**Frequently Asked Questions**

**What notices has the Council served in relation to the nuisance?**

The Council has served notices on the landowner and occupier of the site under section 79 of the Environmental Protection Act 1990.

**What do the notices mean?**

The notices require the landowner and/or the occupier to prevent the recurrence of the statutory nuisance (the smell).

**What are the timescales of the notices?**

The owner/occupiers have until 1 May 2018 to comply with the notices.

**What is being done to prevent further tipping at the site?**

The Environment Agency has served a “STOP” notice under section 59 of the Environmental Protection Act 1990. It is an offence for anyone to breach this notice. If you are aware that further dumping is taking place at the site, please notify the Environment Agency immediately on 0800 80 70 60.

**What samples have been taken & what were the results?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Contaminants tested**  | **Result** | **Location** |
| 19/12/17 | Hydrogen sulphide (H2S)Volatile organic compounds (VOCs)Broad screen using mobile laboratory –Gas Chromatography Mass Spectrometer (GCMS)Carbon monoxide (CO) | Nothing detected. | Rear garden and inside property on Parvet Avenue, DrolysdenandOn site of Gartside Farm |
| 21/12/17 | H2S CO | Nothing detected. | Rear Garden Parvet Avenue, Drolysden |
| 5/01/2018 | VOCsOranosulphur screenMercaptans | Nothing detected above the laboratories limits of detection. | Rear Garden Parvet Avenue, Drolysden |
| 30/01/18 | H2S CO | Nothing detected. | Rear garden and inside property on Parvet Avenue, Drolysden |

**Further Sampling**

Between 19 February and 5 March additional sampling was undertaken and this included a number of monitoring techniques testing for different chemicals. The results from the monitoring are discussed below.

**Hydrogen sulphide (H2S) real time monitoring**

Technicians used very sensitive real time monitoring equipment for a minimum of 2 hours a day over a two week period. A summary showing the maximum concentration measured on each day and the corresponding location are listed in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Time | Location | Concentration in air in parts per billion (ppb) |
| 19/02/18 | 11:45 | Sunnyside Road | 5 |
| 20/02/18 | 08:10 | Somerset Road |  7 |
| 21/02/18 | 08:10 | Field behind bus stop | 28 |
| 22/02/18 | 14:15 | Somerset Road, Parvet Avenue, Chestnut Avenue | 3 |
| 23/02/18 | 08:30 | Grass area behind bus stop | 22 |
| 26/02/18 | 08:30 | Chestnut Avenue | 3 |
| 27/02/18 | 07:00 | Parvet Avenue, St Kildas Avenue | 4 |
| 28/02/18 | 13:00 | Numerous locations | 4 |
| 01/03/18 | 08:55 | Lowfield Avenue | 6 |
| 02/03/18 | 15:00 | Parvet Avenue, Lowfield Avenue | 6 |
| 05/03/18 | 15:00 | Somerset Road, Lowfield Avenue | 4 |

10ppb above this concentration H2S is easily noticeable.

This is the first data set we have received that has detected the presence of H2S and it is likely that this is the chemical causing the odour. Notes and observations from the technicians also confirm that odours were noted during the monitoring. Concentrations recorded were also very brief and lasting only several minutes.

In addition to the real time monitoring undertaken to date, longer term passive H2S diffusion tubes were left on site in a number of locations to collect a sample over a one week exposure period. Nothing above the laboratories limit of detection (0.56ppb) was identified from this monitoring.

Samples of air have also been collected to determine the presence and concentration of other odours associated with landfill sites. No other chemical has been detected during the monitoring undertaken to date.

**Monitoring undertaken between 17 and 24 April**

The table below displays the results obtained for a diffusion tube survey undertaken to determine the concentrations of H2S. Diffusion tubes are small plastic cylinders that have an absorbent material inside them. This collects a sample of H2S over the duration that it is exposed. The tubes are then collected and taken to a laboratory so that the concentration can be determined. The results provide the average concentration of H2S over the duration sampled.

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Location** | **Exposure duration (days)** | **H2S Concentration (ppb)** |
| 17-18/04/18 | Clockhouse Avenue | 1 | 4.65 |
| 17-18/04/18 | Somerset Road | 1 | <0.49 |
| 18-19/04/18 | Clockhouse Avenue | 1 | 0.82 |
| 18-19/04/18 | Somerset Road | 1 | <0.55 |
| 19-20/04/18 | Clockhouse Avenue | 1 | <0.55 |
| 19-20/04/18 | Somerset Road | 1 | <0.55 |
| 23-24/04/18 | Somerset Road | 1 | <0.54 |
| 17-24/04/18 | Clockhouse Avenue | 7 | <0.08 |
| 17-24/04/18 | Somerset Road | 7 | <0.08 |

<= less than

It is not known whether the concentration of 4.65ppb is a valid result as the total mass on the tube exposed for 1 day is higher than the total mass for the tube exposed for 7 days. This seems incorrect. However, the laboratory could add no further clarity to this, so we have included this in the results.

**Monitoring undertaken between 3 and 13 July**

An additional diffusion tube survey was undertaken to determine whether H2S concentrations had increased. The tubes were placed at two locations on Parvet Avenue (east and west), two on Chestnut Avenue (east and west) and one location on Clockhouse Avenue. The results are provided in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Location** | **Exposure duration (days)** | **H2S Concentration (ppb)** |
| 03-04/07/18 | Parvet Avenue (west) | 1 | 0.03 |
| 03-04/07/18 | Chestnut Avenue (east) | 1 | 0.43 |
| 03-04/07/18 | Chestnut Avenue (west) | 1 | 0.29 |
| 03-04/07/18 | Parvet Avenue (east) | 1 | 0.20 |
| 03-04/07/18 | Clockhouse Avenue | 1 | 0.64 |
| 04-05/07/18 | Parvet Avenue (west) | 1 | 0.27 |
| 04-05/07/18 | Chestnut Avenue (east) | 1 | 0.28 |
| 04-05/07/18 | Parvet Avenue (east) | 1 | 0.43 |
| 09-10/07/18 | Chestnut Avenue (west) | 1 | 0.34 |
| 09-10/07/18 | Parvet Avenue (east) | 1 | 0.40 |
| 09-10/07/18 | Parvet Avenue (west) | 1 | 0.20 |
| 10-11/07/18 | Chestnut Avenue (west) | 1 | 0.37 |
| 10-11/07/18 | Parvet Avenue (east) | 1 | 1.21 |
| 11-12/07/18 | Chestnut Avenue (west | 1 | 1.13 |
| 11-12/07/18 | Parvet Avenue (east) | 1 | 1.03 |
| 12-13/07/18 | Chestnut Avenue (west | 1 | 1.25 |
| 12-13/07/18 | Parvet Avenue (east) | 1 | 1.07 |
| 03-13/07/18 | Parvet Avenue (west) | 10 | 0.01 |
| 03-13/07/18 | Parvet Avenue (east) | 10 | 0.04 |
| 03-13/07/18 | Chestnut Avenue (east) | 10 | <0.00 |
| 03-13/07/18 | Chestnut Avenue (west | 10 | 0.03 |
| 03-13/07/18 | Clockhouse Avenue | 10 | 0.09 |

<= less than

**What risk does H2S pose at the concentrations detected?**

We consulted with Public Health England (PHE) to determine how to interpret the results of the H2S monitoring undertaken at the site. They recommended that we should use the screening criteria for H2S listed within the World Health Organisation Air Quality Guidelines for Europe (2000) of 5ppb over a 30 minute averaging period and 107ppb over a 24 hour time weighted average.

The lower 5ppb limit is based on sensory annoyance and it was established in order to protect the public from odour nuisance. It is also below a concentration where toxic effects occur. In order to exceed this guideline, an average concentration of 5ppb will need to be present over a 30 minute period. We are assessing the impacts of odour nuisance by collecting odour diaries completed by residents.

The higher 107ppb limit over a 24 hour averaging period was established to determine toxic effects. In order to exceed this guideline, an average concentration of 107ppb or above will need to be present over a 24 hour period. As you can see from the monitoring results, the concentrations are all considerably below this limit.

PHE have confirmed from the results that “The ambient concentrations of H2S at certain periods may be of a sufficient level that some people may detect an odour. Strong smells are unpleasant and can impact on wellbeing. Some individuals may experience transient symptoms, such as nausea, headaches or dizziness, as a reaction to strong smells, even when the levels of the substances that cause those smells are themselves not harmful to health.”

As a consequence, the monitoring data currently suggests that nothing has been identified which would be harmful to long term health.

**Additional monitoring**

We do not currently intend to undertake any additional monitoring. However, we will keep this under review. Please complete and return any odour diary sheets.

**Is there a contingency plan to evacuate residents?**

Tameside Council does have contingency plans to evacuate residents in the event of an emergency – such plans are held by all local authorities as part of their general duty to protect the public.

**Contact**

TMBC can be contacted on 0161 342 3501

Email: publicprotection-es@tameside.gov.uk

**Reference**

World Health Organisation, 2000, *Air Quality Guidelines for Europe Second Edition****.*** WHO Regional Publications, European Series, No. 91.