**PIPERS AREA RESIDENTS’ ASSOCIATION**

18th August 2015

The Planning Inspectorate

3/20 Kite Wing,

Temple Quay House,

2 The Square,

Bristol BS1 6PN

Dear Sirs,

**Installation of a Biomass Heating System at Units 11-14, Central Trading Estate**

**Ref. APP/U3935/W/15/3103211**

We wish to object to this appeal. We believe that it should be rejected under the provisions of the Swindon Local Plan 2026, the National Planning Policy Framework 2012 (NPPF) and the restrictions on B1(c) light industrial use.

Our main objection is that the factory is situated in a railway cutting - the roof of the building can be looked down on from Devizes Road at the point where the old railway line passes underneath the road – and is in a built-up area where it is surrounded by houses, blocks of flats and businesses. When the factory was built, there was not enough room for it in the railway cutting and space had to be made by further excavating the sides of the cutting contrary to the planning permission *(letter from Chief Planning Officer, 23.07.82)*, and the surrounding buildings are very close. TT Manufacturing recently relocated from a large industrial estate on an open site, where its nearest neighbour outside the estate was a graveyard, dismantling the boiler and setting it up again at 11-14 Signal Way. The new site is particularly unsuitable for processes involving the release of formaldehyde, nitrogen dioxide, particles and particulates because it is in a confined space below ground level and the pollutants will not disperse as quickly as in a more normal site.

Policy EN7 (Pollution) of the Swindon Local Plan 2026 states that:

“Development that is likely to lead to emissions of pollutants such as noise, light, vibration, smell, fumes, smoke, soot, ash, dust, grit or toxic substances that may adversely affect existing development and vulnerable wildlife habitats, shall only be permitted where such emissions are controlled to a point where there is no significant loss of amenity for existing land uses, or habitats. . .

4.365 The policy is aimed at all forms of development including residential, retail, industrial and commercial premises, ensuring the protection of the environment from potentially polluting neighbours. In most cases this may entail controls placed on incoming development to ensure that the amenities of existing occupiers in the adjoining area are not adversely affected from potentially polluting neighbours.”

We believe that the amenities of existing occupiers will be adversely affected by the smell from this chimney and even more importantly by the fumes. Given the history of the site, which we will refer to, their quiet enjoyment of their gardens and their peace of mind will also be affected.

There is an SBC air quality monitoring point at 37 Devizes Road, about 100 metres north of the Central Trading Estate. The station monitors for nitrogen dioxide but not for other pollutants or for particles. The most recent report is the Air Quality Progress Report published in April 2014. This shows that concentrations of nitrogen dioxide at that point exceeded the Air Quality Standards in 2013, as they did in 2009, 2010, 2011 and 2012. According to SBC’s 2014 report, “under the Local Air Quality Management process, where exceedances are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP)” but SBC has not done this. Unlike all the adjacent local authorities, Swindon has not declared any AQMAs. The report shows that air quality in this area is already poor and we consider that the operation of this boiler will make it worse.

The boiler will be burning industrial waste – offcuts of MDF and laminated wood/paper/plastic products. Burning MDF, hardwood plywood, and particle board releases formaldehyde. In 2006 the International Agency for Research on Cancer, part of the World Health Organisation, classified formaldehyde as " a known human carcinogen" associated with nasal sinus cancer and nasopharyngeal cancer. Exposure to low levels of formaldehyde have been shown to cause various health effects. At concentrations above 0.1 ppm in the air formaldehyde can irritate the eyes and mucous membranes, resulting in watery eyes *("Formaldehyde". Occupational Safety and Health Administration, August 2008)*. Formaldehyde inhaled at this concentration may cause headaches, a burning sensation in the throat, and difficulty breathing, and can trigger or aggravate asthma symptoms “*(Formaldehyde Reference Exposure Levels" California Office Of Health Hazard Assessment. December 2008; “Formaldehyde and Indoor Air”, Health Canada. August 2005)*. Detailed statutory regulations are in place to protect the health of people handling MDF and particle board in the workplace. To protect its workers TT Manufacturing has installed a dust extractor. Fumes from the dust extractor frequently make their presence felt in the area with an unpleasant smell which is also of concern to residents, several of whom have notified the Environmental Health Officer about it more than once.

We will refer to the document “Biomass Heating – A Guide to Feasibility Studies” commissioned by the Department of Energy and Climate Change and published by the Biomass Energy Centre in 2011. “Step 8 – the Clean Air Act, Emissions and Emission Abatement” describes the emissions from biomass boilers and states:

Some manufacturers have boilers approved for operation in designated smoke control areas (SCA) and, *subject to the maximum concentrations of particulate matters and NO2 not being exceeded in a given area, approval for a biomass installation should be possible.* (our italics)

So approval for this type of boiler is not automatic. Please see above our comments on the air quality in this area, where concentrations of nitrogen dioxide annually exceed Government guidelines at a nearby monitoring point.

The document states on p.8:

The *complete combustion* (our italics) of wood produces emissions of fine particulates, NO2 and carbon dioxide (CO2), whereas the incomplete combustion of wood results in the release of carbon monoxide (CO), volatile organic gases, benzene and other undesirable substances some of which are carcinogenic.

Of nitrogen dioxide the document states:

NO2 is of particular concern because it is an irritant in the lungs.

Of the fine particulates (PM2.5), it states:

These particles come mainly from combustion sources, including vehicles that burn petrol or diesel, power plants and factories that burn coal, oil, gas or biomass. . . This category concerns scientists the most, because these tiny particles can slip past our bodies’ defences and end up deep in our lungs.

Please bear in mind that the factory is in a confined space in a railway cutting and the pollutants whether resulting from complete or incomplete combustion will not disperse as quickly as in a more normal site.

Step 9 of the document is headed “Chimney Heights and the Dispersal of Pollutants” and states that

The local authority will need to be satisfied that the Guidelines on Discharge Stack Heights for Polluting Emissions have been followed.

The document directs readers to “Technical Guidance Note (Dispersion) D1” which it states is available from the Environment Agency. According to a DEFRA explanation dated 2010 *(*[*http://laqm.defra.gov.uk/laqm-faqs/faq89.html*](http://laqm.defra.gov.uk/laqm-faqs/faq89.html)*)* , this note is out of print and out of date, and calculations should take into account local air quality as measured at local monitoring stations. We cannot locate any more up to date guidance and a FAQ page issued by Eden District Council in 2014 is still directing enquirers to Guidance Note D1.

In 2013 the company Royal Haskoning DHV prepared a 12 page report in an attempt to assess the correct chimney height for a proposed biomass boiler *(Stack Emissions Assessment Farholme Mill).* The company used the D1 method but described its many limitations one of which is that:

“the method is suitable where topographical effects on dispersion are not significant, typically where the surrounding terrain gradients are less than 1 in 10”.

The company also tried the “Defra Assessment Tool”, but here again the company pointed out that

“The Defra assessment screening tool has limitations for this study as the graphs upon which it is based were developed for flat terrain.”

In other words, neither method could give a meaningful result in this case, but as the chimney is already in place we can see that it is nothing like high enough to enable the pollutants to disperse over a greater area and reduce their impact at street level. As we cannot stress often enough, this factory is situated in a railway cutting in a built-up area.

The boiler must be fired up every day and fed periodically by hand. The manufacturer has acknowledged that if it is not operated correctly, “smoke” will be produced. Mr Bennett of TT Manufacturing Ltd, who explained the processes to some members of the residents’ association, says that smoke will be produced every day for up to half an hour in the morning and at the end of the day, when the boiler is being fired up or dying down. The smoke indicates incomplete combustion. But according to the document commissioned by the DECC, whether the combustion is incomplete or complete, dangerous substances will be being emitted.

The factory is situated in the Central Trading Estate. Since the estate was built, the number of dwellings surrounding it has been greatly increased by the building of houses and blocks of flats in Dewell Mews, Strouds Close and most recently Station Approach. The wide access area for the garages behind the north side of St. Margaret’s Road and immediately adjacent to units 11-14 also attracts the many children living in the road.

In 1981 and 1982, planning permission was granted for erection of industrial units in Signal Way for B1 class 3 use. Under the legislation,  a B1(c) use, otherwise known as “light industrial” must be capable of being undertaken

"in any residential area without detriment to the amenity of that area by reason of noise, vibration, smell, fumes, smoke, soot, ash, dust or grit".

As the boiler will be producing smoke and fumes surely it should not be located in an area designated for B1(c) use. The dust extractor (not the subject of this appeal) is also producing intermittently a strong and unpleasant smell. Note that it is simply the “amenity” of the area which has to be protected – there does not have to be proof that residents’ health is being affected, although we are concerned that it will be.

Residents have experience of problems with emissions from another shopfitting company, W. J. White’s, which occupied this site from 1982 to 2009 and had a dust extraction system to protect the health of their workers. The company was refused planning permission for the dust extractor three times in 1993 but they ran it anyway.  Residents who lived close to Units 11-14 at that time have referred, in their objections to the current planning application, to their previous experiences. They refer to a high-pitched noise and an unpleasant smell, to dust on the windowsills, to nose and throat irritation and asthma attacks, and to requesting visits from the Environmental Health Officer. In 2006 a report by Dust Control Systems Ltd.  commissioned by Whites stated that their dust extraction system had not been working properly, had not been safe for the workers and did not meet current legislation.

The plan attached to the 2007 closure order (attached) shows the old dust extraction unit external to the building. It is situated close to the gardens of two residents who were living there at the time and have both contracted the same unusual type of cancer of the throat. It is not surprising that residents are worried about the health effects they may suffer if the boiler is allowed to operate. Their peace of mind is certainly going to be affected. Residents have noted that there is no requirement for any monitoring of the boiler to check whether it is being used in accordance with the manufacturer’s instructions, or of the emissions, by either Swindon Borough Council or any independent body.

In their original application the company does not describe the materials to be burnt, merely referring to “wood waste material”. They have given the answer “No” to Question 16: “Does the proposal involve the need to dispose of trade effluent or waste?”. In answer to Question 22 “Please describe the activities and processes which would be carried out on the site and the end products including plant, ventilation or air conditioning. Please include the type of machinery which may be installed on site:” they have simply put “Joinery Company” and to the following question “Is the proposal a waste management development” they have answered “No”. These replies all seem to be inadequate or inaccurate.

Against Paragraph 13 of the planning application form , “Biodiversity and Geological Conservation”, the applicants have put “N/A” . However, the site is within 50 metres of the border of the Old Town Railway Cutting SSSI. The unique fossil-rich rock faces for which this SSSI was listed are vulnerable to corrosion caused by nitrogen dioxide dissolved in rainwater.. We should be trying to avoid any new source of air pollution in this area in addition to that created by the traffic passing over the bridge which forms the border of the SSSI. Paragraph 118 of the National Planning Policy Framework states that:

“proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted.”

Against Paragraph 20 of the application, “Hours of Opening”, the applicants have put ”Monday to Friday 6 – 6” but in another note to SBC they have stated that there may also be some night shifts and Saturday morning working. Residents should be able to enjoy their gardens peacefully at these times.

Taking into account all these considerations, we trust that the Planning Inspectorate will reject this appeal. We believe that it should be rejected under the provisions of the Local Plan 2026, the National Planning Policy Framework, and the restrictions on B1 (c) light industrial use. The site is not suitable for the operation of a “biomass” boiler, and we believe that the amenities of existing occupiers will be seriously affected by its operation.

Please contact us if there is any further information you would like from us.

Yours sincerely,

Colin Doubleday

Chairman

Linda Kasmaty

Secretary

Jane Milner-Barry

Committee Member

on behalf of

Pipers Area Residents’ Association

**Attached**

Map of the area produced by SBC Planning Department in July 2007 with additions and notes by Pipers Area Residents’ Association