

# Oversight of Textile Manufacturing and Dye Works in Leicester

## **Noise & Pollution Team**

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# Who are the Noise & Pollution Team

- We investigate and regulate various forms of pollution
- We ensure that contaminated land is identified, investigated and remedied.
- We issue permits to approved polluting activities and also maintain the public register of these permits.
- We regulate Smoke control areas. Leicester is a single smoke control area its an offence to emit smoke within the city from a chimney, furnace or fixed boiler.
- We investigate complaints of nuisance which can be from commercial/industrial sites or residential property
- We also investigate complaints relating to light nuisance.
- We act as consultees to our Licensing Team on licenced establishments and events
- We act as consultees to our Planning Team to help minimise any potential detrimental impacts of new development

## **Team**

- The team consists of 2 Team Managers (job share), 8 Officers and 2 Night Noise Support Officers (1 FTE)
- The team respond to complaints during office hours and operate a monitoring service to investigate.
- The monitoring service runs Monday to Friday during office hours and Wednesday to Saturday nights until 02.00 hours.

# Textile Houses & Dye works

- The city has historically had a strong association with the production of textiles, clothing and shoes.
- Various dyeworks process and prepare textiles for the manufacture of clothing.
- There are 5 dye works currently in the city ( 2 are Environment Agency regulated). This number has fallen from 20 over recent years
- The process involves dyeing the cloth and then heat treating the coloured cloth (This is known as Stentering). Stentering ensures that the dye is 'fixed'.
- The process utilises solvents in the cleaning process and the process heat releases these solvents.
- The solvents have a low odour threshold and can give rise to complaints.
- Factories are frequently longstanding and close to residential areas



# Regulation

Depending on the size and scale of the activity these sites are either Local Authority or Environment Agency Regulated

## **Local Authority (LA) Regulated**

- **Statutory Nuisance under the Environmental Protection Act 1990**
- Any complaints would be for the Local Authority to investigate
- statutory nuisance powers to investigate frequency and impact of odour on adjacent residential and/or business
- Powers to serve an abatement notice
- Work with businesses to improve abatement technology and process controls

## **Environment Agency (EA) Regulated**

- **Pollution Prevention & Control Act 1999**
- Where the treatment capacity is greater than 10 tonnes per day the site requires an EA permit to operate.
- Environment Agency inspected
- Complaints investigated by the Environment Agency
- Local authority role to liaise with Environment Agency regarding any concerns

# Odour Management

## **Permitted Sites - Environment Agency (EA) Regulated:**

- Permitted Textile and Fabric finishing sites must operate to Sector Guidance Note 6/08(11) - Statutory guidance for textile and fabric finishing and coating
- Emission limits for permitted sites are a set within the issued permit
- Operators must satisfy the EA that any emissions from the process are below the prescribed limits
- New EU standards for the Textile sector are planned and the sector guidance due for review by DEFRA

## **Permitted Sites and Local Authority Regulated sites:**

- Good operating practice - the application of pre treatments such as scouring (to remove grease, chemicals and dirt) to the raw textile can reduce the impact from stentering.
- Suitable and sufficient stack heights ensure effective dispersal of odours (some weather conditions can reduce the effectiveness of any stack)
- Pollution Abatement technology is used in conjunction with stack height and good operating practice to minimise any odour impact
- Operators must look to implement Best Available Technology (BAT)

# Case Study – Saffron Shades

- The premises was formerly Eurodyers Ltd and Regulated by the EA
- As Eurodyers Ltd the site was prosecuted by the EA for operating without a Permit.
- The site was taken on by Saffron Shades Ltd and has since operated under the 10 tonne threshold and does not require a permit.
- Several complaints were made to the Pollution team who investigated using Statutory Nuisance powers under the Environmental Protection Act 1990
- Following the witnessing of an odour nuisance in June 2022, a site visit was made to the premises.
- Advice on how to reduce odour issues provided - ensuring process emissions were passed through odour abatement kit (electrostatic precipitators) and then up through the stack to ensure better dispersal. Advice also provided on reducing fugitive emissions (those emissions not released through the stack).
- Saffron Shades have since continued to work to improve environmental standards at the factory.
- Complaints have since reduced and no further nuisances have been witnessed.
- Compliance revisit planned for late November

# Case Study – Colours Dyeworks

- This premises has been a dyeworks for a long time and has been the source of odour and noise complaints.
- The company falls under the remit of the Environment Agency. Under the Pollution Prevention and Control Act 1999 it has an A1 permit to operate. This permit contains a number of conditions that the operators must comply with, and these include noise, odour, water, and energy efficiency.
- Stack emissions were monitored in 2006. The results showed that the impact from the stenter stack was ‘insignificant’ and no Environmental Quality Standard (EQS), Environmental Assessment Levels (EAL) or Statutory Emission Limit Values (ELV) were breached.
- The noise and Pollution Team have received sporadic complaints regarding odour from the site. The Team have passed complaints to and liaised with the Environment Agency regarding concerns that odour is causing a nuisance to neighbours.
- In September 2021 there was an increase in complaints to the team regarding odour. This prompted a further investigation with the EA. In May 2022 a joint site visit was carried out. Operating conditions at the site were good and the EA were satisfied with operating practices.
- As part of the permit and companies odour management controls any complaints should go to the EA. Complaints are logged and investigated. Residents have been advised to contact the EA.
- Colours are in the process of updating their pollution abatement technology. The system is an KMA electrostatic precipitator which will have a combined built in recycling element for heat recovery, which allows the excess heat generated during the stentering process to be used to preheat the dyeing machines and also to preheat the stenters.

- The new abatement kit is onsite.
- Installation is planned for completion by the end of January. The intention is that the system will be operational in early February 2023.



- The new abatement technology is recognised in the industry as BAT, therefore legally the company will be doing all they can to meet emission standards.
- Once the installation is complete emission monitoring will take place to demonstrate compliance. The new textile industry guidance standards (expected sometime in 2023) will require the Environment Agency to review the permit for Colours. Colours will need to undertake some extractive monitoring as part of their permit application.
- A sister company in the City, Jersey Dyers, has recently installed the same abatement technology with very good results. Officers from the Pollution Team have inspected and noted considerable improvements in odour control. The company has also seen huge energy savings.
- The textile industry is considered low risk in terms of emissions. For this reason it is thought that the new textile industry guidance requirements are likely to be similar to the required levels in the previous 2003 sector guidance note. There is likely to be a requirement for annual stack monitoring.
- Given our knowledge of this process, the site inspections and the installation of the KMA abatement kit, it is anticipated that levels of pollutants will be well within required standards.
- It is possible that emissions monitoring could report as 'below detection limits' as the equipment has limits to which it can accurately test. This is not reporting a zero emission, but that the emission is below the limit of detection.

# Textiles - Leicester Labour Market Partnership Review and Community Renewal Fund project

- Leicester has the second largest concentration of textile firms in the country, and the largest for garment manufacture, employing over a fifth of the UK workforce. The sector is worth over £500m to the local economy and is a priority sector for our economy.
- The Leicester Labour Market Partnership was launched in September 2019 to bring together key partners to look at ways to proactively address concerns of non-compliance in Leicester's garment sector. The latest review of this work has just been published.
- This aligns with Operation Tacit – an enforcement partnership addressing labour abuse and modern slavery – GLAA, HSE, National Crime Agency, Leicestershire Police
- Leicester City Council has taken a leading role helping to align the work of a range of organisations engaged in supporting local businesses, community organisations and textiles workers
- Leicester City Council has worked with DMU and Fashion Enter to deliver the Leicester Textiles Renewal project (with one off funding from the Community Renewal Fund) - delivering skills and business innovation support for a cohort of 20 manufacturers
- This has included compliance reviews to support participating manufacturers. Although businesses were generally compliant across all areas, environmental management was highlighted as a potential area of focus for any future support.
- There is an opportunity here to link the knowledge and skills in the Pollution Team with the work of the Economic Regeneration Team

## Next Steps

- 1) We will continue to work closely with EA to monitor any risk.
- 2) We will monitor the installation of the new abatement kit at Colours
- 3) We will provide regular oversight reports to Neighbourhood scrutiny on the work of the Noise & Pollution Team

## Closing Comments

- Textile processors and Dye houses do still give rise to some complaints, however the situation in recent years has improved as abatement technology has improved.
- The odour associated with this type of activity is detectable at very low thresholds. This means that some odour may be noticeable, even with the best available technology in situ.
- Operators must still ensure good working practices.
- For EA Permitted sites residents should complain direct to the EA.
- The textile industry is very important to the Leicester economy. Work to support and grow will need to be managed alongside environmental regulation and responsibility. The pollution Team will work with the Economic Regeneration Team in this regard