

Notice of request for more information

Environmental Permitting (England and
Wales) Regulations 2016

Notice requiring further information

To:

Company Secretary
JM Envirofuels (Barry) Limited
Meriden House
6 Great Cornbow
West Midlands
B63 3AB

Application number: PAN-006045

Natural Resources Wales, in exercise of its powers under paragraph 4 of Part 1 of Schedule 5 of the above Regulations, requires you to provide the information detailed in the attached schedule. The information is required in order to determine your application for a permit, dated **10/09/2019**.

The information requested should be sent to the following address by **19/06/2020**.

Information should be sent to:

Waste.permittingenquiries@cyfoethnaturiolcymru.gov.uk

OR

Waste Permitting
Permitting Service (Cardiff)
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Name	Date
Kate Thomas	24/04/2020

Authorised on behalf of Natural Resources Wales

Schedule

1. Treatment activities carried out on site

Action: Please confirm the treatment activities to be carried out on site and if necessary, revise all management plans to accurately reflect the waste activities and include suitable measures to mitigate the associated risks.

Reference number	Detail
1.1.1	<p>During the site visit that took place on 03 February 2020, you advised that the only treatment activities to be carried out on site was the pre-shredding of wood and the removal of metal from sorting the wood. You advised that the pre-shredded wood was then transferred offsite for further processing to produce wood chip, and that this material was then returned to site for either storage prior to transfer or transferred directly off site to Barry Biomass. The management plans submitted with the application do not reflect this. The management plans propose that the production of wood chip is carried out on site and that treatment activities include shredding, screening and the removal of metal using eddy currents.</p> <p>For example, the Environment Management System states that shredding and screening will be carried out. Section 4.1 states:</p> <p><i>The wood recovery facility will handle wood waste using a shredder and screeners.</i></p> <p>Standard Operating Procedures, Section 3.1 states:</p> <p><i>screening will be carried out on each working day as required.</i></p> <p>All management plans must accurately reflect the waste treatment activities that will be carried out on site.</p>

2. Annual throughput, treatment and storage amounts

Action: Confirm the annual throughput, treatment and storage amounts for each waste type and revise all management to accurately reflect this information.

Reference number	Detail
2.1.1	<p>The management plans submitted with the application are unclear with regard to the annual throughput, treatment and storage amounts for each waste type.</p>

3. Fire prevention and mitigation plan (FPMP)

We have assessed the FPMP submitted (document reference "FPMP Barry, revision 5", submitted 15/08/2019) against our current guidance – "Natural Resources Wales Fire Prevention & Mitigation Plan Guidance – Waste Management, Guidance Note

16” (from here on referred to as “the FPMP guidance” in this section). Some information is either missing, unclear or does not meet the requirements of our guidance.

3.1. Site plan and layout of waste stacks on your site

We have reviewed the site plan submitted (Appendix A) in the FPMP. It is unclear how the stacks will be physically accommodated on site and there is information missing from the site plan, as required in the FPMP guidance:

Action: Revise and submit FPMP site plan to include the following information (*this could consist of location plan, site plan and drainage plans on one or more plan*):

Reference number	Detail
3.1.1	<p><i>Layout of stacks:</i></p> <p>Provide a site plan (drawn to scale) with dimensions of the site and stacks to demonstrate that the site can physically accommodate the planned layout of the site, which adheres to our FPMP guidance for stack sizes and separation distances.</p>
3.1.2	<p><i>Location of potential ignition sources on your site:</i></p> <p>Provide the location of potential ignition sources including where the treatment activities will be carried out on site.</p>
3.1.3	<p><i>Layout of buildings:</i></p> <p>Page 13 of the FPMP states: <i>Welfare and cooking take place in the canteen area, where appropriate fire extinguishers are held.</i></p> <p>Page 17 of the FPMP states: <i>the building in the permit area is the weighbridge</i></p> <ul style="list-style-type: none"> - These buildings have not been identified on the site plan in Appendix A. - The portacabin (site office) has not been included on the plan.
3.1.4	<p><i>Location of reception area, weighbridge, tipping area, processing area.</i></p> <p>These need to be included.</p>
3.1.5	<p><i>any areas where hazardous materials are stored on site (location of gas cylinders, process areas, chemicals, piles of combustible materials, oil and fuel tanks):</i></p>

	<p>The site plan includes stockpiles of combustible materials but does not include the following:</p> <p>any areas where hazardous materials are stored on site (location of gas cylinders, process areas, chemicals, oil and fuel tanks).</p> <p>Page 20 states:</p> <p><i>In addition to the wood waste, the following sources of fuel have been identified as;</i></p> <ul style="list-style-type: none"> • <i>Diesel (Red, for machines and plant) (500-2000Litres in a double skinned tank)</i> • <i>Oils & Grease (25 Litre drums stored in ISO)</i> <p><i>These are stored outside of the wood process area as shown on the Site Plan (Appendix A).</i></p> <p>These are not included on the site plan.</p>
3.1.6	<p><i>main access routes for fire engines and any alternative access</i></p> <p>FPMP states: <i>The main access for emergency services is through the main gate on the south of the site, off Wimborne Road, please refer to site plan (Appendix A).</i></p> <p>This is not included on the site plan.</p>
3.1.7	<p><i>access points around the site perimeter to assist firefighting</i></p> <p>This is not included on the site plan.</p>
3.1.8	<p><i>escape and evacuation routes around your site and within buildings must not be compromised by stack layout</i></p> <p>Escape routes not shown on site plan.</p>
3.1.9	<p><i>hydrants and water supplies</i></p> <p>Site layout plan includes location of water tank, but does not include location of hydrant (as referenced in section 7.4 on page 22):</p> <p><i>“Access to water will be from the 1 million litre site tank, a 4inch water main on site and a Fire Hydrant on David Davis Road (100m from entrance).</i></p>
3.1.10	<p><i>any watercourse, borehole or well located within or near the site</i></p> <p>The docks have not been identified on the site plan.</p>
3.1.11	<p><i>areas of natural and unmade ground, (once any infrastructure improvements are complete), on and around proposed site</i></p> <p>This is not included on the site plan.</p>
3.1.12	<p><i>the location of plant, protective clothing and pollution control equipment and materials</i></p> <p>This is not included on the site plan.</p>
3.1.13	<p><i>drainage systems, foul and surface water drains, and their direction of flow and outfall points</i></p>

	Gully adjacent to the freight train line has not been included.
3.1.14	<i>location of “off- site” emergency information pack with site plan</i> This is not included on the site plan.
3.1.15	<i>location of key receptors such as critical infrastructure, schools, hospitals, residential areas, workplaces, protected habitats and rivers within 1km of the site:</i> Local receptors included on page 8 as follows: 1 – Harris Pye 2 – Container storage 3 – Industrial 4 – Residential 5 – Dow Corning Although “5 – Dow Corning” is not included on figure 1 included on page 7. Not all receptors within 1km of the site have been included. This includes but is not limited to the following: <ul style="list-style-type: none"> - The neighbouring waste metal site (South Wales Exports Limited – permit number EPR/BB3293NH) - Local wildlife sites (LWS) - the LWS that includes Cadoxton Ponds Nature Reserve and the LWS lying southeast to the site. - Residential areas to east, north west, north east (Spring Street area), south east (Bendrick Road area) - Holton and Cadoxton Primary Schools - Barry Docks and Cadoxton train stations - Critical infrastructure also includes the main road to Barry (Ffordd Y Mileniwm) - Railway line that runs parallel to this main road. - Cadoxton River - From the site visit (carried out on 03 February), it was noted that there is a freight train track running along the side of the dock, adjacent to the site. In addition to this, there are some receptors included in “Emergency Action Plan – Appendix B of the FPMP” that have not been included in this section.

3.1.16	<p>Cylinders stored at site Page 12 states:</p> <p><i>Gas Bottles – in the CCTV unit Situating near the weighbridge, over 6m away from wood</i></p> <p>The CCTV unit has not been included on the site plan.</p>
3.1.17	<p>compass rose showing north and the prevailing wind direction This is not included on the site plan.</p>
3.1.18	<p>location of the skip and metal containers As referenced on pages 13 and 30 of FPMP but not included in site plan .</p>
3.1.19	<p>plan includes a “pump”, although it was noted during the site visit that this was not present. If this is not present, please revise your site plan accordingly.</p>

3.2 Fire Prevention and Mitigation Plan contents

The following information is missing from the FPMP as specified by Section 5 of the guidance:

Action: Revise and submit FPMP to provide the following information, that meets the standards in the FPMP guidance:	
Reference number	Detail
3.2.1	<p><i>the amount and type of waste received daily and how it is managed:</i> The FPMP states that 413 tonnes of wood waste will be received per day.</p> <p>However, no information on the amount of other combustible waste types (including plasterboard and metal) that will be received has been included.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.2	<p><i>the total amount of waste and the types and forms (e.g. unprocessed, shredded, chipped, fines or baled) that are stored on site at any one time.</i></p> <p>The FPMP does not include the total amount stored for each waste stream. The FPMP must include the total amount of waste (in tonnes) and the form of waste to be stored at any one time for the following:</p> <ul style="list-style-type: none"> - unprocessed wood - processed wood (shredded) - processed wood (woodchip) - fines - plasterboard - metal

	<p>The FPMP must stipulate the amount of waste stored in stockpiles and the Maltese crosses.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.3	<p>The site plan shows 6 stockpiles with dimensions of 30m x 20m and 1 stockpile of 35m x 13m. Although the height of the stockpiles is not included in the FPMP. It is not clear what material is to be stored in these stockpiles (if it is unprocessed, woodchip or fines).</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.4	<p><i>the maximum size of any waste pile (in m³), stipulating the maximum length, width and depth</i></p> <p>The FPMP includes inconsistent information with regards to stack sizes, including:</p> <ul style="list-style-type: none"> - Page 18 states: <i>The processed materials will be stored within the Maltese Cross configurations, 17.5m x 17.5m x 5m or 20m x 20m x 4m, each quadrant storing no more than 1250m³ (367.5 tonnes per quadrant, 1470 tonnes per Maltese Cross).</i> - Page 59 includes a photograph of the stack and shows the dimensions as 17.5m x 17.5m x 4m. - The text below this image states: <i>The dimensions of each batch shall be approximately 4 metres high, 20 metres square, with a gap of typically 6-10 metres between each Maltese cross.</i> - Page 5 states: <i>Quarantine Area:- An area designated for the storage of materials, primarily for the segregation of materials in an incident situation, but can also be used for waste processing, temporary parking, material segregation etc. is 50% minimum size of the largest stockpile on site and in this case that would be 35mx25m</i> - Table 6.1 (on page 17) includes two different example sizes of stockpiles for unprocessed wood: <i>25x20x5 (example) and (35x20x4) (example)</i> - Site plan in Appendix A shows 6 x stockpiles with 30m length and 20m width and 1 x stockpile with 35m length and 13m width. - Stack sizes (in length, width and height) for plasterboard and metal have not been included. <p>The FPMP must be clear on where processed and unprocessed wood will be stored, the dimensions of the stack sizes and the maximum amount of material to be stored (in tonnes).</p>

	<p>Action: Please provide revised FPMP (including site layout plan) that includes accurate and consistent information on all stack sizes (including the Maltese crosses). This information must include length, width and height of each stack.</p> <p>The FPMP must also consider the overspill of the Maltese crosses to ensure that the calculations on the amount of waste in these is accurate.</p> <p>The FPMP must include exact dimensions of each of the stacks that will be used to ensure that the correct separation distances are in place, in accordance with our FPMP guidance.</p>
3.2.5	<p><i>the maximum size of any waste pile (in m³), stipulating the maximum length, width and depth</i></p> <p>Stack sizes for plasterboard and metal have not been included. If these wastes are to be stored in bays, the height of the bay walls should also be provided.</p> <p>Action: Please provide revised FPMP (including site layout plan) that includes accurate and consistent information on all stack sizes (including length, width and height) to demonstrate that the site has the physically capability to store 20,000 tonnes of waste wood at any one time.</p>
3.2.6	<p><i>how each type of waste will be stored</i></p> <p>It is unclear how all waste types will be stored. It is not clear if the non wood waste will be stored loosely in storage bays or if they will be stored within containers, within the storage bays.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.7	<p><i>the maximum time each type of waste will be stored on site and how it will be managed</i></p> <p>Table 6.1 (on page 17) states the following: <i>Fines (0-20mm) Stored in open stock piles</i></p> <p>It is not clear what material the “fines” are, what the dimensions of the stockpiles are and where these stockpiles are located on site.</p> <p>ACTION: Please revise the FPMP to include this information.</p> <p>Please note: Table 6.1 states that this material will be stored for 9 months. This is in excess of the FPMP guidance maximum storage time of 1 month.</p>
3.2.8	<p><i>the maximum time each type of waste will be stored on site and how it will be managed</i></p> <p>Page 10 states: <i>This material will be removed from site within 9 months of production.</i></p> <p>Table 6.1 (on page 17) states the following: <i>Processed Wood (PW) (10- 75mm) Stored in Bays.</i></p>

	<p>Table 6.1 states that this material will be stored for 9 months. This is in excess of the FPMP guidance maximum storage time of 3 months.</p> <p>Please note: The FPMP guidance offers scope for additional monitoring methods to be put in place if material is to be stored in excess of the maximum storage times, however this is to accommodate seasonal; change or variation in the wood industry rather than everyday practice.</p>
3.2.9	<p><i>the maximum time each type of waste will be stored on site and how it will be managed</i></p> <p>Table 6.1 does not include the storage time for plasterboard or metal. The FPMP does not include measures that will be used to manage these waste streams.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.10	<p><i>A clear area must be established around the perimeter of site; this can vary depending on the layout of your site and permitted stack sizes in accordance with the separation distances as illustrated in Table 2 (this must be available at all times and identified on your site plan).</i></p> <p>This has not been included in the site layout plan.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.11	<p><i>the fire prevention techniques used, including management of hotspots (sign of potential self-combustion), monitoring, reporting, recording and actions</i></p> <p>Page 38 states: <i>Daily checking of stock piles for temperature and signs of temperature increase as well as not keeping material onsite for two weeks will minimise the potential for hot spots.</i></p> <p>Table 6.1 states that processed wood will be stored for 9 months. Therefore, the statement about not keeping material on site for 2 weeks contradicts this.</p> <p>ACTION: Please revise the FPMP to include consistent information on how long waste is to be stored on site for.</p> <p>Procedures on reporting and recording have not been included.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.12	<p><i>all combustion products and emissions (to air, land and water) from the fire and the emergency response (including the impact on people, critical infrastructure and the environment) and how they will be minimised.</i></p>

	<p>Page 21 states: <i>The mostly likely impact would be from smoke due to suppressing the fire with water. It is expected (with FRS approval) that a controlled burn would take place, whereby the impact of smoke would be substantially reduced. Smoke may cause a temporary issue for the train using the railway line for the loading / unloading of scrap metal.</i></p> <p>You should not assume that the FRS will allow a controlled burn to take place.</p> <p>Whilst the risk from smoke to the railway line has been identified in this section of the FPMP, there is no further information on procedures in place to contact the management of this line.</p> <p>The FPMP does not consider the risk of emissions to the local community and includes limited information on how emissions will be minimised.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.13	<p><i>Contact details of sensitive receptors within 1km of your site. To protect sensitive receptors, the plan should include measures that will be used to raise the alarm and to inform local residents, e.g. local school, nursing home etc.</i></p> <ul style="list-style-type: none"> - This section should be updated to include the emergency contact number for ABP to that of LPS which their 24 hour line at the Port of Cardiff - 02920 835023. - There is no information on procedures in place to notify local residents. <p>Not all receptors within 1km of the site have been included. This includes (<i>but is not limited</i>) to the following:</p> <ul style="list-style-type: none"> - The neighbouring waste metal site (South Wales Exports Limited EPR/BB3293NH) - The owner of the freight train line has not been included. - National Rail (for Barry Docks and Cadoxton train stations and train line) <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.14	<p>Site plan shows 7 x stockpiles. It is unclear if stockpiles are for unprocessed or processed wood.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.2.15	<p>Further information must be provided on what is considered "processed wood". Is this pre-shredded wood or wood chip?</p> <p>ACTION: Please revise the FPMP to include this information.</p>

3.3 Common causes of fire and preventative measures

The following information is missing from the FPMP as specified by Section 6 of the guidance:

Action: Revise and submit FPMP to provide the following information:

Reference number	Detail
3.3.1	<p><i>arson or vandalism</i></p> <p>During the site visit it was noted that the site is open at the southern point (David Davies Road). The site cannot be fully enclosed due to the freight train line.</p> <p>ACTION: Please revise the FPMP to include what measures will be in place to ensure that the public cannot access the site, from all access points.</p>
3.3.2	<p>Page 28 states: <i>On-site security comprises: locked gates, 24-hour monitored CCTV from cameras which managers can access from mobile phones. There are daily site boundary checks and fencing damage repaired.</i></p> <p>ACTION: Please revise the FPMP to include what measures will be in place to alert managers that site security may have been breached?</p>
3.3.3	<p><i>Ignition sources</i></p> <p>Section 4.1 on Page 11 states that plant including shredder will be 6m away from stockpiles.</p> <p>However, the site plan does not include a dedicated area where shredding will take place. During the site visit it was confirmed that shredding will take place depending on where there is space available on site. In these circumstances please confirm procedures in place to ensure that all plant (including the shredder) will be kept 6m from combustible and flammable material.</p> <p>Please note that the site layout plan should also demonstrate that there is space to do this.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.3.4	<p><i>self-combustion</i></p> <p>The FPMP refers to “BRE Global reports” on iso thermal self-heating. These reports have not been endorsed by the Fire and Rescue Services in Wales or Natural Resources Wales. Therefore, we cannot accept this as information that can be relied upon to support your proposals on storing waste in excess of the maximum storage times as specified in our FPMP guidance.</p> <p>ACTION: Please revise the FPMP to remove this information.</p>
3.3.5	<p><i>plant or equipment failure</i></p>

	<p>Page 7 states: <i>Should situations arise such as plant breakdown / temporary closure of outlets, contingency plans are in place to divert materials within Jack Moody Recycling sites.</i></p> <p>No provision for plant breakdown in the event of a fire or where alternative plant would be sourced from has been included in the FPMP.</p> <p>During the site visit you confirmed that plant from the neighbouring recycling site could be utilised, although agreement for this has not been included in the FPMP.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.3.6	<p><i>discarded smoking materials</i></p> <p>Page 22 states: <i>There is a strict no smoking policy on site, a designated smoking area is by the weighbridge for staff and visitors to use. The smoking area does not contain any combustible materials and there is a sand / or water filled bucket for cigarette ends.</i></p> <p>Page 29 states: <i>Covered in section 7.2. Smoking only allowed is designated area by weighbridge away from wood storage area. Shown on site plan.</i></p> <p>The weighbridge and the designated smoking area have not been included on the site plan.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.3.7	<p><i>Reaction between wastes</i></p> <p>Page 29 states: <i>Not applicable as only wood is processed and stored.</i></p> <p>This is incorrect as other waste types are to be accepted and stored on site. Consideration of this should be included in the FPMP.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.3.8	<p><i>hot loads deposited at the site</i></p> <p>Page 9 states: <i>Wastes will be checked on arrival against the details given on the waste transfer note/season ticket. If necessary, the weighbridge operator, or other suitably qualified person, will make a visual inspection of loads received in sheeted or netted containers.</i></p> <p>This states that “if necessary”, operatives will make a visual inspection of the loads. All loads should be visually inspected. Your EMS and FPMP should be revised to include suitable waste acceptance procedures in accordance with our guidance “How to Comply with your Environmental permit”.</p>

	ACTION: Please revise the FPMP and EMS to include this information.
3.3.9	<p><i>hot loads deposited at the site</i></p> <p>Section 4.3 on page 13 includes moving hot loads to quarantine area and techniques used to manage these. However, the quarantine area may also be used to store other non-permitted waste materials as per section 3.3, however the FPMP does not include procedures used to move temporarily stored waste from the quarantine area to allow hot loads to be moved to this area, as adding hot loads to other quarantined waste may still cause fire.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.3.10	<p><i>“Tramp” metal</i></p> <p>Not duly made response (dated 10/09/19) includes a photo of “bottom ash tramp material”.</p> <p>ACTION: Please revise the FPMP to include your interpretation of “tramp material”.</p>

3.4 Storage times and self-combustion factors

In accordance with Section 7 of our FPMP guidance, if you are storing materials at risk of self-combustion for longer than 3 months you must demonstrate what additional measures you will take, including monitoring the piles to reduce this risk. You must include this information in your FPMP.

To help prevent self-combustion taking place you should consider adopting the following general fire prevention principles.

Although you are proposing to store waste in excess of the storage times specified in the guidance, you have not considered general fire prevention principles in the FPMP, as specified by the guidance:

Action: Revise and submit FPMP to consider additional measures to reduce the risk of self-combustion.	
Reference number	Detail
3.4.1	<p><i>Maximum storage times</i></p> <p>The storage times in the FPMP exceed the maximum storage times in the FPMP guidance.</p> <p>FPMP guidance includes:</p>

	<p>Non-shredded or similarly treated wastes (that is wastes whose particle size has not been reduced) – FPMP guidance limits this to maximum 6 months storage time.</p> <p>Table 6.1 (page 17) in the FPMP states that unprocessed wood >75mm chips used will be stored for 9 months.</p> <p>Shredded and similarly treated wastes (that is wastes whose particle size has been reduced) – FPMP guidance limits this to maximum 3 months storage time.</p> <p>Table 6.1 in the FPMP states that processed wood (10- 75mm) will be stored for 9 months.</p> <p>Combustible fines/dusts & very small particle size wastes – FPMP guidance limits this to 1 month. Table 6.1 incorrectly states this as 3 months and states that fines (0-20mm) stored in open stock piles will be stored for 9 months.</p> <p>FPMP does not include storage time for other combustible waste types (including plasterboard and metal).</p> <p>Please note: The FPMP guidance offers scope for additional monitoring methods to be put in place if material is to be stored in excess of the maximum storage times, however this is to accommodate seasonal; change or variation in the wood industry rather than everyday practice.</p> <p>Please revise the FPMP to meet the storage times as specified in the NRW guidance.</p>
3.4.2	<p>The FPMP guidance states: <i>Materials that are at risk of self-combustion if stored for more than 3 months are:</i></p> <ul style="list-style-type: none"> • <i>green material, compost, wood and wood products,</i> <p><i>If you are storing materials at risk of self-combustion for longer than 3 months you must demonstrate what additional measures you will take, including monitoring the piles to reduce this risk. You must include this information in your FPMP.</i></p> <p><i>To help prevent self-combustion taking place you should consider adopting the following general fire prevention principles:</i></p> <ul style="list-style-type: none"> - <i>minimise stacks sizes (small stacks with appropriate separation are safer than one larger one)</i> - <i>control moisture levels</i> - <i>demonstrate good stock rotation for all stored materials and show how this is monitored and implemented daily</i> - <i>store material in its largest form prior to processing e.g. do not undertake preparatory treatments such as size reduction of green waste unless you are intending on submitting the waste to the treatment process immediately</i>

	<p>- <i>monitor and control sub-surface temperature and moisture content with a suitable thermal device (thermal probe/thermal camera) and ensure that this is capable of reaching all parts of a stack</i></p> <p>Page 12 states: <i>Unprocessed mixed Wood is visually monitored daily/weekly, IR thermal imaging gun can be used, if suspect materials are noticed</i> This implies it is only monitored if suspect materials are noticed.</p> <p>ACTION: Please revise the FPMP to be specific on the frequency of the visual monitoring – is it daily or weekly? How many times per day will this be carried out?</p> <p>Page 19 states: <i>Unprocessed wood owing to its form has been proven to be low risk and will not generate sufficient heat to combust (BRE Global reports,), when stored in the dimensions and time periods detailed above. Owing to the structure of these stock piles being large pieces of wood there is nothing on the market that can measures /detect heat in the core of these stock piles. We will carry out visual checks of these stock piles daily, and the IR heat gun can also be used as another means of monitoring.</i></p> <p>Therefore, the only monitoring of unprocessed wood will be via daily visual checks and “<i>the IR heat gun can also be used as another means of monitoring.</i>”</p> <p>The plan does not state in what situation will prompt the use of the IR heat gun or how frequent the IR gun will be used or how many readings will be taken per stockpile. The IR gun will only measure surface temperature of the stockpile.</p> <p>What measures will be used to get the temperature from the centre of the stockpile?</p> <p>ACTION: Please revise the FPMP to include this information. As per point 3.3.4 above, please remove references to BRE Global Reports.</p>
3.4.3	<p><i>reduce risk factors (e.g. exposed metal content, proportion of 'fines', mixing of materials and heat generated during treatment)</i> This has not been considered.</p>

	ACTION: Please revise the FPMP to include this information.
3.4.4	<p><i>store material in its largest form prior to processing e.g. do not undertake preparatory treatments such as size reduction of green waste unless you are intending on submitting the waste to the treatment process immediately</i></p> <p>FPMP does not follow this principle as unprocessed wood is to be stored for 9 months and processed wood is then to be stored for 9 months – as per Table 6.1 on page 17.</p> <p>During the site visit it was confirmed that wood would only be pre-shredded on site. It is not clear on when wood will be pre-shredded, length of time it will be stored for before being transferred from site.</p>
3.4.5	<p><i>monitor and control sub-surface temperature and moisture content with a suitable thermal device (thermal probe/thermal camera) and ensure that this is capable of reaching all parts of a stack</i></p> <p>Page 19 states: <i>On a daily basis each storage bay is visually inspected by the site manager for any anomalies, such as visual signs of heat, steam or vapour.</i></p> <p><i>We will carry out visual checks of these stock piles daily, and the IR heat gun can also be used as another means of monitoring.</i></p> <p>It is not clear if this section is referring to the non wood waste stored in the storage bays. ACTION: Please revise the FPMP to include this information. Please confirm the measures used to monitor and control sub-surface temperature and moisture content for non wood waste.</p>
3.4.6	<p><i>monitor and control sub-surface temperature and moisture content with a suitable thermal device (thermal probe/thermal camera) and ensure that this is capable of reaching all parts of a stack</i></p> <p>Section 6.5 includes information on monitoring processed material and fines daily with ITOM probes, however, the FPMP does not include measures used to monitor unprocessed wood or non wood waste.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.4.7	<p><i>routinely turn stacks</i></p> <p>Page 62 states: <i>Monitoring records for each Batch shall be checked every working day. Corrective actions shall be carried out if stockpile/batch core zone temperature trends move out of the target range.</i> <i>Corrective action to lower the batch/stockpile temperature may include:</i></p> <ul style="list-style-type: none"> • <i>Additional or more frequent turning/mixing;</i>

	<p>This paragraph states “additional or more frequent turning” although procedures for turning waste, including frequency is not referenced anywhere else in the FPMP.</p> <p>ACTION: Please revise the FPMP to include how often routine turning will be carried out.</p>
3.4.8	<p><i>detect and control hotspots within stacks (Note: steam is a good indicator of self-heating)</i></p> <p>Page 13 states: <i>Wood chip / fines begin to heat after production due to breathing (microbiological oxidation). Daily checking of stock piles for temperature and signs of temperature increase will provide an early warning and minimise the potential for hot spots to develop.</i></p> <p>It is unclear if daily checking of stockpiles includes unprocessed wood and other waste materials or just processed wood.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.4.9	<p><i>define the maximum storage time of all materials on site and show how this will be monitored and controlled</i></p> <p>Proposed storage times for unprocessed wood, processed wood and fines is 9 months.</p> <p>No storage times for metal or plasterboard have been included in the FPMP.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.4.10	<p>Section 2.1 – Dust generating activities of the dust management plan includes the following: <i>wind blowing across stockpiled materials (wood). In some conditions it may be necessary to cover stockpile with plastic sheeting should the material be required for a long period of time.</i></p> <p>Covering the stockpiles with plastic may increase the temperature of the wood, especially for unprocessed wood which will not be subject to continuous monitoring.</p> <p>ACTION: If you propose to cover stockpiles, please revise the FPMP to reference this and to consider the risk of increasing the temperature and include measures to be put in place to mitigate this risk.</p>
3.4.11	<p>The dust management plan includes dampening down the wood waste to suppress dust emissions. This could increase the risk of heat</p>

	<p>generation which could cause self-combustion. This risk must be considered in the FPMP.</p> <p>ACTION: If you propose to water stockpiles, please revise the FPMP to reference this and to consider the risk of increasing the temperature and include measures in place to mitigate this risk.</p>
3.4.12	<p>The FPMP proposes to store up to 20,000 tonnes of waste wood to ensure a sufficient supply to the power station during the winter months, although it is unclear on why it is proposed to store the wood for up to 9 months.</p> <p>It is also unclear if it is proposed to store all wood waste for 9 months.</p> <p>ACTION: Revise the FPMP to include a visual overview of your seasonal fluctuations.</p>

3.5 Managing waste material stacks and separation distances

The following information is missing from the FPMP or does not meet the standards specified by the FPMP guidance:

Action: Revise and submit FPMP to meet the NRW guidance on stack sizes and separation distances.	
Reference number	Detail
3.5.1	<p>The FPMP meets the requirements of the Environment Agency's Fire Prevention Plan guidance and not the NRW guidance in regard to separation distances, and 6 metre separation distances have been used.</p> <p>In accordance with our FPMP guidance, separation distances of 6 metres for the proposed stack sizes is not acceptable.</p> <p>The stack length will determine the appropriate separation distances. Using the graphs for wood chip from within the FPMP guidance the following separation distances would be applicable:-</p> <p>30m (length) x 20m (Width) – Separation distance would be a minimum of 11m for the length to the next stack and 10m separation distance for the width of the next stack.</p> <p>35m (length) x 13m (Width) – Separation distance would be a minimum of 11+m for the length to the next stack and 8+m separation distance for the width of the next stack.</p> <p>Suitable separation distances must be in place, irrespective of any monitoring that is carried out.</p> <p>ACTION: Please revise the FPMP to meet the separation distances in our FPMP guidance. Please note that failure to do so <i>may</i> result in the refusal of your permit application.</p>

3.5.2	<p><i>enable easy access for emergency vehicles around the whole site</i></p> <p>A revised site plan is required to show all buildings, freight train line, waste stored under exemptions (by South Wales Exports Ltd) on dockside, oil, fuel tank, separation distances, and access around the perimeter.</p>
3.5.3	<p><i>manage all stacks of materials that can self-combust and demonstrate suitable additional precautions if they are stored for more than 3 months</i></p> <p>The guidance states that unprocessed wood may be stored for up to 6 months. The FPMP proposes to store unprocessed wood for up to 9 months. Therefore, additional measure should be considered to prevent the risk of self-combustion. The FPMP does not include the following:</p> <ul style="list-style-type: none"> - Procedure for routine turning of stockpiles. - It is unclear if the procedure to detect hotspots extends to unprocessed wood and other materials. - Minimising external heating during hot weather by shading from direct sunlight has not been considered in the FPMP. <p>ACTION: Revise the FPMP to include this information.</p>

3.6 Enclosing Stacks Using Bays and Walls

The following information is missing from the FPMP as specified by the FPMP guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.6.1	<p>Section 6.3 on page 18 states: <i>The blocks are Class A1 rated and have a 120-minute fire resistance period in accordance with BS EN 13501-1:2002.</i></p> <p>The current version is BS EN 13501-1-2018 – this version has superseded the 2002, 2007 and 2009 versions.</p> <p>ACTION: Please revise the FPMP to include evidence that the concrete blocks are produced in accordance with the current standards.</p>
3.6.2	<p>What about the walls separating non wood waste? FPMP is not clear on how non wood waste will be stored.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.3	<p>Page 31 also states:</p>

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Gwefan/Website www.cyfoethnaturiolcymru.gov.uk

www.naturalresourceswales.gov.uk

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	<p><i>Details on concrete blocks are provided in the Appendix.</i></p> <p>No information has been provided.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.4	<p>No evidence or confirmation provided that installation method used is in line with the manufacturers recommended installation requirements.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.5	<p><i>protection from wind</i></p> <p>This has not been considered.</p>
3.6.6	<p><i>how you intend to check temperature and moisture content of all the material within the bay so that the entire volume of the pile receives representative checks</i></p> <p>Information provided on monitoring temperature for processed wood has been provided, however information on unprocessed wood or other combustible material has not been included in the FPMP.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.7	<p><i>the construction of the walls in terms of how they offer a thermal barrier and enable cooling</i></p> <p>Page 48 states: <i>Thermal radiation damage will be minimal owing to the impermeable surface and bay walls being concrete, these structures will absorb heat up to 1200oc. There is no infrastructure adjacent that could be affected by thermal effects.</i></p> <p>Are the walls at the back of the storage bays? This is not clear on the site plan.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.8	<p><i>how stock capacity will be managed and controlled</i></p> <p>This is not included in the FPMP.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.6.9	<p><i>the frequency and method of turning piles</i></p> <p><i>Corrective action to lower the batch/stockpile temperature may include: Additional or more frequent turning/mixing</i></p> <p>However, FPMP does not reference routinely turning stacks.</p> <p>What process is in place to turn stacks? How often will this be done?</p> <p>ACTION: Please revise the FPMP to include this information.</p>

3.6.10	<p>The FPMP should consider the wall separating JM Envirofuels and South Wales Export Limited. The FPMP should demonstrate how this wall is suitable in segregating waste between the two sites.</p> <p>The FPMP should include measures used to prevent a fire spreading from JM Envirofuels to South Wales Export Limited.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
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3.7 Waste Stored in Containers

The following information is missing from the FPMP as specified by the FPMP guidance:

Reference number	Detail
3.7.1	<p>Page 13 states: <i>Magnets are in use on conveyors to remove any metal (which potentially could be hot) from the shredding process and stored in metal containers.</i></p> <p>Page 30 states: <i>Metals are removed using the magnets (x2) and the eddy current separator (for non-ferrous metals) on the screener/shredder and stored in a metal skip.</i></p> <p>FPMP does not state where the conveyors, magnets or skip is located.</p> <p>ACTION: Please revise the FPMP to include this information.</p>
3.7.2	<p><i>If you have a fire, you should be able to move containers as soon as is reasonably practicable in a safe manner to prevent the fire spreading. You should set out in your FPMP the procedures you will put in place to allow this to happen.</i></p> <p>FPMP does not include this information. Metal waste is to be stored in skips and the FPMP should be revised to consider to this section of the guidance.</p> <p>ACTION: Please revise the FPMP to include this information.</p>

3.8 Seasonality and waste stack management

The following information is missing from the FPMP as specified by Section 15 – “Seasonality and waste stack management” of the FPMP guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.8.1	<p>You should demonstrate that your waste stack management is viable and that you are able to prove the suitability of materials, the resilience of the supply chain and end users.</p> <p>You have not included any information in the FPMP on this for the other combustible waste to be stored on site, including plasterboard and metal.</p> <p>ACTION: Please revise the FPMP to include this information.</p>

3.9 Monitoring and turning of stacks

The following information is missing from the FPMP as specified by Section 16 – “Monitoring and turning of stacks” of the FPMP guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.9.1	<p>Temperature in unprocessed stockpiles is not monitored.</p> <p>Table 6.1 (on page 17) states the following: <i>Unprocessed wood stored for 9 months.</i></p> <p>No information on monitoring other combustible waste types including plasterboard and metal.</p> <p>ACTION: Please revise the FPMP to include this information.</p>

3.10 Water supplies

The following information is missing from the FPMP, is incorrect or requires further information, as specified by Section 20 – “Water supplies” of the guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.10.1	<p><i>You must have sufficient water supplies available to your site for firefighting to take place and to manage a worst case scenario incident (e.g. one (your largest stack) or more stacks are on fire.</i></p> <p>Page 22 of the FPMP states: <i>Access to water will be from the 1 million litre site tank, a 4inch water main on site and a Fire Hydrant on David Davis Road (100m from entrance). There is also the availability to abstract water from the Port (subject to consent from the Port Authority and agreement from FRS).</i></p> <p>Page 26 of the FPMP states:</p>

	<p><i>Couplings on the storage tank will be compatible with Fire service equipment.</i></p> <p>During the site visit it was noted that the tank does not have any valves present to allow the FRS to access the water. If you propose to use this source as your water supply in the event of a fire, you must have suitable measures in place at all times to ensure that the FRS can access the water from the tank.</p> <p>Please note: It was also noted in the site visit that due to the freight line and the waste stored by the neighbouring site that the FRS may be prevented from accessing the site in this area and therefore maybe prevented from accessing and using water from the dock.</p> <p>If extracting water from the dock is part of the fire strategy for the site, you will need to include permission from the Dock Authority in the FPMP. You will also need to ensure that a suitable hard standing abstraction point is in place. The FPMP must also consider how the FRS will access the water with the presence of the freight line and the waste stored by the neighbouring site on the berth.</p> <p>ACTION: Please revise your FPMP to clarify the main supply of water to be used during an incident, providing detailed measures that will be in place to demonstrate that the FRS will have immediate access to this water supply and that this will not be infringed in any way.</p>
3.10.2	<p>It was also noted that this tank was uncovered and filled 2 years ago. As the tank is uncovered, the amount of water contained may have reduced due to evaporation.</p> <p>ACTION: Please revise your FPMP to include what measures will be in place to ensure that the water tank remains full, how you will monitor the level in the tank and what procedures will be in place to ensure that effective maintenance of the tank.</p>
3.10.3	<p>Due to the length of time that the tank was filled, the water may be stagnant and contain contaminants. Therefore, this water supply may not be suitable for firefighting purposes, due to the risk to the fire fighters from contaminated water.</p> <p>ACTION: Please revise your FPMP to include what measures will be in place to ensure that the water is free and remains free from contamination?</p>

3.10.4	<p>Fire hydrant</p> <p>If you propose to use water from the hydrant in the event of a fire, please provide information on the flow rates from the fire hydrant to ensure that they meet sufficient requirements to supply sufficient volume of water.</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.10.5	<p>Fire hydrant</p> <p>If you propose to use water from the hydrant provide evidence that you have permission to access this water.</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.10.6	<p>Adequate water supplies</p> <p>Section 7.4 on page 22 of the FPMP states: <i>The estimated volume of water needed to fight a wood fire has been calculated at 4hrs firefighting water requirements for site, with wood stockpiles of 3000m³ as detailed in 5.3. Wood piles in case of emergency require a rate of 5m³ or 5000 litres of water per minute of burn.</i></p> <p>This is incorrect. The FPMP guidance states: <i>A 300m³ stack of combustible material will normally require an average water supply of at least 2,000 litres a minute for a minimum of 3 hours.</i></p> <p>Therefore, a 3000m³ stack would require 20,000 litres a minute (not 5000 litres as stated in the FPMP), for a minimum of 3 hours. This equals a total requirement of 3,600,000 litres.</p> <p>“5.3” does not exist in the FPMP but table 6.1 states that the largest stack will be 3000m³ of unprocessed wood.</p> <p>Please note: The FPMP states that firewater will be recirculated. Reuse of firewater can only be determined by the fire and rescue service during an incident. Recirculation of fire water cannot be relied upon as a firefighting technique used in the FPMP.</p> <p>ACTION: Please revise your FPMP to include the correct volume of water required to extinguish a fire in the largest stack on site, based on the calculation in Section 20 of our FPMP guidance.</p>

3.11 Managing fire water run-off

The following information is missing from the FPMP as specified by Section 21 – “Managing water run-off” of the guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.11.1	The FPMP states that fire water runoff will be directed to the sealed drainage system. During the site visit you confirmed that the sealed

	<p>drainage system is directed to the interceptor owned by Associated British Ports before being discharged to sewer.</p> <p>If run-off from everyday waste activities are discharged to sewer, there must be a discharge consent in place with the sewage undertaker. To allow the discharge from this site to sewer evidence of this must be submitted to us.</p> <p>ACTION: Please submit evidence of a discharge consent from the sewage undertaker for the waste activities carried out on site.</p>
3.11.2	<p>ACTION: If you propose to contain firewater using this proposal, you must provide the following information within your FPMP:</p> <p>Written agreement from ABP and from the sewage undertaker that you have permission to direct firewater runoff in this manner.</p>
3.11.3	<p>You confirmed during the site visit that the firewater runoff could be captured in the sites drainage system (preventing it from going to the interceptor) before being pumped to the water tank.</p> <p>If you propose to contain firewater runoff using this proposal, your FPMP must include sufficient procedures that will ensure that all run-off will be contained. This must include (<i>but is not limited to</i>) the following information:</p> <ul style="list-style-type: none"> - Capacity of the sites drainage system - How the run off would be contained in the sites drainage system before it could be diverted to the tank (<i>as the water in the tank will be used for fire fighting purposes and the runoff could not be diverted to the tank before all the water has been emptied from the tank</i>). - Capacity of the tank - How the fire water runoff would be pumped into the water tank and what equipment is available on site to do this - How the fire water runoff would be removed from the tank (<i>as the volume of water required for the largest stack exceeds the volume capacity of the tank</i>). - What equipment would be available to do this. - If the equipment is permanently on site to enable you to do this in during an incident. - How you have considered potential storm surge increasing the volume of water to be accommodated in the tank during an incident.

	ACTION: Please revise your FPMP to include this information.
3.11.4	<p>Page 23 of the FPMP states: <i>the water extracted from the tank to put out a fire would lead to a reduction in water level in the tank which would then give capacity for run-off from fire-fighting – an endless loop apart from evaporation and absorption.</i></p> <p>This statement means that the fire water runoff will be directed to the tank and would be re-circulated in the event of a fire. Recirculating firewater may not always be suitable and is dependent on view of the FRS during an incident. Therefore, it is not suitable for the site to be dependent on recirculating fire water.</p> <p>ACTION: Please remove this proposal from the FPMP.</p>

3.12 Designated quarantine area

The information on the designated quarantine area in the FPMP is unclear and requires clarification.

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.12.1	<p>ACTION: Please revise your FPMP to include confirmation of the dimensions of the quarantine area and include this on revised site plan.</p> <p>There are inconsistencies in the FPMP in regard to the dimensions of the quarantine area.</p> <p>Page 5 states that the quarantine area will be 35m x 25m. The dimensions on the site plan in Appendix A show that the quarantine area is 20m x 6.4m.</p> <p>Section 7.3 on page 22 states that the quarantine area is (minimum 25m x 15m).</p>
3.12.2	<p>ACTION: Please revise your FPMP to include consistent information on the volume of waste that it can hold. The FPMP should demonstrate that the designated quarantine area has the capacity to store 50% of the largest stack.</p> <p>Section 7.3 Quarantine Area states: <i>Quarantine area (minimum 25m x 15m) will be dependent upon site operations / wind & weather conditions and is situated close to the stockpiles (6m away from stock piles) and will be 50% volume capacity of the largest pile (1500 m3) either an area on the pad or in one of the storage bays identified on the site plan.</i></p>

	<p>Page 31 states: <i>This area (quarantine) is identified on the site plan as a capacity of 2500m³.</i></p> <p>It is unclear how this volume has been calculated. If the dimensions of the quarantine area were 20m (width) x 6.4m (length) x 4m (height), the capacity would be 512 m³.</p>
3.12.3	<p>Whilst a quarantine area can be used temporarily to store waste, park vehicles etc, the FPMP you should ensure that you can remove waste as soon as practicable. Your FPMP should include procedures you will use to do this, including the heavy plant on site available for you to do this.</p> <p>Page 5 states: Quarantine Area:- <i>An area designated for the storage of materials, primarily for the segregation of materials in an incident situation, but can also be used for waste processing, temporary parking, material segregation etc.</i></p> <p>ACTION: Please revise your FPMP to include this information.</p>

3.13 During and after an incident

The FPMP must have contingency measures in place for dealing with issues during and after a fire. The following information is missing from the FPMP as specified by the guidance:

Action: Revise and submit FPMP to provide the following information:	
Reference number	Detail
3.13.1	<p>Page 32 states: <i>There is an Emergency plan in section 7.7 and Appendix B that details the actions and equipment available during an incident including FRS access and post fire requirements.</i></p> <p>Section 7.7 or Appendix B do not include measures to divert waste.</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.13.2	<p>having a plan for how you will notify those who may be affected by a fire, such as nearby residents and businesses</p> <p>Page 40 includes a list of telephone numbers for neighbouring receptors.</p> <p>This does not include residential areas – we are unsure if this includes all the receptors.</p>

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	<p>it is not clear who will contact neighbouring receptors or the procedures in place to do this.</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.13.3	<p><i>contractors that might be used to assist with additional plant for firefighting techniques, removal of waste material, containment and removal of excess water run-off</i></p> <p>No information has been provided on the measures used for contractors that might be used to assist with additional plant for firefighting techniques or the removal of waste material.</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.13.4	<p><i>Removal of excess water run-off</i></p> <p>Page 27 states: <i>The management in emergency situations and the initiation of the emergency plan – including the management of fire water, is the responsibility of the Company Director/ Site Manager. This would also include the organisation of tankers to remove excess waters from the site should the situation arise.</i></p> <p>No other information has been provided on agreements in place to provide these tankers, such as where would they come from and where would they transfer fire water to? How would the tankers collect the firewater from the tanks?</p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.13.5	<p><i>how you will clear and decontaminate the site</i></p> <p>ACTION: Please revise your FPMP to include this information.</p>
3.13.6	<p><i>the steps you must take before the site can become operational again</i></p> <p>ACTION: Please revise your FPMP to include this information.</p>

3.14 Fire risk assessment

Action: Fire risk assessment does not form part of the FPMP, and this should be a separate document.	
Reference number	Detail
3.14.1	The fire risk assessment does not form part of the FPMP, and this should be a separate document.

4. Odour management plan (OMP)

We have assessed the OMP submitted 15/08/19 (revision 1) against our current guidance – “How to comply with your environmental permit, Additional guidance for: H4 Odour Management”.

Action: Revise and submit OMP to provide the following information:	
Reference number	Detail
4.1.1	Section 7.2 - waste composition, states that odorous material may be rejected from site. The OMP should include the following: - where and how odorous material will be stored - how long it will be stored on site before being removed.

5. Dust management plan

The submitted dust management plan lacks details on identified dust sources and proposed mitigation measures for dust emissions from these sources.

Action: Submit a revised dust management plan to include (but is not limited to) the following information and produced in accordance with the Environment Agency's dust management plan template.	
<p>You can get a copy the template by emailing air.quality@environment-agency.gov.uk. (see web page https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#dust-mud-and-litter).</p> <p>Please note: the EA's template does not necessarily form a definitive dust and emission management plan and additional controls over and above what is included in the EA's template may be required depending on site specific issues.</p>	
Reference number	Detail
5.1.1	Section 2.1 of the submitted dust management plan lacks the details on identified sources, and proposed mitigation measures. For example, frequency, duration and locations for the dust emissions from shredding and screening, mitigation measures and their trigger for implementation. Information about the possible dust impact assessment from on site, e.g., shredding and screening, were not provided.
5.1.2	Appendix B of the submitted dust management plan displays the site plan including new stockpiles. However, there is no detailed design information about these stockpiles in terms of wind blowing impact (e.g. whether there are walls and if so, how high these are.)
5.1.3	Specify what the possible smallest sizes of the waste (including wood, bottom ash) that will be stored in the stockpiles. Specify what the potential impact will be from wind blowing and mitigation measures used.
5.1.4	Include suitable dust monitoring procedures.

	<p>Please note: The EA's template covers dust monitoring. There are two types of dust monitoring – visual dust monitoring and small particles like PM10 and PM2.5 monitoring. The latter affect human health, but they are not visible by the naked eye so if you see dust this will include an element of PM2.5 and PM10.</p> <p>The EA's template indicates "Detail how you will carry out routine dust monitoring. This isn't something you should do after a complaint. This is your company being pro-active to ensure it isn't affecting local neighbours."</p>
5.1.5	Source, pathway and sensitive receptor approach should be taken in assessing the potential impact to human health from the dust particles from the site. Your dust management plan must include a health impact assessment, in accordance with the EA template.
5.1.6	<p>ACTION: Please revise all management plans to ensure that they include consistent information.</p> <p>There is a discrepancy in that the dust management plan states that the site is permitted to accept 85,000 tonnes of source segregated, civil amenity and commercial wood wastes, whereas the noise management plan states that the site is permitted to accept up to 150,000 tonnes.</p>
5.1.7	<p>Measures to suppress dust include dampening down waste. The dust management plan should include:</p> <ul style="list-style-type: none"> - where the water is coming from - if the site has a mains supply - if it is from the tank, you should include how the water is accessed. - what procedures will you have in place to ensure that you have sufficient amount of water in hotter months.
5.1.8	There are no details regarding the number and types of lorries arriving/leaving site that have the potential to generate dust.
5.1.9	The submitted dust management plan outlines some control and prevention measures, dust action plan, but lacks details and specification as per Table 3.2 of the EA's template, e.g. trigger for implementation.
5.1.10	Appendix C – Process Flow Diagram submitted is of a poor quality, it is not readable.
5.1.11	<p>Consider the risks to the Cadoxton Ponds Nature Reserve.</p> <p>List of receptors in the dust management does not include Cadoxton Ponds Nature Reserve which is 160m from the site.</p>

6. Noise management plan

We have assessed the noise management plan submitted 15/08/19 (revision 3) against the Environment Agency guidance that we continue to follow – "H3 part 2 noise assessment and control".

Action: Please provide a noise impact assessment to support your claim that the noise levels generated by the site will not have an adverse impact.

Reference number	Detail
6.1.1	<p>There is reference to a noise assessment in Section 2.2.3 of the noise management plan, however this has not been submitted.</p> <p>British Standard BS 4142 should be referred to in the noise impact assessment. The noise impact assessment should include all the sources and a worst-case scenario considering possible cumulative impact should be assessed. Representative background sound level LA90 monitoring is a requirement in the BS 4142 method.</p> <p>The guidance for noise impact assessments involving calculations or modelling can be found in the link below. https://www.gov.uk/guidance/noise-impact-assessments-involving-calculations-or-modelling#noise-data</p> <p>Associated modelling files or calculation spreadsheet should be submitted with the noise impact assessment.</p>
6.1.2	<p>Section 2.2.1 indicated noise from onsite vehicle movement and activities will occur 24 hours a day, 7 days a week. This should be reflected in the noise impact assessment.</p>
6.1.3	<p>Section 6.4 of the submitted Environmental Management System (EMS) states <i>"All operations taking place within the licenced site area will be shielded by an acoustic barrier. This landscaped and planted bund will provide attenuation for any noise generated by site operations."</i></p> <p>This should be reflected in the noise impact assessment with detailed information.</p>
6.1.4	<p>Section 1.3 of the EMS states that the sites planning permission sets out the operating hours for reception and handling of wastes. (Although the Local Authority have confirmed that planning permission is not in place for the site.) It should be noted that Planning and EPR permitting are two different regimes.</p> <p>The operational hours should be reflected in the noise impact assessment accordingly.</p>

Action: Revise and submit noise management plan to include the following information:

Reference number	Detail
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6.1.5	<p>The submitted noise management plan lacks the details on the potential sources (both stationary and mobile), e.g., frequency, duration, sound power level and location of the sources that could generate noise on-site.</p> <p>The submitted Noise Management Plan is not adequate in terms of possible noise impact at receptors generated due to the onsite activities and what relevant mitigation measures will be taken if noise impact is significant according to BS4142. The Noise Management Plan should be presented in conjunction with the noise impact assessment.</p>
6.1.6	Section 2.1, there are no details regarding on-site noise sources including both stationary and mobile, their frequency & duration, sound power level and location of the activities (sources), e.g., the number and type of lorries arriving/leaving the site, onsite activities, their frequency & duration, sound power level in a normal operation day.
6.1.7	The plan states that annual noise monitoring of plant will be carried out by a competent person. More detail about the monitoring that will be carried out is required; it should meet the requirements of BS 4142.

7. Revised list of waste codes

Action: Please confirm what waste 03 01 99 relates to. Classify the waste to the appropriate code or provide suitable justification on why 03 01 99 is suitable.

Reference number	Detail
7.1.1	<p>The revised list of waste codes (submitted 01 November) includes the following:</p> <p>03 01 99 Wastes not otherwise specified</p> <p>You should not use a 99 code if there is a more appropriate code to use following the waste classification procedure, in accordance with WM3 – Guidance of the classification and assessment of waste.</p>

8. Environment management system (EMS)

We have assessed the environment management system submitted (document reference “Environment management system Revision 05” against our current guidance – “How to comply with your environmental permit” and the following information is missing.

Action: Revise and submit EMS to include the following information, in accordance with our guidance “How to Comply with your environmental permit”.

Reference number	Detail
8.1.1	<p>There is no information on the ash to be accepted included in the EMS. The EMS should include the following information:</p> <ul style="list-style-type: none"> - Nature and origin of the waste - Waste acceptance procedures in place to ensure that only non-hazardous ash will be accepted. - How the ash will be transported on and off site. - How the ash will be stored and how long it will be stored for. - Measures used to mitigate the risks associated with storing this waste. - Confirmation if the ash waste is being accepted for disposal and as well as recovery, as the list of outlets provided for this waste includes Whitemoss Landfill Skelmersdale. If the waste was sent here, it would be accepted for disposal. Therefore, the site will be accepting ash for recovery AND disposal. <p>ACTION: Please revise the EMS to include this information.</p>
8.1.2	<p>It is not clear what waste acceptance procedures are in place to ensure that only non-hazardous plasterboard is accepted.</p> <p>ACTION: Please revise the EMS to include this information.</p>
8.1.3	<p>There is limited information on the storage of single source wastes to be accepted (including glass, metal, bottom ash and plasterboard) included in the EMS.</p> <p>ACTION: In accordance with How to Comply with your Environmental Permit, please revise the EMS to include the following information:</p> <ul style="list-style-type: none"> • storage times and procedures to ensure that these times are not exceeded • how these wastes will be stored • maximum storage capacities for specified storage areas and the facility as a whole and procedures to ensure that these capacities are not exceeded • maximum storage heights to prevent or minimise the emission of dust, litter and throughput management • a procedure to identify the specific waste types stored at your facility <p>Section 4.1 of the EMS states: <i>For the other listed wastes, this material will be stored in segregated bays for bulking up for transfer off site for recovery. A loading shovel will be utilised to push material into the bays and then to load containers/ vehicles for transfer off site for recovery.</i></p>

	No other information on these waste types is included.
8.1.4	<p><i>Page 10 states: any large items deemed inappropriate will be removed and placed into a rejects container for disposal to landfill or recycling.</i></p> <p>ACTION: Please include where this container is located and what measures are in place to prevent any risks from storing this waste. Please include how long rejected waste be stored for onsite prior to removal.</p>
8.1.5	<p>ACTION: Please ensure that the EMS and FPMP are consistent with regard to maintaining secure site security, as these documents current differ.</p> <p>Section 3.2 of EMS states: <i>The condition of the fencing, gates and site office will be inspected on a daily basis as part of site management practices and recorded in a site register. Any damage will be reported to the site manager and where practicable, repairs will be carried out before the end of the working day. In the event of additional required work, it will be completed within 14 days.</i></p>
8.1.6	<p>Section 6.6 Control and monitoring of litter states: <i>"Should any problems arise with feed quality portable screens or netting will be used during shredding and other material handling operations".</i></p> <p>There is no further information on:</p> <ul style="list-style-type: none"> - what risks will be mitigated from using screens or netting - where or how portable netting will be used - what procedures will be in place to decide that screens or netting will be used - how these will be effective in mitigating the risk <p>ACTION: Please revise the EMS to include this information.</p>
8.1.7	<p>The site shares an entrance with the neighbouring site – South Wales Exports Limited. The EMS should acknowledge this and include the following information:</p> <ul style="list-style-type: none"> - how both parties can access the site in normal and in emergency situations - how waste is transported through to JM Envirofuels - how waste is segregated from South Wales Exports Limited. <p>ACTION: Please revise the EMS to include this information.</p>

9. Site drainage

We have assessed the site drainage arrangements in various documents submitted with the application. There is inconsistent information within these documents.

Action: Revise and submit EMS, FPMP and site drainage plan to provide the following information:

Reference number	Detail
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9.1.1	<p>The EMS, section 2.2 Engineering Surface water management states: <i>Surface water runoff from the access roads and the areas used for the reception, handling and storage of wood and transfer waste will be collected in the perimeter site drainage system. A series of gullies will be located along the vehicle access roads and turning areas to collect the surface runoff. The collected runoff will drain to a collection chamber.</i></p> <p>This contradicts the drainage information included in the FPMP, which states:</p> <p><i>8.1 Site Drainage and Containment</i> <i>The waste processing areas will incorporate an impermeable pavement with drainage via the above ground tank. The tank has no outlets to prevent contaminated water entering surface water (e.g. following a fire). All waste storage areas will drain to the tanks.</i></p> <p>The site drainage plan (submitted 10/09/19) does not include a collection chamber. Although the site plan includes an interceptor. It was noted during the site visit that the site's sealed drainage system is connected to the interceptor owned by ABP, which is located off site.</p> <p>ACTION: Please revise your EMS and FPMP with the correct and consistent details of the drainage arrangements on site.</p>
9.1.2	ACTION: Please revise your site plan and site drainage plans to reflect the drainage arrangements on site.
9.1.3	ACTION: Please revise your EMS to include full details of the type of interceptor that will be used and its purpose.
9.1.4	ACTION: Please provide evidence from ABP that you have permission to use the interceptor for the activities to be carried out on site.
9.1.5	<p>ACTION: Please revise your EMS to include how you will ensure that the sealed drainage system (including gullies and interceptor) is cleaned and maintained to ensure its effectiveness.</p> <p><i>Please note: the EMS should consider the risk of woodchip going to the drainage system and potentially causing a blockage and thereby preventing run off from being captured. The EMS should include measures to mitigate this risk.</i></p>
9.1.6	ACTION: Please revise your EMS to include how you will ensure that the interceptor is maintained to ensure its effectiveness.

10. Waste wood specification for biomass fuel

Action: Please revise and submit EMS to include the following information:

Reference number	Detail
10.1.1	<p>Waste wood is intended to be used in biomass facilities. If the wood is to be stored outside for long periods it will become wet. Biomass facilities have specification requirements for the waste wood that can be accepted. How will you ensure that the waste wood stored at the site will meet the specification requirements of biomass facilities?</p> <p>What will happen if the waste wood from the site is rejected by the biomass facilities? What contingency plans are in place?</p>

11. Control over the operation of the facility

Action: Please confirm that JM Envirofuels (Barry) Limited will have control over the regulated facility.

Reference number	Detail
11.1.1	<p>We note from the consultation response from Associated British Ports that you propose to assign the lease agreement of the site to “Glamorgan Recycling Ltd”.</p> <p>In accordance with “Regulatory Guidance Note No. 1 - Understanding the meaning of operator”. The operator is the legal person or organisation who has control over the operation of a regulated facility.</p> <p>Therefore, the permit holder must be the legal entity who is running the site. Please provide clarification on this.</p>

12. Permit boundary

Action: Please submit a revised site plan showing the correct permitted boundary of the site.

Reference number	Detail
12.1.1	<p>The original site plan “Barry location plan” (submitted with the original standard rule permit application) showing the permit boundary of the site is incorrect and does not accurately reflect the actual working boundary of the site.</p> <p>Currently (on paper) the permit boundary on the existing permit overlaps with the adjacent metal recycling site – South Wales Export Limited. We know that in reality there is a physical boundary between the two permitted sites, that the permit boundaries do not overlap, and that JM Envirofuels has never carried any activities on the South Wales Export Limited site.</p>

	In order to correct the permit boundary on your permit please confirm that the boundary on the site plan submitted with the original standard rule permit application ("Barry Site Layout 2") is correct.
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13. Standard operating procedures for monitoring wood waste temperature

We have assessed the Standard operating procedures for monitoring wood waste temperature document submitted with the application. Information within this document conflicts with information in the rest of the FPMP and the EMS.

Action: Revise and submit Standard operating procedures to ensure that it is consistent with the other management plans.

Reference number	Detail
13.1.1	<p>Section 2.3 appears to be in reference to unprocessed wood. Section 2.4 states that wood batches are created and once the bay is complete, that monitoring will take place. This contradicts the FPMP, which states that monitoring of unprocessed wood will not be carried out. Or has the wood been shredded, and this detail isn't included?</p> <p>ACTION: Please revise the Standard operating procedures to make this clear.</p>
13.1.2	<p>Section 3.1 states: <i>The screened material shall be formed into a bay if not delivered to the power station usually within 24 hours.</i></p> <p>This contradicts the "first in first out principle" and the storage time included in the FPMP.</p> <p>ACTION: Please revise the Standard operating procedures to ensure that it is consistent with the procedures in the FPMP.</p>