

**Open Report on behalf of Anglian Water Services**

Report to:	<b>Environmental Scrutiny Committee</b>
Date:	<b>29 January 2016</b>
Subject:	<b>Water Recycling Centres Update (Ingoldmells, Spalding and Fishtoft)</b>

**Summary:**

This report provides a summary of the situation regarding odours from the Ingoldmells, Spalding and Fishtoft Water Recycling Centres (previously Sewage Treatment Works). Ingoldmells was first brought to the attention of the Committee in November 2012 with further reports in 2013, 2014 and 2015. Spalding was considered by the Committee in 2014 and 2015. This update also contains an update on Fishtoft Water Recycling Centre.

**Actions Required:**

The Committee is invited to consider and comment on the report and consider if it wishes to receive a further update at a future meeting of the Committee.

**1. Background**

**Ingoldmells Water Recycling Centre**

In the whole of 2015 Anglian Water received nine odour complaints relating to Ingoldmells and no complaints have been received since August 2015. This compares with 177 odour complaints in 2010. All the complaints were received from two properties, further investigations have identified that the source of odours triggering these complaints were localised issues in the sewer networks and not from the Water Recycling Centre.

Of these two properties, one property is on a caravan park served by a private sewer system. We have requested permission to access the private sewer system to help understand why this customer is experiencing occasional problems. The second property is upstream of a section of sewer that we have found is prone to partial blockage with grease and fat discharged from local trade premises. This causes flow in the sewer to be held back and increases the likelihood of it going septic and generating odours. We have now increased the frequency of cleaning this length of sewer and have subsequently received no further odour complaints.

## Ingoldmells Community Engagement

In October 2015, Anglian Water hosted a site visit and tour of the Ingoldmells Water Recycling Centre with Matthew Warman, MP for Boston and Skegness. We discussed the work and investment that has been made over the last five years to address the odour issues. Matt Warman confirmed that his feedback is that odour is no longer a widespread problem around Ingoldmells.

The next Residents Group odour meeting will be held in March 2016 before the start of the tourist season.

## Investment at Ingoldmells Water Recycling Centre

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

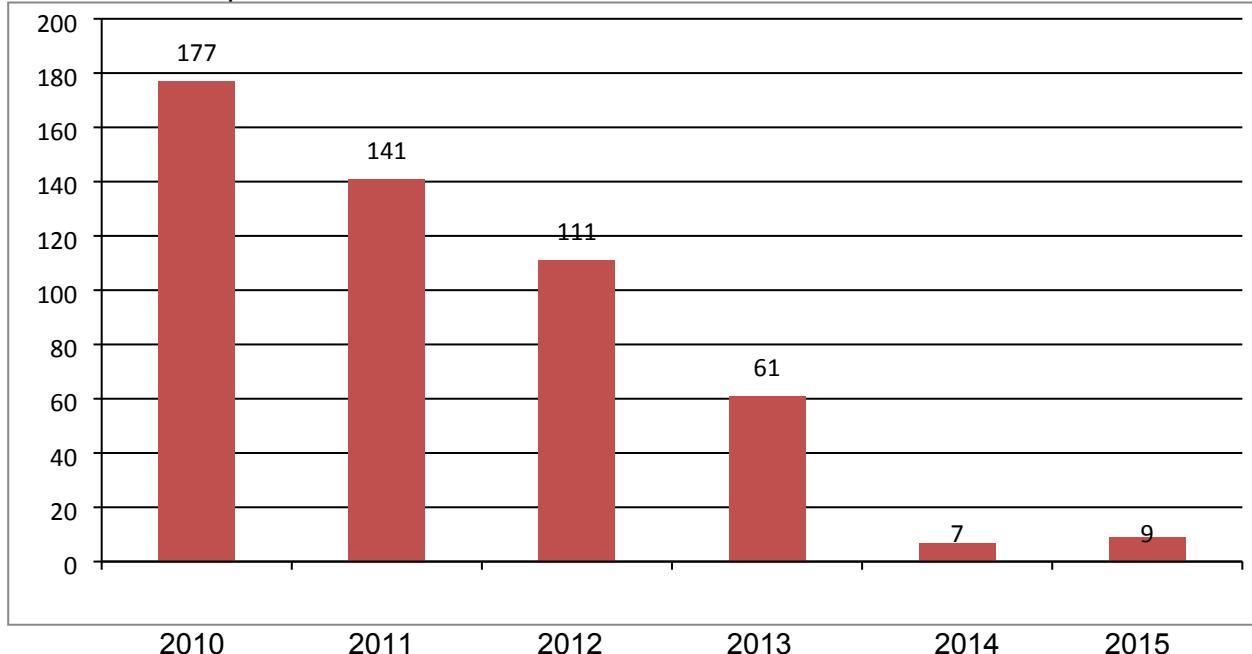
- Installation of a weather monitoring station
- Permanent setup of iron dosing to reduce odours from the centrifuge building where we thicken sludge for recycling
- Updating of the odour dispersion model to measure the impact of the work completed
- £200,000 on the building of a covered sludge storage 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.

## Ingoldmells Complaints History 2010-2015

Number of complaints received as shown below



## Spalding Water Recycling Centre

There have been six odour complaints relating to the Spalding Water Recycling Centre in 2015 (two in July, one in August, two in October, and one in November). These were reported by two nearby commercial premises; a review of wind data confirms that the odours are likely to have originated from the recycling centre.

Anglian Water have found that the six odour complaints were linked to either a temporary loss of one of our on-site chemical septicity treatments or an increase in sludge on-site due to high loads received from food traders ramping up production before Christmas.

## Spalding Water Recycling Centre Update

This year we have been running a trial 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.

Following on from this trial we have obtained funding to install an iron dosing system on site. This will allow us to optimise the amount of chemical added during sludge dewatering and should reduce odours further. Quotes are currently being obtained for the work required but in the meantime we are continuing to import iron rich sludge from elsewhere.

## 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.

As noted elsewhere, the use of nitrate dosing in the sewer network has proved very successful in reducing septicity and odours in other networks. We now have nitrate dosing systems in place at various pumping stations around Spalding. The chemical dosing is regularly optimised and was significantly increased from late October due to the higher organic loads being discharged by factories.

Anglian Water continues to review the location and volumes of chemical used in light of sample results, our own odour monitoring and any customer complaints. This work has identified a location where the discharges from two factories 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. This work is at an early stage and will require the purchase of additional land on which to site the chemical storage tank.

## **Fishtoft Water Recycling Centre**

In the last twelve months Anglian Water have received a number of odour complaints from one 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.

Anglian Water has carried out odour logging at the affected property to try to 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 survey 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.

## **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.

### **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.

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