

Policy and Scrutiny

Open Report on behalf of Richard Wills, Director responsible for Democratic Services

Report to:	Environmental Scrutiny Committee
Date:	31 July 2015
Subject:	Ingoldmells and Spalding Sewage Treatment Works Update

Summary:

This report provides a summary of the situation regarding odours from the Ingoldmells and Spalding 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.

Paul Dimbleby, Lincolnshire Tactical Support Manager at Anglian Water has now provided the following update on the current issues at the site.

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

At the January 2015 Committee meeting concerns were raised about the capacity of the Ingoldmells Water Recycling Centre and sewer network to be able to cope with an increase in future visitor and resident numbers:

Water Recycling Centre Capacity

Has the capacity to cope with an additional 52% of the maximum load currently received from residents and visitors in peak season without any modification.

Sewer Network

Surveys and modelling have identified that the gravity sewer in High Street and part of Skegness Road is the first part of the network that would reach capacity due to future growth. The sewer is still able to accommodate an additional 1000 people connected at any point in time from the part of Ingoldmells that it serves. This is on

top of the current maximum flow received from residents and visitors in peak season. This capacity could be increased further by re-routing some flows upstream of High Street if required.

The sewers along the High Street and Skegness Road are susceptible to becoming blocked with discharges of fat, oils and grease in to the sewers. To mitigate this we have increased the frequency of our sewer cleaning programme and are working with local businesses and caravan parks to reduce the amount of unsuitable material put in to the sewers.

Ingoldmells odour issues

A Residents Group odour meeting was held on 18th May 2015 and attended by Anglian Water, Envent (consultant), East Lindsey District Council and members of Ingoldmells Parish Council and the residents group. An update was given on the ongoing investigations in to the remaining local sewer odours, the installation of 2 additional sewer septicity dosing systems and a new weather monitoring station installed at the Water Recycling Centre to help with the understanding of odour sources in the event of any odour complaints.

The feedback from residents was that the issue of widespread odours was very much improved but there remain occasional intermittent odours that affect very localised areas. We stressed the importance of receiving timely notification of problems and we continue to investigate these occasional odours using feedback received from residents via our Call Centre, dedicated email address and Odour Cards.

Since the weather monitoring station was installed we have received 2 odour complaints from the same property on a caravan park. Using data from the weather station it is clear that the odour source was local to the affected caravan and did not originate from the Water Recycling Centre. We will be carrying out monitoring in the network around the caravan park to try and identify the cause of the problem and have written to the resident with an update on our findings and the next steps.

So far in 2015 we have received 6 odour complaints from 2 residents, this compares with 177 odour complaints in 2010. Further investigations have identified that the source of odours triggering these complaints were localised issues in the sewer network and not the Water Recycling Centre. We continue to work with East Lindsey District Council to understand and tackle these remaining localised odour sources.

Investment at Ingoldmells Water Recycling Centre

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

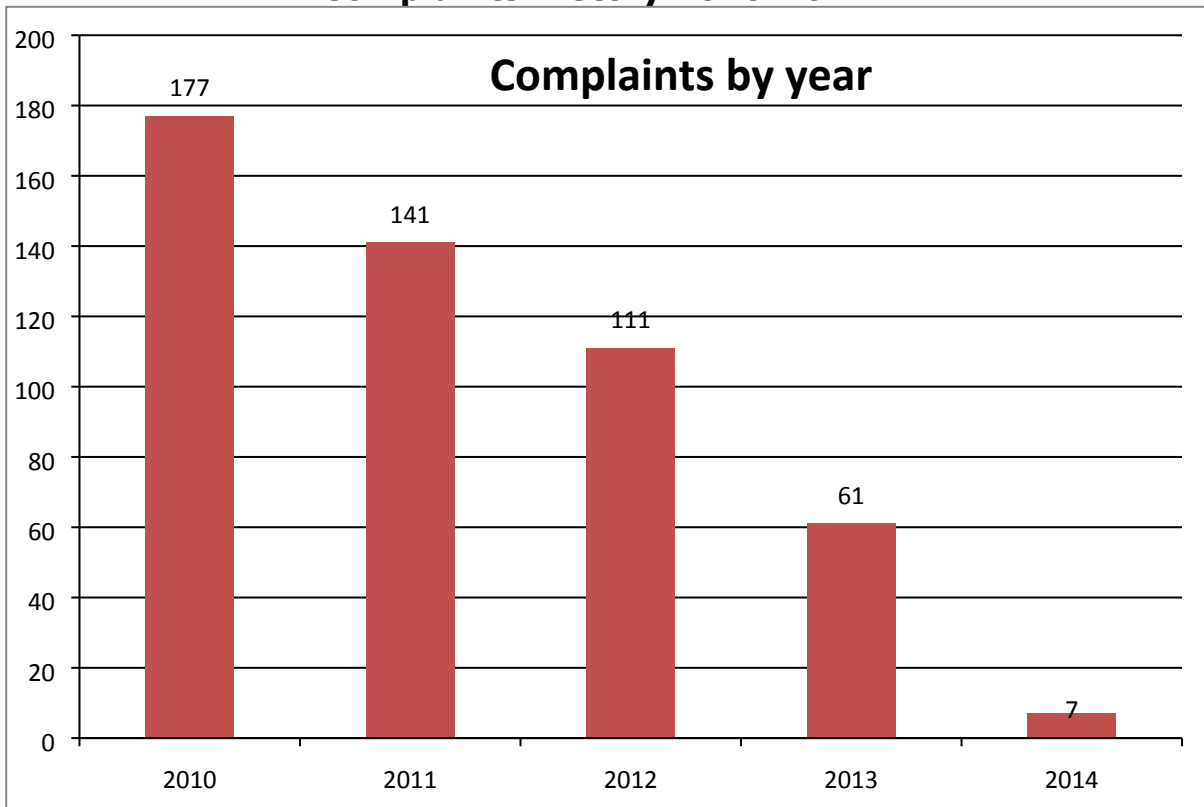
- Installation of a weather monitoring station
- Permanent setup of iron dosing to reduce odours from the centrifuge building where we thicken sludge for recycling
- Updating of the Odour Dispersion model to measure the beneficial impact of the work completed

- £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
- Installation of a further 2 septicity dosing systems in trial locations
- 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.

Complaints History 2010-2014



Spalding

Spalding odour issues

There has been one odour complaint relating to the Spalding Water Recycling Centre in 2015. This occurred on the morning of 7th July and was reported by a neighbouring commercial premises, a review of wind data confirms that the odour is likely to have originated from the recycling centre.

Water Recycling Centre Update

Repairs to the sludge storage tanks and lime sludge dosing system were completed towards the end of last year as previously reported. The plant has continued to operate as normal since then.

For the last few months we have been running a trial mixing iron rich sludge from other water recycling centres with the sludge produced on site at Spalding. Early indications are that this has been successful in significantly reducing the amount of odorous sulphide gas released during sludge dewatering. The trial is continuing and we are reviewing the future installation of an iron sludge dosing system on site.

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 reliability of the largest chemical dosing system (which doses half of all the chemical used in the entire sewer network) is much improved since refurbishment work was completed on it in February.

We continue to review the location and volumes of chemical used in light of sample results, our own odour monitoring and any customer complaints. This work is ongoing and the location and dose rate of nitrate will continue to be reviewed through the year.

2. Conclusion

This report provides a summary of the issues and the progress made to date to solve the odour problems at the Ingoldmells and Spalding 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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