

## **Why is Tonbridge and Malling Borough Council doing these works now?**

All councils have a legal duty to inspect their areas for contaminated land. Where a council considers there is a reasonable possibility that land may be contaminated it should inspect the land to obtain sufficient information to decide whether or not it is contaminated.

Land at Tolsey Mead and Eaglestone Close is located on the former Joco Pit landfill site. The Council has monitored landfill gas at the former Joco Pit site since 1991 when changes in legislation required the Waste Control Authority in this case Kent County Council (KCC) to review redeveloped land which had been used for landfill in the preceding 30 years. Initial borehole installation and monitoring was carried out jointly with KCC, however since then the Borough Council has continued to monitor landfill gas levels independently.

Having monitored since 1991, we now need to look more closely at this site as recent monitoring has shown a change in gas levels at one of our existing monitoring boreholes.

The Council makes its decision about whether to investigate further or take action to remediate based on a consideration of the potential risk to human health and property from the possible contamination. This is called a risk assessment. Currently there is inadequate data to complete the risk assessment. The Council wishes to carry out further investigations to collect more gas data from across the site to confirm site wide conditions to enable a thorough and appropriate risk assessment to be made.

## **What is “contaminated land”?**

Contaminated land has a strict legal definition and for the protection of human health in this instance is defined as land that is ‘by reason of substances in, on or under the land that – (a) significant harm is being caused or there is a significant possibility of significant harm being caused’.

The term ‘Harm’ means harm to health and in the case of man includes harm to property.

## **What is the council looking for?**

This area formerly known as Joco Pit was the site of an inert waste landfill that received waste approximately between 1969 and 1984. We believe that due to less stringent legislation at that time, materials may have been tipped which are gradually decomposing and creating landfill gas. Generally gas readings have remained consistent; however a change in gas concentrations has been noted recently in one location. Due to limited monitoring points available, more monitoring locations are required to allow us to carry out detailed assessment of landfill gas risks across the site.

## **Why have you not done it before now?**

Monitoring of landfill gas at the former Joco Pit has been conducted regularly since 1991 when, in conjunction with Kent County Council as the waste control authority at that time, boreholes for monitoring of gas were installed at several locations across the site. Since that time the Borough Council has continued to monitor gas levels at regular intervals from available boreholes.

Until recently, stable levels of gas have been detected and the Council had no cause for concern. Recent monitoring has recorded a change in gas levels in one of the monitoring boreholes. In accordance with Government Guidance, the apparent change in gas levels has prompted the Council to carry out further investigation, initially by way of a review of the information we hold. The review has highlighted the need for additional monitoring boreholes to allow a detailed risk assessment to be undertaken.

## **What gases are being produced?**

Landfill gas is produced as materials that were previously buried on site such as wood and food waste decompose. The most significant gases produced at old landfill sites are Methane and Carbon Dioxide which are the gases the Council has monitored since 1991.

## **How do you know where to look?**

We have divided the site into two zones, and residents in both zones have been sent letters. The first zone comprising the former Joco Pit is where historical records indicate the tipped material was placed and this is where we will be focusing our investigation. If you live in this area you will have had a letter telling you and asking if we can install a borehole on your property for monitoring purposes. We need to identify eight suitable borehole locations within this zone.

The second zone comprising some properties on Wye Road and Annett's Hall was not part of the former Joco Pit but was directly adjacent to it. We are not planning to locate any new monitoring locations in zone 2 at this point in time, but wish to make residents there aware of the situation.

This first stage of the inspection has been designed to give us a picture of the whole former Joco Pit site and we hope that this gives enough information to allow us to conclude that the site does not pose an unacceptable risk to health and therefore does not meet the legal definition of contaminated land. If this is proven to be case no remediation works are required.

The works proposed might show us that there are some areas that need further investigation. If this is required we will inform residents as soon as possible.

The historic maps of the site are available to view via the former Joco Pit web pages.

## **How will the council measure the risk?**

When monitoring began in 1991 eight boreholes were installed across the site as well as two just off site for control purposes. Unfortunately, over time a number of these became unusable or residents refused the Council access where they were located on private land. The works now planned will involve installing 8 new boreholes in order to assess a wider area of the site. This in turn will allow an accurate risk assessment for the site to be made. The works will involve an initial 3 month period of gas monitoring, comprising 1 month of continuous monitoring at 8 locations followed by 2 month of weekly spot monitoring. During drilling of the boreholes, we will also take soil samples from the ground and send these for external laboratory testing. We have chosen expert consultants to help us to do this. Our consultants are experts at risk assessment and they will collect information and provide a risk assessment that the council will consider when deciding whether the land is contaminated and if there really is an unacceptable level of risk.

## **What is landfill gas and what are the risks?**

Waste material placed in a landfill decomposes over time; this process generates a number of gases (collectively known as landfill gas). The main landfill gases of concern are methane and carbon dioxide.

Although landfill gas poses a very low risk on most sites it is equally true that landfill gas can pose a serious risk on some sites. The two main gases we are monitoring for (methane and carbon dioxide) can both pose serious safety risks in buildings if the gas is able to accumulate at concentrated levels. Both methane and carbon dioxide can pose a risk of asphyxiation if the gas is allowed to build up at concentrations that are high enough to displace existing air and create conditions where low levels of oxygen are present. Risk of this is considered to be greatest in houses with basements and in underground service corridors (e.g. underground manhole chambers). We are not aware of any houses with basements at the former Joco Pit site and as such consider risks from carbon dioxide to be relatively low.

Methane if allowed to build up has the potential to pose an explosion hazard. Although explosions caused by landfill gas are very rare, incidents from suspected methane from landfills have been documented in the past. At some landfills, methane can be produced at sufficient quantities to collect in the landfill or nearby structures at explosive levels. The following conditions must be met for landfill gas to pose an explosion risk;

1. The gas must be able to migrate from the ground,
2. The gas must be able to collect in a confined space at a concentration at which it could potentially explode,
3. There must be an ignition source.

As recent monitoring has recorded a change in gas levels, the Council has decided, as a precautionary measure to carry out additional investigations to provide improved coverage of monitoring wells. This will allow us to assess landfill gas conditions across the site. On the basis of the information available we do not think there is a

serious risk as we have not recorded conditions where by methane or carbon dioxide will be migrating from the ground, however we do need the additional information from across the site to allow us to confirm this.

### **What advice has the council taken?**

The council is following guidance provided by the Government and Environment Agency. We have employed experts to help us to design the site investigation and to do the risk assessments. The company we are using, Leap Environmental Ltd has significant experience of supporting councils in making decisions about contaminated land.

### **Do you want to drill a hole in my garden?**

If you live in zone 1, we will have asked you in our letter whether we may have your permission to drill a borehole and install a monitoring well in your garden. The borehole is made by a small tracked machine and is about the same diameter as a drainpipe. A continuous monitoring device will then be placed on each borehole for a period of one month, after which the monitor will be removed and a metal cover (flush fitting cover much like a water stop cock cover) will be installed, from which spot monitoring can be conducted over the following 2 months. A photograph showing what the monitor looks like is available to view on the former Joco Pit web pages.

If you live in zone 2, at this stage we are not proposing to drill any boreholes in this area. We have however notified you of the works we are undertaking so that you are also aware of what is going on.

### **Do I have to let you drill the hole?**

We need to find eight suitable borehole locations, so that we can monitor gases from across the area. We will need to install the continuous monitor and then return at weekly intervals to check the equipment and carry out spot monitoring. We hope we have permission from a sufficient number of households to enable us to do this. We hope to get a sufficient number of volunteers but we should make you aware that as a last resort, if we are unable to identify suitable location elsewhere and only if necessary we have legal powers that allow us to get access to your property to install a borehole.

### **Will you make a mess in my garden?**

We will make sure we minimise all disruption and our consultants aim to leave your garden in the condition it was when we arrived.

## **What will happen next and how long will it take?**

The council will use the information from the initial period of monitoring to decide what, if any, further investigation or remedial work is needed. If there is anything further we need to investigate then we will arrange with the homeowners affected to do this. The council has allocated a budget that will cover the investigation and a full risk assessment of the site. Our outline timetable for the initial work is given below but this might change depending on a number of factors including what we find:

- Work to install boreholes to begin late February 2018
- Continuous monitors in place to end of March 2018
- Spot monitoring to begin end of March for a period of 2 months
- Analysis of results May/June
- Full risk assessment completed by July.

We will put regular updates on the web page about progress and timing as and when we have information. We also have a dedicated email address where residents can contact us with any questions you may have. We aim to respond to emails within 24hrs where possible this is [formerjocopit@tmbc.gov.uk](mailto:formerjocopit@tmbc.gov.uk)

## **Should I have been aware of this when I brought my home?**

Solicitors will carry out checks of the local land charges register held by the Council when carrying out due diligence for a purchase. That register, however, only contains certain details. We are aware that, previously, the fact that the land was a former landfill did show up on these searches. Due to changes in the land charges regime and the way in which searches are carried out, this detail can no longer be provided through that process.

The rules on contaminated land came into force in 1990. Since that time, conveyancing solicitors should have routinely obtained an environmental report (such as Landmark, Envirocheck or Homecheck), and if that report was obtained they should have provided you with a copy or a summary of relevant information which would most likely have highlighted that the site is a former landfill.

## **Can I still sell my house?**

Anyone buying a property should be advised to complete an environmental search by their solicitor. This will flag that the site is a former landfill and may trigger enquires with the council. If we receive enquires we will give factual information about the works that are underway which may put off some buyers, depending on how they perceive risks. While the investigation is being carried out it may be more difficult to sell a property. We are aware of this and it is for this reason that we wish to complete this process as quickly as possible. When this process is finished it will remove uncertainty associated with landfill gas risk.

## **Who will have to pay for any necessary remedial works?**

We are a long way from identifying if remedial works are required. Initially the council will pay to carry out the installation of new boreholes and monitoring required to create an adequate risk assessment. This will then allow a decision to be made as to whether any work is needed to control identified risks. The council has a legal duty to apportion liability for any remediation works that may be required. In line with our duty we will carry out investigations into the people or organisations that may be liable for costs of remediation, should this be required. If we can trace the people responsible, then the council will determine liability and costs for each such person following the Government Guidance on this. However, in absence of such people then costs can be charged to the landowner. That means you might have to pay some of the costs but only if the Council decides (based on all of the available information and following advice from our consultants) that remedial work is needed and we can't pursue previous owners or polluters.

## **What other information can we see?**

The web page has links to other places you can get general information on contaminated land like the Environment Agency and Public Health England. You can also download the final versions of technical reports we have about the site.

## **How can I ask more questions?**

We have arranged for Council officers and our consultants to be at two drop in information sessions at Potters Mede on Wrotham Road at the following dates times;

Tuesday 30 January between 6pm and 8pm,  
Thursday 1 February between 7pm and 9pm.

We may also hold further resident briefings and drop in sessions if these are needed at a later stage.

We have also set up a dedicated email address where residents and other interested parties can contact us with questions not covered by these Frequently Asked Questions. We aim to respond to emails within 24hrs where possible. Please email [formerjocopit@tmbc.gov.uk](mailto:formerjocopit@tmbc.gov.uk)