

Open Report on behalf of Anglian Water Services

Report to:	Environmental Scrutiny Committee
Date:	10 June 2016
Subject:	Water Recycling Centres Update

Summary:

This report provides a summary of the situation regarding odours from the Ingoldmells, Spalding and Fishtoft Water Recycling Centres (previously Sewage Treatment Works). This report also provides an update on the Boston Water Recycling Centre and an update of all Water Recycling Centres that recorded more than 5 odour complaints in 2015-16.

Actions Required:

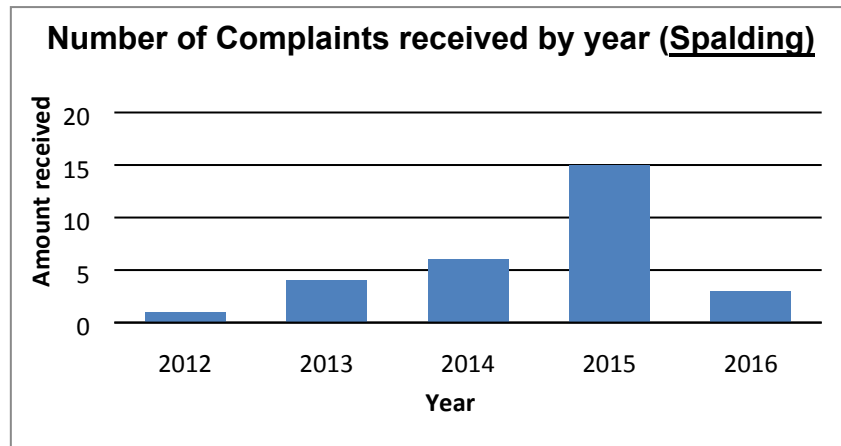
Members of the Environmental Scrutiny Committee are invited to consider and comment on the report and highlight any future actions required.

1. Background

Spalding Odour Issues

Since the last Scrutiny meeting in January there have been 2 odour complaints relating to odours in the Spalding Water Recycling Centre region (1 in March and 1 in April). The March complaint was reported by a commercial business in the Pinchbeck area and was linked to temporary loss of chemical septicity treatment in the local network.

The April complaint was made by a commercial property adjacent to Spalding Water Recycling Centre. This was caused by a reduction in iron sludge imports which are being utilised to reduce odours. The iron rich imports were stopped for 2 weeks to allow essential maintenance on site. It should be noted that the complainant remarked that the odours were the first they had experienced for many months.



Spalding Water Recycling Centre Update

We have continued mixing iron rich sludge from other Water Recycling Centres with the sludge produced on site at Spalding. This has been successful in significantly reducing the amount of odorous sulphide gas released during sludge dewatering.

We have invested £90k on a new iron dosing system on site that has now been installed and commissioned. The iron chemical (ferrous chloride) has been ordered and dosing will start by the end of May. Once this dosing has started, optimisation of the dose rates will be required to further reduce odours.



Long term Investment

Approximately £5M investment has been agreed as the long term strategy to replace the sludge processing plant with a more modern centrifuge system. The main advantages of the new plant will be better containment and faster sludge processing reducing the chances of septic conditions arising and therefore reduced odours.

A further benefit of this scheme will be a reduction in sludge movements through Fishtoft village by our tankering fleet. Currently this scheme is programmed for completion by 2019.

Spalding Sewer Network Update

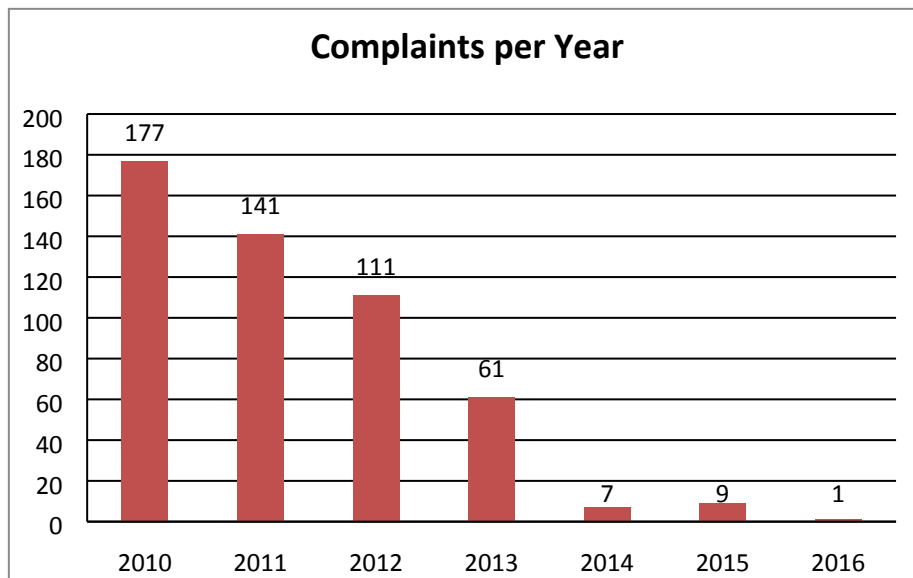
The long sewer network in the Spalding area combined with a large number of pumping stations and factory trade effluent discharges can result in septic sewage arriving at the Water Recycling Centre. When this happens it can release hydrogen sulphide gas which gives rise to a rotten egg type smell which can be detected at very low concentrations.

We continue to use nitrate dosing in the sewer network and this has proved very successful in reducing septicity in our networks. We now have nitrate dosing systems in place at various pumping stations around Spalding. The chemical dosing is regularly optimised to allow for variations in strength of trade discharges.

It has been identified that 2 factories effluents near Springfields Retail Park are combining to rapidly produce septic conditions in the downstream sewers and ultimately at Spalding Water Recycling Centre. We hope to address this by installing an additional nitrate dosing system at our Springfields pumping station. The work to purchase the land to site the chemical storage tank is on-going.

Ingoldmells Odour Issues

To date in 2016 we have received 1 odour complaint in Ingoldmells, this compares with 177 odour complaints in 2010. The complaint was received from a single property in Ingoldmells High Street, further investigations suggests that the source of odours triggering this complaint was from a localised sewer networks issue and not from the Water Recycling Centre.



Our Collection teams, who operate and maintain the sewerage networks, have engaged with the owner of the property to undertake further investigations. These investigations involve CCTV surveys and deployment of odour loggers to trace possible sources of odour.

Further to this we continue to undertake an increased frequency of cleaning on the receiving sewer in Ingoldmells High Street and have subsequently received no further odour complaints.

Ingoldmells Community Engagement

On the 8th April we hosted the local resident odour group meeting in Ingoldmells which was attended by 5 local residents. Overall the attendees agreed the odour issues relating from our Water Recycling Centre were much improved but felt there were still local issues in the network to be addressed.

Discussion in the meeting was focused on the sewer in Ingoldmells High Street which local residents felt was under capacity. We have modelled this sewer and can confirm that there is sufficient capacity. However this length of sewer does suffer from Fats, Oils and Greases (FOG) which can lead to blockages which in turn may cause odour issues. We regularly update food establishments in the area with regard to our Keep It Clear Campaign to educate on responsible trade discharges. We feel a collaborative approach with the Local Council Environmental Health Officers would be mutually beneficial.

Operation of the Pumping Station (Ingoldmells TPS) that receives flow from this main is being checked to ensure flows are optimised.

Another lengthy point of discussion was around how local caravan park owners operate and discharge their sewerage into our network. We made it clear that Anglian Water has no control or jurisdictions on these assets.

Investment at Ingoldmells Water Recycling Centre

We have invested almost £1,000,000 and completed extensive work, including:

- Installation of a weather monitoring station
- Permanent setup of iron dosing to reduce odours from the centrifuge building where we thicken sludge for recycling
- Updating of the Odour Dispersion model to measure the impact of the work completed
- £200,000 on the building of a covered sludge storage tank
- Proactive use of £30,000 of odour neutralising sprays at the treatment plant

Investment in Ingoldmells Sewerage Network

- Permanent installation of a £70,000 septicity dosing network in the sewerage system of Ingoldmells
- Joint working with Butlins to install a septicity dosing system on their discharge upstream of our Haven pumping station
- Consultant contracted to undertake odour logging and weekly sampling to optimise chemical dose rates and ensure odour is minimised
- Investigations have identified some lengths of sewer affected by significant fat, oil and grease (FOG) deposits. These have been cleared and we hope to work with local food establishments and residents to minimise future problems.

Fishtoft Odour Complaints

- In the last 12 months we have received a number of odour complaints from 1 property located to the south of Fishtoft Water Recycling Centre. We have no records of any odour complaints from this property before the current owner moved in last year or from any of the other 30 or so properties that surround the site.
- We have carried out odour logging at the affected property to try and identify the time and extent of any odours. The customer reported odours on several occasions whilst the odour loggers were in place but no odour was recorded by either logger. We are now odour logging on site around the Water Recycling Centre to try and identify if any odours are being generated.
- If the odour logging is inconclusive we will arrange for odour surveys and modelling to be carried out which will identify potential odour sources and map the strength of any odours if they are carried off site. The customer is continuing to maintain an odour diary for us and is in regular communication with our local Customer Liaison Manager.

Boston Water Recycling Centre

At the January Scrutiny meeting questions were raised with regard our tankering fleets movements through Fishtoft village. Boston Water Recycling Centre is located at the end of Scalp Rd in Fishtoft which means our tankering vehicles drive through Fishtoft village to access Boston WRC.

As Fishtoft Academy is situated on the route our tankers follow, there is an long standing agreement between Anglian Water and Fishtoft village residents to prohibit tankers journeys during school terms at the following times:-

- From 08:40 to 09:10
- From 15:00 to 15:30

In addition to this, there is another restriction between 18:00 and 07:30 to prevent sleep disturbances to village residents. The only time that we will breach these agreements is should an operational emergency occur.

At Januarys Scrutiny meeting it was reported that our vehicles were not adhering to the tankering restrictions and frequently speeding through the village putting lives in danger.

All our vehicles have telematics that accurately records when our tankers travel through Fishtoft village and at what speed. The below report summarises all of the tankering journeys made since the Scrutiny meeting in January.

**Fishtoft Village Telematics Data
(November 2015 – May 2016)**

In this six month period there were **1123** separate instances of Anglian Water tankers entering the Geofence of Fishtoft village.

Of these **1123** instances, **43 (3.8%)** breached the times under curfew.

Of these **1123** instances, **6 (0.5%)** breached the speed limit. These are listed below.

Event Type	Vehicle	Event Date	Event Date	Max MPH
Geofence Entered	KX64 TJY	22/01/2016	16:33	33
Geofence Entered	KX64 TJU	04/03/2016	09:27	32
Geofence Entered	KV63 TLK	09/03/2016	12:26	32
Geofence Entered	KP58 MZO	21/03/2016	17:43	33
Geofence Entered	KN59 AYX	24/03/2016	15:12	31
Geofence Entered	KN59 AYX	25/03/2016	09:27	32

Odour Complaints – All Water Recycling Centres

At the Scrutiny Committee in January we were requested to provide a report of all our Water Recycling Centres that recorded more than 5 odour complaints in 2015-16. The below tables list those of our 224 Sites in Lincolnshire that received odour complaints, sites with 5 or greater have been highlighted.

Site Name	Number Of Work Orders
Anwick WRC	1
Boston WRC	5
Cleethorpes - Kings Road TPS	1
Fishtoft WRC	6
Frampton WRC	1
Frithville WRC	1
Glentworth WRC	7
Great Ponton WRC	1
Horbling WRC	1
Ingoldmells WRC	9
Ketton WRC	2
North Hykeham WRC	1
Pickworth WRC	1
Sibsey WRC	1
South Hykeham WRC	1
Spalding WRC	15
Sturton by Stow	2
Swallow	2
Tickencote WRC	1

2. Conclusion

This report provides a summary of the issues and the progress made to date to solve the odour problems at the Ingoldmells, Spalding and Fishtoft sites and provides a report of all Water Recycling Centres that recorded more than 5 odour complaints in 2015-16.

3. Consultation

a) Policy Proofing Actions Required

n/a

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Stuart Robson, Tactical Support Manager (Anglian Water Services).

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