79) | 243/0909 | 14 | 12 | 96% |
| Vinovium Stw | 243/0966 | 47 | 592 | 100% |
| Willington Cso | 243/D/0393 | 37 | 71 | 100% |
| Wear Chare (Batts Terrace) Cso | 241/1116 | 53 | 91 | 100% |
| Vinovium Cso No A13 | 242/C/0371 | 9 | 9 | 100% |
| Dellwood Pumped Storage Tank Cso | 242/1042 | 137 | 1885 | 99% |
| Vinovium Cso No A14 | 242/C/0372 | 10 | 4 | 100% |
| Gomer Terrace Cso | 241/1056 | 7 | 17 | 87% |
| Barrington St Cso | 243/0930 | 27 | 30 | 100% |
| Chapel Street Cso | 243/0931 | 10 | 4 | 98% |
| Escomb Sps | 241/1023 | 43 | 391 | 100% |
| Low Wadsworth Stw | 241/1097 | 80 | 578 | 100% |
| Low Wadsworth Sps | 241/1081 | 64 | 675 | 98% |
| Grange Bank Cso (Wv112) | 241/1141 | 13 | 35 | 100% |
| Mill Farm Cso | 241/1121 | 1 | 1 | 94% |
| Low Lane Sps | 241/1080 | 62 | 867 | 99% |
| Valley Terrace Cso (Wv046) | 241/1122 | 23 | 70 | 95% |
| The Hollow Cso | 241/1108 | 29 | 71 | 100% |
| The Hollows Cso (Wv50) | 241/1125 | 59 | 279 | 90% |
| Ullswater Crescent Cso (Wv056) | 241/1130 | 38 | 121 | 100% |
| Bladeside Cso | 241/1098 | 66 | 412 | 98% |
| West Road Cso (Wv63) | 241/1138 | 51 | 220 | 100% |
| Peases West Cso | 241/1083 | 50 | 296 | 98% |
| Woodfield Hill Crook Cso | EPRBB3499RX | 5 | 5 | 92% |
| Fir Tree Stw | 241/1013 | 30 | 485 | 100% |

| | | | | |
|-------------------------------|-------------|------|-------|------|
| Scotch Isle Farm Cso (Wv085) | 241/1120 | 34 | 36 | 97% |
| East End Cso | 241/1092 | 38 | 66 | 100% |
| Frosterley (Willow Green) Stw | 241/1104 | 88 | 1118 | 100% |
| Mill Cottages Cso (Wv087) | 241/1119 | 22 | 13 | 99% |
| Stanhope Stw | 241/1100 | 72 | 922 | 100% |
| Bondisle Way Cso | 241/1090 | 43 | 102 | 98% |
| Riverside Cso | 241/1091 | 51 | 62 | 99% |
| Stanhope Swimming Pool Cso | EPRBP3729GJ | 47 | 126 | 98% |
| Rose Terrace Cso | 241/1089 | 12 | 7 | 100% |
| Western Area Stw | 241/1146 | 73 | 703 | 99% |
| Westgate Cso | 241/E/0471 | 18 | 56 | 81% |
| Rookhope Stw | 241/1145 | 81 | 793 | 100% |
| Stotfield Burn Cso | 241/1050 | 13 | 29 | 16% |
| Westgate Caravan Site Cso | 241/1064 | 5 | 23 | 89% |
| Huntshield Ford Cso (Wv097) | 241/1157 | 44 | 271 | 99% |
| Vedra Close Cso | 241/A/0999 | 5 | 22 | 93% |
| Totals | | 6541 | 36722 | |

Annex D

HENDON SEWAGE TREATMENT WORKS STORM AND EMERGENCY SEWAGE MONTHLY UPDATE (CONSENT REF 245/1213) **(Prior to a complaint to the EA)**

Table 1 Storm Overflow Event Monitoring 1st April 2019 to 31 March 2020

| Date | Screened Storm/ Emergency to Sea |
|------------|-------------------------------------|
| | (hrs:mins) |
| 25/04/2019 | 00:01 |
| 21/05/2019 | 00:40 |
| 28/05/2019 | 00:18 |
| 04/06/2019 | 00:08 |
| 12/06/2019 | 00:03 |
| 11/07/2019 | 00:02 |
| 20/07/2019 | 00:03 |
| 26/07/2019 | 00:03 |
| 04/08/2019 | 00:03 |
| 27/08/2019 | 00:50 |
| 13/09/2019 | 00:06 |
| 22/09/2019 | 00:22 |
| 30/09/2019 | 00:01 |
| 23/11/2019 | 00:18 |
| 10/12/2019 | 01:50 |
| 18/12/2019 | 00:01 |
| 09/01/2020 | 06:21 |
| 13/01/2020 | 00:08 |
| 14/01/2020 | 00:02 |
| 09/02/2020 | 01:41 |
| 12/02/2020 | 00:10 |
| 13/02/2020 | 00:30 |
| 15/02/2020 | 00:46 |
| 22/02/2020 | 00:31 |
| 24/02/2020 | 00:08 |
| 08/03/2020 | 00:01 |
| 11/03/2020 | 00:45 |

| | |
|---------------|----------------|
| 27 Discharges | 15 hrs 52 mins |
|---------------|----------------|

HENDON SEWAGE TREATMENT WORKS STORM AND EMERGENCY SEWAGE
MONTHLY UPDATE (CONSENT REF 245/1213) **(After a complaint to the EA)**

Table 1 Storm Overflow Event Monitoring 1st April 2019 to 31 March 2020

| Start | Stop | Duration |
|---------------------|---------------------|----------|
| 02/04/2019 02:58:51 | 02/04/2019 09:04:31 | 6:05:40 |
| 02/04/2019 17:37:41 | 02/04/2019 18:12:11 | 0:34:30 |
| 03/04/2019 08:00:01 | 03/04/2019 10:10:00 | 2:09:59 |
| 25/04/2019 16:42:11 | 25/04/2019 19:47:41 | 3:05:30 |
| 04/05/2019 08:52:31 | 06/05/2019 10:25:00 | 49:32:29 |
| 08/05/2019 03:04:11 | 08/05/2019 03:58:31 | 0:54:20 |
| 08/05/2019 14:09:21 | 08/05/2019 14:25:00 | 0:15:39 |
| 08/05/2019 22:28:11 | 09/05/2019 00:00:51 | 1:32:40 |
| 11/05/2019 14:38:11 | 11/05/2019 15:30:11 | 0:52:00 |
| 21/05/2019 19:21:41 | 21/05/2019 20:20:31 | 0:58:50 |
| 25/05/2019 20:10:00 | 25/05/2019 20:18:11 | 0:08:11 |
| 26/05/2019 09:29:01 | 26/05/2019 09:44:31 | 0:15:30 |
| 27/05/2019 20:08:11 | 27/05/2019 23:23:21 | 3:15:10 |
| 28/05/2019 12:21:01 | 28/05/2019 14:43:21 | 2:22:20 |
| 31/05/2019 14:39:21 | 31/05/2019 14:53:01 | 0:13:40 |
| 04/06/2019 20:33:41 | 05/06/2019 02:10:00 | 5:36:19 |
| 07/06/2019 21:38:31 | 08/06/2019 22:12:31 | 24:34:00 |
| 12/06/2019 01:47:11 | 12/06/2019 03:25:00 | 1:37:49 |
| 12/06/2019 06:03:41 | 12/06/2019 17:15:31 | 11:11:50 |
| 12/06/2019 18:39:41 | 12/06/2019 20:22:41 | 1:43:00 |
| 12/06/2019 22:40:21 | 14/06/2019 01:26:51 | 26:46:30 |
| 14/06/2019 08:36:11 | 14/06/2019 08:37:01 | 0:00:50 |

| | | |
|---------------------|---------------------|---------|
| 14/06/2019 10:21:51 | 14/06/2019 12:25:00 | 2:03:09 |
| 14/06/2019 14:27:21 | 14/06/2019 15:10:00 | 0:42:39 |
| 14/06/2019 14:33:01 | 14/06/2019 15:07:31 | 0:34:30 |
| 16/06/2019 18:24:51 | 16/06/2019 18:52:21 | 0:27:30 |
| 19/06/2019 10:24:31 | 19/06/2019 12:17:01 | 1:52:30 |
| 24/06/2019 01:13:11 | 24/06/2019 01:40:00 | 0:26:49 |
| 24/06/2019 03:51:41 | 24/06/2019 06:41:31 | 2:49:50 |
| 24/06/2019 14:39:51 | 24/06/2019 16:32:01 | 1:52:10 |
| 25/06/2019 16:00:01 | 25/06/2019 16:42:31 | 0:42:30 |
| 09/07/2019 20:12:01 | 09/07/2019 21:25:00 | 1:12:59 |
| 10/07/2019 03:29:31 | 10/07/2019 05:10:00 | 1:40:29 |
| 11/07/2019 11:46:21 | 11/07/2019 17:25:00 | 5:38:39 |
| 12/07/2019 20:52:41 | 12/07/2019 22:49:21 | 1:56:40 |
| 17/07/2019 21:36:41 | 17/07/2019 22:50:41 | 1:14:00 |
| 20/07/2019 11:08:21 | 20/07/2019 11:40:00 | 0:31:39 |
| 20/07/2019 13:02:41 | 20/07/2019 17:16:41 | 4:14:00 |
| 21/07/2019 23:11:11 | 22/07/2019 01:15:31 | 2:04:20 |
| 24/07/2019 05:21:51 | 24/07/2019 08:06:21 | 2:44:30 |
| 26/07/2019 16:50:21 | 26/07/2019 19:59:51 | 3:09:30 |
| 27/07/2019 03:13:51 | 27/07/2019 06:25:00 | 3:11:09 |
| 27/07/2019 20:44:41 | 27/07/2019 23:25:00 | 2:40:19 |
| 28/07/2019 23:53:11 | 29/07/2019 00:18:41 | 0:25:30 |
| 30/07/2019 12:55:00 | 30/07/2019 14:00:01 | 1:05:01 |
| 31/07/2019 04:26:41 | 31/07/2019 06:33:31 | 2:06:50 |

| | | |
|---------------------|---------------------|---------|
| 31/07/2019 09:55:21 | 31/07/2019 10:56:41 | 1:01:20 |
| 04/08/2019 22:27:21 | 04/08/2019 23:57:51 | 1:30:30 |

| | | |
|---------------------|---------------------|----------|
| 05/08/2019 00:03:01 | 05/08/2019 00:06:41 | 0:03:40 |
| 06/08/2019 13:33:51 | 06/08/2019 17:28:51 | 3:55:00 |
| 09/08/2019 06:30:11 | 09/08/2019 14:25:00 | 7:54:49 |
| 09/08/2019 17:36:31 | 09/08/2019 18:29:21 | 0:52:50 |
| 09/08/2019 21:44:51 | 09/08/2019 23:49:21 | 2:04:30 |
| 10/08/2019 08:01:41 | 10/08/2019 08:31:51 | 0:30:10 |
| 10/08/2019 23:16:41 | 11/08/2019 01:25:00 | 2:08:19 |
| 11/08/2019 12:11:21 | 12/08/2019 14:32:41 | 26:21:20 |
| 12/08/2019 19:00:41 | 12/08/2019 19:26:51 | 0:26:10 |
| 16/08/2019 12:11:11 | 16/08/2019 13:22:51 | 1:11:40 |
| 17/08/2019 00:58:11 | 17/08/2019 01:25:41 | 0:27:30 |
| 22/08/2019 09:01:41 | 22/08/2019 09:34:01 | 0:32:20 |
| 27/08/2019 19:43:31 | 27/08/2019 21:25:00 | 1:41:29 |
| 27/08/2019 23:38:41 | 28/08/2019 03:25:00 | 3:46:19 |
| 04/09/2019 17:38:21 | 04/09/2019 19:10:00 | 1:31:39 |
| 06/09/2019 09:53:21 | 06/09/2019 10:25:41 | 0:32:20 |
| 22/09/2019 18:29:01 | 22/09/2019 23:26:21 | 4:57:20 |
| 23/09/2019 19:57:31 | 23/09/2019 20:55:00 | 0:57:29 |
| 24/09/2019 13:28:51 | 24/09/2019 19:10:00 | 5:41:09 |
| 25/09/2019 10:58:11 | 25/09/2019 12:10:00 | 1:11:49 |
| 26/09/2019 03:08:51 | 26/09/2019 03:55:00 | 0:46:09 |
| 26/09/2019 09:31:11 | 26/09/2019 10:11:31 | 0:40:20 |
| 27/09/2019 15:46:21 | 27/09/2019 18:40:00 | 2:53:39 |
| 28/09/2019 05:57:21 | 28/09/2019 11:54:41 | 5:57:20 |
| 29/09/2019 04:35:21 | 29/09/2019 18:10:41 | 13:35:20 |
| 30/09/2019 20:53:51 | 01/10/2019 22:30:01 | 25:36:10 |
| 03/10/2019 23:38:21 | 04/10/2019 13:44:41 | 14:06:20 |

| | | |
|---------------------|---------------------|----------|
| 06/10/2019 04:39:21 | 06/10/2019 23:19:41 | 18:40:20 |
| 07/10/2019 17:52:51 | 07/10/2019 18:16:11 | 0:23:20 |
| 11/10/2019 03:39:31 | 11/10/2019 05:15:11 | 1:35:40 |
| 13/10/2019 13:03:11 | 13/10/2019 13:56:31 | 0:53:20 |
| 13/10/2019 15:21:01 | 13/10/2019 21:25:00 | 6:03:59 |
| 14/10/2019 08:32:21 | 14/10/2019 08:35:11 | 0:02:50 |
| 15/10/2019 02:53:01 | 15/10/2019 03:10:00 | 0:16:59 |
| 18/10/2019 07:53:41 | 18/10/2019 11:50:31 | 3:56:50 |
| 19/10/2019 15:29:01 | 19/10/2019 21:20:41 | 5:51:40 |
| 20/10/2019 11:10:21 | 20/10/2019 15:55:00 | 4:44:39 |
| 20/10/2019 17:33:51 | 20/10/2019 18:17:21 | 0:43:30 |
| 20/10/2019 21:06:51 | 20/10/2019 22:26:21 | 1:19:30 |
| 22/10/2019 13:19:31 | 22/10/2019 13:25:00 | 0:05:29 |
| 23/10/2019 19:55:00 | 23/10/2019 20:41:11 | 0:46:11 |
| 25/10/2019 15:45:11 | 25/10/2019 23:29:01 | 7:43:50 |
| 26/10/2019 08:01:51 | 26/10/2019 08:13:41 | 0:11:50 |
| 26/10/2019 11:07:21 | 26/10/2019 12:10:00 | 1:02:39 |
| 30/10/2019 00:48:11 | 30/10/2019 01:33:31 | 0:45:20 |
| 30/10/2019 08:06:51 | 30/10/2019 09:17:21 | 1:10:30 |
| 01/11/2019 05:49:51 | 01/11/2019 08:41:31 | 2:51:40 |
| 01/11/2019 10:28:31 | 01/11/2019 10:40:41 | 0:12:10 |

| | | |
|---------------------|---------------------|----------|
| 02/11/2019 00:52:21 | 02/11/2019 03:28:11 | 2:35:50 |
| 02/11/2019 22:42:51 | 03/11/2019 04:55:00 | 6:12:09 |
| 03/11/2019 06:40:41 | 03/11/2019 07:56:11 | 1:15:30 |
| 04/11/2019 20:53:01 | 05/11/2019 10:39:11 | 13:46:10 |
| 05/11/2019 16:23:31 | 05/11/2019 18:45:11 | 2:21:40 |

| | | |
|---------------------|---------------------|----------|
| 06/11/2019 19:33:41 | 06/11/2019 22:03:21 | 2:29:40 |
| 07/11/2019 05:32:11 | 07/11/2019 06:37:01 | 1:04:50 |
| 07/11/2019 11:58:11 | 07/11/2019 12:02:31 | 0:04:20 |
| 07/11/2019 12:29:01 | 07/11/2019 12:34:11 | 0:05:10 |
| 08/11/2019 11:50:21 | 08/11/2019 17:13:01 | 5:22:40 |
| 08/11/2019 18:08:41 | 08/11/2019 20:55:00 | 2:46:19 |
| 10/11/2019 11:43:41 | 10/11/2019 11:53:51 | 0:10:10 |
| 10/11/2019 23:22:01 | 11/11/2019 02:55:00 | 3:32:59 |
| 12/11/2019 11:14:41 | 12/11/2019 13:28:01 | 2:13:20 |
| 12/11/2019 16:01:11 | 12/11/2019 17:04:01 | 1:02:50 |
| 12/11/2019 18:57:31 | 12/11/2019 21:07:41 | 2:10:10 |
| 15/11/2019 02:52:41 | 15/11/2019 05:00:21 | 2:07:40 |
| 15/11/2019 06:27:51 | 15/11/2019 06:46:01 | 0:18:10 |
| 15/11/2019 19:18:41 | 15/11/2019 20:00:31 | 0:41:50 |
| 15/11/2019 21:22:21 | 15/11/2019 22:45:11 | 1:22:50 |
| 16/11/2019 04:57:51 | 16/11/2019 05:45:31 | 0:47:40 |
| 16/11/2019 10:29:11 | 17/11/2019 01:18:41 | 14:49:30 |
| 17/11/2019 02:24:11 | 17/11/2019 03:34:51 | 1:10:40 |
| 17/11/2019 07:42:51 | 17/11/2019 20:09:11 | 12:26:20 |
| 21/11/2019 08:55:51 | 21/11/2019 10:06:41 | 1:10:50 |
| 22/11/2019 08:04:51 | 22/11/2019 08:53:31 | 0:48:40 |
| 22/11/2019 09:48:21 | 22/11/2019 10:14:41 | 0:26:20 |
| 22/11/2019 10:42:21 | 22/11/2019 10:59:51 | 0:17:30 |
| 23/11/2019 08:55:00 | 23/11/2019 10:55:00 | 2:00:00 |
| 23/11/2019 11:11:51 | 23/11/2019 11:19:31 | 0:07:40 |
| 23/11/2019 11:20:01 | 23/11/2019 21:55:31 | 10:35:30 |
| 23/11/2019 23:17:01 | 24/11/2019 02:10:41 | 2:53:40 |

| | | |
|---------------------|---------------------|----------|
| 25/11/2019 18:07:21 | 25/11/2019 20:25:00 | 2:17:39 |
| 27/11/2019 13:12:51 | 28/11/2019 20:29:11 | 31:16:20 |
| 28/11/2019 22:34:01 | 28/11/2019 23:41:41 | 1:07:40 |
| 29/11/2019 09:11:41 | 29/11/2019 09:12:41 | 0:01:00 |
| 29/11/2019 11:14:31 | 29/11/2019 11:14:41 | 0:00:10 |
| 30/11/2019 09:59:11 | 30/11/2019 10:18:01 | 0:18:50 |
| 03/12/2019 08:06:01 | 03/12/2019 09:11:31 | 1:05:30 |
| 10/12/2019 17:24:41 | 10/12/2019 21:32:31 | 4:07:50 |
| 12/12/2019 16:35:31 | 12/12/2019 19:32:51 | 2:57:20 |
| 14/12/2019 11:01:21 | 14/12/2019 11:57:11 | 0:55:50 |
| 14/12/2019 12:31:01 | 14/12/2019 13:33:31 | 1:02:30 |
| 15/12/2019 17:59:01 | 15/12/2019 20:55:00 | 2:55:59 |
| 16/12/2019 08:32:31 | 16/12/2019 09:04:51 | 0:32:20 |
| 18/12/2019 20:58:31 | 19/12/2019 00:08:01 | 3:09:30 |
| 19/12/2019 08:01:11 | 19/12/2019 08:30:51 | 0:29:40 |
| 19/12/2019 17:53:41 | 19/12/2019 19:50:01 | 1:56:20 |
| 24/12/2019 06:57:11 | 24/12/2019 08:37:11 | 1:40:00 |
| 09/01/2020 02:10:21 | 09/01/2020 08:40:41 | 6:30:20 |

| | | |
|---------------------|---------------------|---------|
| 09/01/2020 08:43:01 | 09/01/2020 08:47:11 | 0:04:10 |
| 09/01/2020 08:51:51 | 09/01/2020 16:54:01 | 8:02:10 |
| 09/01/2020 20:43:01 | 09/01/2020 21:38:11 | 0:55:10 |
| 12/01/2020 11:49:41 | 12/01/2020 13:35:31 | 1:45:50 |
| 13/01/2020 18:21:31 | 13/01/2020 20:44:01 | 2:22:30 |
| 14/01/2020 14:54:01 | 14/01/2020 18:59:31 | 4:05:30 |
| 16/01/2020 21:58:41 | 16/01/2020 23:10:00 | 1:11:19 |
| 01/02/2020 19:57:31 | 01/02/2020 21:11:51 | 1:14:20 |

| | | |
|---------------------|---------------------|--------------------|
| 09/02/2020 00:34:51 | 09/02/2020 02:43:11 | 2:08:20 |
| 09/02/2020 05:06:01 | 09/02/2020 18:47:21 | 13:41:20 |
| 13/02/2020 06:20:41 | 13/02/2020 11:38:11 | 5:17:30 |
| 13/02/2020 13:18:31 | 13/02/2020 15:38:11 | 2:19:40 |
| 15/02/2020 18:08:31 | 16/02/2020 14:34:41 | 20:26:10 |
| 16/02/2020 18:32:21 | 16/02/2020 20:25:00 | 1:52:39 |
| 20/02/2020 10:47:01 | 20/02/2020 11:21:21 | 0:34:20 |
| 20/02/2020 11:40:31 | 20/02/2020 12:45:11 | 1:04:40 |
| 22/02/2020 03:31:11 | 22/02/2020 05:25:00 | 1:53:49 |
| 23/02/2020 07:58:21 | 23/02/2020 08:20:41 | 0:22:20 |
| 24/02/2020 05:58:21 | 24/02/2020 18:41:11 | 12:42:50 |
| 24/02/2020 19:04:11 | 24/02/2020 20:15:01 | 1:10:50 |
| 28/02/2020 05:29:11 | 28/02/2020 08:55:00 | 3:25:49 |
| 28/02/2020 14:27:01 | 28/02/2020 15:07:01 | 0:40:00 |
| 29/02/2020 21:20:41 | 29/02/2020 22:40:00 | 1:19:19 |
| 08/03/2020 05:05:01 | 08/03/2020 06:28:11 | 1:23:10 |
| 09/03/2020 20:02:01 | 09/03/2020 21:44:01 | 1:42:00 |
| 09/03/2020 22:32:11 | 09/03/2020 23:22:51 | 0:50:40 |
| 11/03/2020 16:44:21 | 11/03/2020 17:49:41 | 1:05:20 |
| 11/03/2020 18:53:31 | 11/03/2020 22:35:41 | 3:42:10 |
| 12/03/2020 21:41:31 | 12/03/2020 22:43:31 | 1:02:00 |
| 28/03/2020 16:04:31 | 28/03/2020 17:36:21 | 1:31:50 |
| 31/03/2020 04:18:41 | 31/03/2020 06:34:51 | 2:16:10 |
| 31/03/2020 08:40:00 | 31/03/2020 09:03:21 | 0:23:21 |
| Totals | 178 Discharges | 645:51:55 Hours |

Sewage Pollution in South Tyneside Updated - April 2021

Introduction

Figures have now been obtained that give a disturbing indication of the amount of sewage that has been regularly discharged untreated into the watercourses of South Tyneside over the last three years. (See Annex B)

How the wastewater treatment system works.

Combined sewers convey wastewaters for treatment at the sewage works, and also take away rainwater to prevent flooding. During rainfall, the rain dilutes the wastewater in the sewer. The combined wastewater is contaminated with foul waste including excrement. Sewers are of a finite size. Even when they are full, wastewater and rainfall must still be taken away from houses to prevent flooding. Combined Sewer Overflows (CSOs) are the 'safety valves' on the system, ensuring that households remain safe. CSOs discharge into watercourses.

The legislation for wastewater treatment.

The Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC) was encompassed in UK law almost word for word under the Urban Waste Water Treatment (England and Wales) Regulations 1994. Both pieces of legislation declare that urban waste-water entering collecting systems shall, before discharge, be subject to secondary treatment or an equivalent treatment.

The objective pursued by Directive 91/271 goes beyond the mere protection of aquatic ecosystems and seeks to conserve man, fauna, flora, soil, water, air and landscapes from any significant adverse effects of the accelerated growth of algae and higher forms of plant life that results from discharges of urban waste water.

The European Court of Justice in 2012 (The Whitburn case) found that failure to treat urban wastewater cannot be accepted under usual climatic and seasonal conditions, as otherwise the Urban Waste Water Treatment Directive (91/271) would be rendered meaningless.

The general objective of the Directive is to ensure a high level of environmental protection. The European Commission declared that it would be absurd to accept that untreated waste-water may be discharged into the environment as a matter of course, in the absence of exceptional circumstances, simply because a collecting system or a treatment plant has been designed with insufficient capacity.

The Environmental Permitting Regulations 2016

Permits to discharge untreated sewage from Combined Sewer Overflows into watercourses during heavy rainfall are issued to water companies and regulated by the Environment Agency.

There is growing evidence to show that these permits are being abused.

Sewage is regularly discharged into South Tyneside watercourses in moderate rainfall. This is due to a lack of investment by the water companies into their infrastructure and a lack of capacity at the sewage treatment works.

The water companies are 'polluting for profit'.

How are Combined Sewer Overflows monitored?

The Environment Agency have been required to install Event Duration Monitors (EDMs) in all Combined Sewer Overflows. These record the number of discharges and the duration of the discharges. The actual volume of untreated wastewater is not measured by EDMs.

The UK authorities have adopted a 24/12 spill counting rule. This disguises the amount of discharges as it aggregates the number of discharges.

- Start counting when the first discharge occurs.
- Any discharge (or discharges) in the first 12-hour block are counted as one spill.
- Any discharge (or discharges) in the next, and subsequent 24-hour blocks, are each counted as one additional spill per block.
- Continue counting until there's a 24-hour block with no discharge.
- For the next discharge after the 24-hour block with no discharge, you begin again with the 12-hour and 24-hour block spill counting sequence.

South Tyneside CSO Performance

South Tyneside has 63 CSOs. Of these (in 2020) 48 have EDMs fitted, 9 more than in 2018.

| Year | No of 'spills' | Duration of 'spills' (Hours) |
|------|----------------|------------------------------|
| 2018 | 823 | 2599.5 |
| 2019 | 1285 | 5110.8 |
| 2020 | 1197 | 6337.2 |

The real figures must be higher as 15 CSOs are yet to be fitted with EDMs.

A notorious CSO in South Tyneside is located at Regent Road in Jarrow.

This discharged 71 times in 2018 for 487 hours and 70 times in 2020 for 535.34 hours.

This CSO was overtaken as a major polluter in 2019 by a nearby CSO at Bedesway, Jarrow as data has been released showing it 'spilling' 117 times for a staggering 1697.22 hours (Equivalent to a continuous discharge for 24 hours a day for 70 days). This 'spilled' on at least 117 days.

The 2020 lead polluter is Wagonway Road CSO in Hebburn, which discharged 142 times into the River Tyne for 1951.51 hours (Equivalent to a continuous discharge for 24 hours a day for over 81 days). This 'spilled' on at least 142 days.

These CSOs represent the last 'safety valves' in South Tyneside sewage system before the sewage is supposed to be pumped over the Tyne.

When the Howdon sewage treatment works can not cope with the volumes of sewage arriving these safety valves release untreated sewage into the Tyne. These 'spills' are routine in nature and are not taking place in the exceptional circumstances environmental law demands.

The last South Tyneside 'safety valve' CSO before the sewage flows to Hendon is Whitburn Steel. This CSO discharged 75 times, spilling 760,000 tonnes (m³) of untreated sewage into the North Sea, in 2019.

This was enough sewage to fill 304 Olympic sized swimming pools.

In general, a spill greater than 50m³ is considered significant.

The Whitburn system remains in breach of environmental law as of March 2021, but the EA want to wait 10 years to 'assess' the system.

The data supplied by the authorities needs to be treated with caution

In March 2020 the EA issued an apology after their published sewage discharge records for Whitburn for 2019 were challenged.

They were forced to increase the volume of sewage discharges for Whitburn by 10% from 683,676 cubic meters to 760,993.5 cubic meters.

In March 2021 Northumbrian Water issued an apology after their published untreated sewage discharge records for Hendon Sewage treatment works for 2019 were challenged.

They were forced to increase their published hours of untreated discharges in 2019 from Hendon Sewage Treatment works by **4,000%** from 15 hours 52 mins to 646 hours.

Northumbrian Water's performance

By 2019 Northumbrian Water Limited had paid out a total of £1.7billion in dividends to its owners, the Hong Kong billionaire Sir Li Ka-shing and his family, since they bought the business for £2.4billion in 2011. NWL made a further £170 profit from pollution in 2020.

Data from the Environment Agency show that, in 2020, Northumbrian Water were responsible for **32,947** spill events (Remember this does not reflect the actual number of discharges as they use the 12/24 spill rule).

Discharges of sewage from Combined Sewer Overflows in the Northumbrian Water area lasted for 178,229 hours, equivalent to **20.3 years** of continuous discharging.

Northumbrian Water claim that any sewage that is discharged into watercourses when it rains is diluted by rainwater. Wastewater that is discharged when it rains is exactly the same dilution in terms of ratio of rainwater to foul water as the wastewater that is treated at the Sewage Treatment Works during the same rainfall event.

Northumbrian Water relies on CSOs to discharge sewage untreated into the environment when it rains as there is not the capacity in the system to collect and treat the wastewater in even moderate rainfall. This is due to a lack of investment and contravenes environmental law.

Discharging sewage is cheaper than treating it.

Sewage Pollution as a contributor to climate change.

Seagrasses can absorb more carbon up to 40 times faster than terrestrial forests and these ecosystems become sources of CO₂ emissions when they are degraded or destroyed. A major driver of seagrass decline is nutrient pollution from sewage. A study has shown that 90% of the seagrass meadows in the UK have been lost to pollution.

Locally, the seagrass meadows in the nearby River Tyne estuary have been devastated by sewage flowing from nearby Combined Sewer Overflows.³⁹

³⁹ <https://bit.ly/3bHG7db>

How can sewage cause harm to public health in South Tyneside?

Untreated sewage includes faeces and urine and contains bacteria, viruses (including coronavirus), toxins, pharmaceutical residues and microplastics. More and more antibiotic resistant bacteria are being found in sewage.

Micro-organisms can enter through the oral route (ingestion), through the eyes, ears and nose or through an open wound. Alarmingly, with certain pathogens it takes only one viral particle to cause an infection. Infections can even be contracted from the aerosol spray blown from the water's surface as micro-organisms are contained within the minute water droplets that are unsuspectingly inhaled.

Pathogens don't all die off quickly in the marine environment either, indeed some pathogens can survive for long periods of time, such as hepatitis A, which can survive for up to 100 days in saltwater.

Recent epidemiological studies show a close relationship between contact with polluted waters and the incidence of gastro-intestinal, eye, ear, nose and throat infections or irritations and respiratory symptoms. This is a recognised problem for surfers, kite surfers, windsurfers, sailors, kayakers and wild swimmers.

Even the dog walkers, joggers and walkers who all enjoy the access to South Tyneside's riverside and beaches throughout the year are at risk from sewage pollution.

Public Health is a Material Planning Consideration

Local authorities have important and wide-ranging public health functions, for example under the Public Health (Control of Disease) Act 1984. This legislation adopts an 'all-hazards' approach and provides South Tyneside Council with the necessary powers to control human health risks arising from infection or contamination of any form including chemicals and radiation.

Statutory duties for public health were conferred on local authorities by the Health and Social Care Act 2012. Local authorities (and directors of public health acting on their behalf) now have a critical role in protecting the health of their population, both in terms of helping to prevent threats arising and in ensuring appropriate responses when things do go wrong.

Health considerations are capable of being material planning considerations. This is recognised in the NPPF which includes the following statement at paragraph 91.

91. Planning policies and decisions should aim to achieve healthy, inclusive and safe places

Section 12 of the Health and Social Care Act 2012 imposes a duty on local authorities to take appropriate steps to improve the health of the people who live in their areas. Whilst the courts have yet to consider the impact of this new duty in general and in relation to the planning system in particular, there can be no real doubt that it has relevance to planning decision making in that it reinforces the need to consider whether there are health implications associated with planning decisions. Again, once health implications have been identified as material to a planning decision, the weight to be attached to this material consideration is a matter for the decision maker.

The health implications of exposure to the levels of sewage pollution regularly discharged into the River Tyne and on to the beaches of South Tyneside must be a Material Planning Consideration with respect to future developments as, without an improvement in sewage treatment capacity, more development will bring about an inevitable increase in sewage pollution.

Public concern (when justified) is also a material planning consideration

What are the reasons for sewage pollution?

There is a lot of debate about climate change and the increasing intensity of rainfall events being contributory factors.

What is also relevant is the fact that population levels have increased considerably in the UK since Victorian times yet we are still using combined sewers that were constructed in the 19th century.

As more development takes place and more houses are built then more pressure is exerted on a failing sewage system.

What are the solutions?

The most obvious solution would be to require the water companies to invest some of their vast profits in improving their infrastructure to bring sewage collection and treatment into the 21st century.

A programme of separating foul and surface water in the present combined sewer system would be very expensive and disruptive as most roads would need to be dug up.

More sewage treatment capacity would help. A system of storing wastewater during rainfall events to be treated when the storms abate could also prove to be effective. Both of these proposals would be resisted by the water companies as this would eat into their profits.

To prevent the situation becoming worse, pressure could be applied to Local Planning Authorities to qualify planning approval for new development with Grampian conditions to ensure development comes forward in line with the required upgrade in the sewage system.

Acceptable conditions could be phrased as:

No dwelling hereby permitted shall be occupied until works to improve the existing public foul sewerage network so that it is able to cope with the flows from the proposed development have been completed.

Surface water drainage into the sewer system should not be permitted unless the developer can demonstrate how the proposal is unable to make proper provision for surface water drainage to ground, water courses or surface water sewer.

It would be better if no surface water was allowed to enter the foul system.

Will South Tyneside Council play their part in tackling sewage pollution?

Historically STC have been unwilling to challenge Northumbrian Water. They have always deferred to bland assurances that are made by the water company (not backed up with evidence) that sufficient sewage treatment capacity exists.

Northumbrian Water will always claim they have sufficient capacity when they are allowed to simply dump the extra flows of sewage from new

development (that their sewage treatment works cannot deal with) into watercourses.

A Legal Opinion has recently been obtained (See Annex A) that challenges the position taken by STC.

The Legal Opinion has been provided to STC who are considering the implications of this.

The summary of the legal opinion reads

In summary, case law and policy are both eminently clear that there is nothing in law or planning policy requiring LPAs to defer to sewerage undertakers. LPAs are perfectly entitled to form their own view of likely impacts on the sewerage system based on the available evidence.

In the particular case of the Tyneside area, it is in my view simply incorrect to say that it is not within the relevant LPAs' remit to question the local sewerage undertaker (Northumbrian Water)'s strategy towards its network, or the capacity of its infrastructure. This assertion, made in a Sunderland City Council meeting on 4th November 2020, is plainly incorrect as a matter of law.

How can this legal opinion be used to tackle sewage pollution?

Any proposed developments , especially on previously undeveloped land, should be challenged on grounds of Public Health, Public Concern and insufficient sewage treatment capacity grounds (all material planning considerations) due to the demonstrated lack of sewage collection and treatment capacity in South Tyneside.

This document is subject to review, amendment and/or alteration should new evidence/ information come to light or any of the calculations are found to be erroneous.

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South Tyneside CSO Data ('Spills' since 2019 that are greater than 40 are highlighted)

| Site Name | Permit Number | 2018 data | | 2019 data | | 2020 data | |
|---|---------------|-----------|------------------------|--|------------------------|--|------------------------|
| | | Spills | Total Duration (hours) | Counted spills using 12-24hr counting method | Total Duration (hours) | Counted spills using 12-24hr counting method | Total Duration (hours) |
| Boldon Colliery Cso Arnold Strt Cso (Nos.97/99) | EPRAB3290EA | 0 | 0 | 3 | 0.75 | 0 | 0 |
| Boldon Colliery Cso Brooke Avenue New Road | 235/F/0613 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boldon Colliery Cso Charles Street (Nos.95/97) | EPRAB3291RT | 0 | 0 | 2 | 0.75 | 2 | 3 |
| Boldon Colliery Cso Ernest Street No. 3 | EPRAB3390WN | 9 | 2 | 36 | 13.5 | 2 | 1.5 |
| Boldon Colliery Cso North Road No. 1 | 235/1505 | 0 | 0 | 1 | 0.5 | 1 | 0.25 |
| Boldon Colliery Cso South Crescent No.7 | EPRCB3096RW | 6 | 2 | 8 | 7.25 | 2 | 0.5 |
| Brooke Avenue (No20) Sty049 | EPRBB3792AU | 37 | 46 | 49 | 72 | 38 | 54.25 |
| Cemetery Road Cso Sty029 | 235/C/0047 | 22 | 50 | 30 | 42 | 19 | 36.5 |
| Coronation Street Cso | EPRBP3720XY | 0 | 0 | 45 | 179.02 | 37 | 230.00 |
| Cso East Holborn West | 235/1644 | 3 | 24 | 6 | 4.65 | 1 | 0.37 |
| Cso East Holborn West | 235/1645 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cso Junct.lang holme Avenue & Beckenham Avenue | 235/1590 | 1 | 1 | 9 | 8.25 | 2 | 0.75 |
| East Boldon Cso No 6 | 235/F/0616 | 39 | 36 | 48 | 68.5 | 46 | 57.25 |
| Eden Walk CSO (STY 034) | 235/1969 | 25 | 21 | 36 | 51 | 24 | 24 |
| Eldon Street Cso (Sty067) | 235/1944 | 4 | 1 | 73 | 309 | 49 | 259.5 |
| Harton Low Staithes (Mill Dam) | 235/1907 | 2 | 2 | 3 | 4.5 | 5 | 5.25 |
| Hebburn Cso Pinewood / Lamport St (No.25) | 235/1051 | 5 | 3 | 10 | 7 | 4 | 2 |
| Hebburn Cso Reyrolle Works South (Rear) [D22] | 235/1186 | 11 | 6 | 77 | 124 | 67 | 152.25 |
| Hebburn Cso Royal Industrial Estate | 235/1744 | 11 | 20 | 13 | 40.25 | 5 | 11.5 |
| Jarrow Cso Bedesway [B10/104] | 235/1276 | 53 | 191 | 117 | 1697.22 | 36 | 140.34 |

| | | | | | | | |
|--|-------------|----|------|------------------------|----------|------------------------|--------|
| Jarrow Cso Regent Road (West Of A1) [B5/104] | 235/B/0170 | 71 | 487 | No 2019 data available | | 70 | 535.34 |
| Marsden Cso Coast Road (A193) Redwell Lane | 235/1588 | 17 | 58 | 18 | 59.16667 | 21 | 54.17 |
| New Road Cso | 235/1572 | 19 | 43 | 19 | 36 | 15 | 22.75 |
| Prince Consort Rd Pump Station | 235/1657 | 38 | 78 | 63 | 181.5 | 40 | 82 |
| Rear 92/94 Charles Street Cso | EPRAB3290DW | 0 | 0 | 0 | 0 | 0 | 0 |
| Roman Road CSO | 235/1703 | 28 | 119 | 55 | 212.75 | 33 | 132.75 |
| Don Smith St SPS | 235/1652 | 5 | 8 | 12 | 52.5 | 4 | 15.5 |
| South Shields Cso Temple Street [B26/101 | 235/1943 | 46 | 136 | 70 | 192.83 | 51 | 160.25 |
| Springwell Park Cso | 235/1704 | 16 | 55 | 28 | 84.75 | 24 | 115.75 |
| Station Road CSO | 235/1702 | 64 | 458 | 59 | 321.75 | 46 | 328.5 |
| Tudor Road Cso (Sty068) | 235/1905 | 67 | 256 | 68 | 202.64 | 26 | 90.58 |
| Tyne Street Pumping Station | 235/1656 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tyneside Cso No 85/201 | 235/B/0169 | 36 | 65 | 84 | 610 | 39 | 289.73 |
| Wapping Street | 235/1902 | 32 | 100 | 49 | 134 | 25 | 89.5 |
| West Boldon Cso No 4 | 235/F/0614 | 65 | 195 | 95 | 232.5 | 84 | 378.5 |
| West Holborne South Cso | 235/1945 | 15 | 59 | 20 | 48.5 | 12 | 25.25 |
| West of Hedworth Lane CSO STY 035 | 235/C/0044 | 26 | 19 | 32 | 26.5 | 25 | 27.5 |
| Whitburn Steel Ps | 245/1207 | 41 | 49.5 | No 2019 data available | | 23 | 67.92 |
| William Street Cso | 235/1746 | 9 | 9 | 19 | 14.5 | 6 | 2.75 |
| Blackett Street | 235/1181 | | | No 2019 data available | | 18 | 28.5 |
| Burdon Road Cso | 235/1279 | | | 27 | 70.3 | 19 | 39.37 |
| Cleadon Lea Pumping Station | 235/1493 | | | No 2019 data available | | No 2020 data available | |
| Cleadon Village Pumping Station | 235/1494 | | | No 2019 data available | | No 2020 data available | |
| Cso At Sw Corner Of Allotment Garde | 235/1187 | | | 1 | 0.5 | 2 | 3.75 |
| Don Valley Pumping Station | 235/B/0171 | | | No 2019 data available | | No 2020 data available | |
| East Holborn Pumping Station | 235/1646 | | | No 2019 data available | | No 2020 data available | |
| Ellison Street Cso | 235/1747 | | | No 2019 data available | | No 2020 data available | |

| | | | | | | | |
|-------------------------------------|------------|------------|---------------|------------------------|------------------------|-------------|----------------|
| Harton Low Staithes Cso | 235/1908 | | | No 2019 data available | 33 | 160.33 | |
| Harton Low Staithes Pumping Station | 235/1638 | | | No 2019 data available | No 2020 data available | | |
| Heaton Gardens Pumping Station | 235/1388 | | | No 2019 data available | No 2020 data available | | |
| Hebburn Riverside Sps | 235/1050 | | | No 2019 data available | No 2020 data available | | |
| Hebburn Village Pumping Station | 235/0634 | | | No 2019 data available | No 2020 data available | | |
| Jarrow Pretreatment Works | 235/2012 | | | No 2019 data available | No 2020 data available | | |
| Jarrow Road Pumping Station | 235/1405 | | | No 2019 data available | 48 | 606.73 | |
| Littlehaven Ps Water Company | 235/1129 | | | No 2019 data available | No 2020 data available | | |
| Marine Drive Pumping Station | 235/1389 | | | No 2019 data available | 0 | 0.00 | |
| Market Dock Pumping Station | 235/1639 | | | No 2019 data available | No 2020 data available | | |
| Mitre Place Cso | 235/1940 | | | 0 | 0 | 0 | |
| Pilot Street Pumping Station | 235/0076 | | | No 2019 data available | 15 | 15.59 | |
| Reyrolle Sewer (North) Cso | 235/1185 | | | No 2019 data available | No 2020 data available | | |
| Tyneside Cso 85/301 | 235/B/0168 | | | No 2019 data available | 36 | 133.50 | |
| Wagonway Road Pumping Station | 235/1745 | | | No 2019 data available | 142 | 1951.51 | |
| Wapping Street Pumping Station | 235/1642 | | | No 2019 data available | No 2020 data available | | |
| West Holborn Pumping Station | 235/1655 | | | No 2019 data available | No 2020 data available | | |
| Totals | | 823 | 2599.5 | 1285 | 5110.831 | 1197 | 6337.21 |