

Notice of request for more information

The Environmental Permitting (England & Wales) Regulations 2016

The Company Secretary

Tudor Griffiths Limited

Wood Lane
Shrewsbury Road
Ellesmere
Shropshire
SY12 0HY

Application number: EPR/CP3698VW/V004

The Environment Agency, 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 duly made on 12 November 2020.

Send the information to the email address below by **09/06/2021**. If we do not receive this information by the date specified then we may treat your application as having been withdrawn or it may be refused. If this happens you may lose your application fee.

Email address: john.mcclean@environment-agency.gov.uk.

Name	Date
John McClean	28/04/2021

Authorised on behalf of the Environment Agency

Notes

These notes do not form part of this notice.

Please note that we charge £1,200 where we have to send a third or subsequent information notice in relation to the same issue. We consider this to be the first notice on the issues covered in this notice.

The notes in italics that appear after information requests in the attached schedule do not form part of the notice. The notes are intended to assist you in providing a full response.

Fire Prevention Plan

You must consider the 'Fire Prevention Plans: environmental permits' guidance (updated 11/01/2021) (<https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits>), hereafter referred to as the guidance, and come to your own view as to what proposals you consider will meet the objectives to:

- minimise the likelihood of a fire happening;
- aim for a fire to be extinguished within 4 hours; and
- minimise the spread of fire within the site and to neighbouring sites.

You can follow the measures set out in the guidance and if you do so you will meet the objectives of the guidance and we are likely to approve your Fire Prevention Plan (FPP). If you do not include these measures you can propose alternative measures to meet the objectives. We will technically assess your alternative measures and, if we are satisfied that they meet the objectives, we can approve the FPP.

If your proposals do not meet the measures in the guidance, you should explain in detail the alternative measures you intend to take and how those measures can meet the objectives. This applies to each of the information requests in the attached schedule.

Schedule

Fire Prevention Plan (FPP).

1. Outline in detail how the FPP will be tested annually and demonstrate the training exercises meets the requirements Section 5 of our FPP guidance. This must address the following:

- what the training will cover
- how often it will happen.
- what staff need to do to prevent a fire occurring;
- what to do during a fire if one breaks out;
- Site specific requirements.
- How you will fully test your fire prevention plan – they will normally need to be more than a simple fire evacuation drill.
- Procedures for review and revision of the FPP

Section 2.2 of your FPP addresses testing of the plan and staff training with sub-section 2.2.2 outlining what the test will include.

You must demonstrate that the contents of this test will meet all the specific requirements of an annual test as outlined in Section 5 of our guidance.

2. In relation to inspections and certification of electrical equipment and installations:

(a) Confirm that “Fireline” are a suitably qualified and certified company to carry out electrical work;

(b) Outline the content of the Electrical Maintenance Schedule “visual inspection” to be carried every six months on the biomass building, materials recovery facility (MRF) and other site areas.

Appendix 4 (Electrical Maintenance Schedule) notes that “Fireline” carry out emergency lighting inspections and portable appliance testing. There is no evidence provided that they are accredited and certified to carry out this work.

The Electrical Maintenance Schedule proforma notes that a “visual inspection” is carried out on the biomass building, materials recovery facility (MRF) and other areas of site every six months. There is no indication given as to the scope of visual inspections with regard to electrical maintenance.

3. In relation to moisture testing of wood on site:

(a) Confirm if moisture testing is carried out on wood stockpiles prior to their transfer to the biomass plant or only on wood prior to its transfer off-site.

(b) Outline the method for testing moisture on wood and the turnaround time for results.

(c) Outline and justify the trigger moisture level which you would regard as indicating an increase in temperature of the wood that requires further investigation or action.

(d) Outline and justify the further investigation or action to be taken should moisture trigger levels indicate an increase in temperature.

The 4W Environmental Limited document responding to each FPP item in the Schedule 5 Notice issued on 9th December 2020 stated, in response to question 9(b) that “Moisture checks carried out daily. If there was a sudden reduction in moisture this would occur at the same time as an increase in temperature”.

The references in the FPP to carrying out moisture checks on wood relate predominately to the use of this technique to confirm the wood meets the moisture ranges required for product specification purposes rather than using this as an alternative measure of detecting a temperature rise in the wood piles (e.g., sections 3.2.28(viii) and 3.2.41).

You must confirm if the use of moisture checking would be used as an alternative measure of detecting temperature rises in wood stockpiles.

4. In relation to the visual assessment of biomass stockpiles:

(a) Demonstrate how the visual assessment operates as a means of detecting signs of temperature elevation.

(b) Provide a copy of the procedure for inspecting biomass stockpiles for signs of elevated temperatures and any checklist produced from these inspections.

Section 5.7.2 of your FPP notes that stockpiles will be visually monitored by staff for potential evidence of excessive heating such as steam, smoke, feelings of warmth. If hot spots are suspected, then the waste is removed to the quarantine area. There is access to a thermal imaging camera to use by trained staff if a hotspot is suspected.

Sufficient information has not been provided to demonstrate that this management system will manage the risk of self-combustion or auto-ignition in the absence of routine temperature monitoring which would not be required if stockpiles are not stored on site for longer than three months.

5. Provide a copy of the spillage procedure toolbox talk used to train staff.

The 4W Environmental Limited document responding to each item in the Schedule 5 Notice issued on 9th December 2020 stated, in response to question 10(b) that a copy of the spillage procedure toolbox talk used to train staff was attached to the response but no such document was submitted.

6. In relation to the operation of the biomass boilers:

(a) Confirm the operational hours of the biomass boilers.

(b) If biomass boilers are to be operated at periods when the site is unattended, demonstrate how their operation will be controlled to manage fire risks.

Section 3.2.3 of your FPP states that the biomass boilers will operate “continuous” although site operating hours at the biomass plant will be 09.00 – 17.00. Should biomass boilers be operated when the site is not routinely attended by staff, then you must demonstrate how fire risks are controlled during those periods.

7. State the timescale for VP Fire Safety completing firefighting training for key staff.

Section 12.1.6 of your FPP states “Going forward TG Enviro are currently looking to get VP Fire Safety to come out on site and carry out firefighting training for key staff”. No timescale is set for this activity.

8. In relation to the extent and scope of the fire watch carried out on site:

(a) Confirm that all potential sources of fire (including hot works and hot surfaces) are included in the fire watch.

(b) Confirm if any formal documentation such as a fire watch checklist is produced (and, if so, provide a copy with this response).

(c) Confirm the timescale for Tudor Griffiths agreeing with their insurance company the procedure for fire watch including equipment previously subject to hot works and submitting an updated FPP that includes this procedure.

Section 4.7.6 of your FPP states that “fire watch must be provided during and for a period of 1 hour after work”. Sections 4.9.2 and 4.13.1 state respectively “The cleaning activity will also act as part of the fire watch at the end of the working day” and “This activity [cleaning mobile plant] will also act as a fire watch at the end of the working day. It is not deemed necessary to carry out a fire watch after plant and equipment have been cleaned”.

Further information is required to clarify the extent of fire watch and any cleaning period contributing to the fire watch.

The 4W Environmental Limited document responding to each item in the Schedule 5 Notice issued on 9th December 2020 stated, in response to question 5(b) that “The procedure for fire watch including equipment that has previously been subject to hot works is currently being agreed between the H&S Manager for TG Group and the insurance company. The current draft procedure has been written in to the FPP.” A timescale must be set for TG Group and the insurance company to agree the procedure for fire watch.

9. In relation to checking waste loads arriving on site:

(a) Demonstrate how the visual checks carried out on incoming wood will identify signs of heating and prevent hot loads being accepted onto site and possibly being mixed with other wastes stored on site.

(b) Provide justification why the site thermal imaging camera would not be used to detect hot loads in incoming waste deliveries.

(c) Demonstrate that operational staff, including weighbridge operators, are trained and aware of how to find a hot load amongst incoming wastes.

Section 3.2.22 of your FPP states “A visual inspection of the load by CCTV camera will also be undertaken where possible by the weighbridge officer”. There is no information provided on what that visual inspection would be looking for or what circumstances would render the inspection not possible. More detail is required on how that visual inspection process will operate.

Although the training needs assessment records show that “signs of hot loads, what to look out for” are included in the training for the MRF, Inert and Biomass, it is unclear if the weighbridge operator is trained and aware of how to look out for a hot load.

10. In relation to management of waste on site:

(a) Demonstrate how operational procedures, the design of site, storage and handling of waste piles will operate the first in, first out policy and demonstrate good stock rotation.

(b) Demonstrate how operational staff are trained in operating the first in, first out policy.

(c) Demonstrate how operator understanding of a good first in, first out policy will allow them to know which waste stockpiles have been on site for the longest period of time and hence which stockpiles should be processed first.

(d) Update drawing, TGE/09/A, to include the maximum pile volumes and a representative drawing of the stockpiles showing the footprints of the piles.

Section 5.2 of your FPP addresses how you “Manage storage time” and notes that by processing biomass in a timely manner, you remove the need for stockpiling and ensure that the policy of first in and first out is met. Section 5.4 of the FPP references “Stock rotation policy” and again focuses on the regular processing of stockpiles to demonstrate that the first in and first out policy is achieved.

Neither section fully clarifies how operational staff are aware which wood stockpile would be present on site for the longest period of time and which should be processed first.

Drawing, TGE/09/A, shows stockpile storage areas such as Grade A loose wood, Grade A fines and Grade A chip etc. and it is not apparent from the FPP how these stockpiles will be managed and processed to ensure good stock rotation and first in, first out policy.

11. (a) Demonstrate that fire walls and bays constructed on site are designed to meet the requirements in Section 11.2 of our guidance namely to:

- resist fire (both radiative heat and flaming);

- have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.

(b) Demonstrate how the specification, construction and dimension of the walls offer a thermal barrier.

(c) Demonstrate that if waste is stored in a bay you:

- will carry out full and frequent stock rotation, ensuring you have a first in, first out policy, and how you will monitor and record this
- will check the temperatures of all the waste within the bay so that you carry out representative checks on the entire volume of the pile
- have taken into account the calculation of flame height and radiation in preventing the spread of fire between piles
- will prevent brands or lighted material moving outside the bay walls and igniting other wastes
- will keep clear a 'freeboard' space of 1m minimum at the top and sides of the walls at all times to prevent fire spreading over and around the walls
- will quickly and effectively remove wastes at risk of ignition to the quarantine area to isolate any bays with burning waste during an incident

Your response to question 15 in the Schedule 5 Notice issued on 9th December 2020 notes, in relation, to fire walls and bays that "the building design and construction has been in accordance with Building Regulations, as part of this work the building was inspected and approved by the Fire Brigade, operation has been approved by the insurers who look at fire risk".

This does not demonstrate that the fire walls and bays meet our requirements in section 11.2 of our guidance and you should justify and demonstrate compliance with each requirement of section 11.2 of our guidance in your response to this question.

12. (a) Confirm the scope and timescales for the proposed upgrade in fire detection and alarms within the MRF building.

(b) Demonstrate that the proposed upgrade in fire detection and alarms within the MRF building meet the requirements in Section 13 of our FPP guidance.

(c) In the interim period before fire detection systems in the MRF building are upgraded, justify how site security visits or continuously monitored CCTV are capable of responding quickly and efficiently to an alarm sounding in the MRF building particular during periods the site would not be routinely attended by Tudor Griffiths staff.

Although the MRF building is not the direct subject of this permit variation application, EPR/CP3698VW/V004, the FPP submitted with this application is a consolidated FPP across all the operations on the Tudor Griffiths site. In addition, a fire in the MRF building has the potential to "cause or increase the impact of fire on a site" (including the biomass plant) as outlined in Section 3 of our FPP guidance. This question on the MRF building is asked as it can impact on fire control within the biomass operation.

Should a fire be detected in the biomass building, the alarm will also be activated automatically at the local Ellesmere fire brigade and the East Midlands Monitoring Service. Section 12.1.14 of your FPP states that "it is proposed" a similar system will operate for fires detected in the MRF building but that, at the moment, the alarm would sound which would be picked up on site security visits. We require confirmation on your proposals to upgrade the alarm system at the MRF building.

Your FPP states in Section 4.1.3 that the CCTV system is monitored continuously by East Midlands Monitoring Service and in Section 4.1.4 that there are three site security visits per night when visual checks are carried out including checks on whether doors are closed/locked. Further evidence is required to demonstrate that these security visits and monitoring of CCTV are capable of responding to an alarm sounding out of normal operating hours in the MRF building.

13. Confirm the timescales for installation and implementation of the proposed new ring main to go around the biomass building and provide water in the event of fire.

Section 12.1.6 of your FPP states “TG Enviro is also developing a ring main scheme to go around the Biomass building, Biomass outdoor storage area and MRF building (installed). This system will have fire hoses at key locations around the site and will provide access for the fire brigade to 50 000 litres of water”. Confirmation is required on the timescale for implementing this system which will provide approximately 17% of the water requirements in the event of fire.

14. In relation to the polybooms which are proposed in the March 2021 revision of the FPP to retain fire water rather than the surface water lagoon proposed in previous versions of the FPP:

(a) Demonstrate that the quantity of water required to erect the polybooms will not compromise the water supply required for immediate fire-fighting on site.

(b) Confirm the number of people required to erect the polybooms, the total time required to erect all four polybooms and that sufficient people would be available for a fire event that might occur outside of normal site operating hours.

(c) Demonstrate there is sufficient lighting on site for safe and effective erection of the polybooms at night time.

(d) Demonstrate that deployment of polybooms (rather than simply checking they are present on site) will be included in emergency exercises to test the operation of your FPP.

(e) Demonstrate that the polybooms are neither constructed of flammable materials which could burn in a fire before they could be erected nor stored in a location where a fire could prevent access to them.

(f) Demonstrate that connecting multiple lengths of polybooms can be carried out in a manner that creates an effective seal to prevent the escape of fire water.

(g) Demonstrate that operational staff know which locations to erect polybooms and that these locations take into account site infrastructure to be protected (such as surface water drains).

Sections 14.1.4 and 14.1.5 of your FPP states that four 100 m rolls of polybooms will be used to retain any fire water on site. They would be installed in less than ten minutes each but require water to do so. Further information is required to demonstrate that they can be quickly and effectively deployed in an emergency situation and would not divert water resources away from fire-fighting in the early stages of a fire situation.

15. In relation to your proposed stockpile sizes (FPP, Table 11) which do not comply with the maximum pile sizes outlined in our FPP guidance (section 9.2):

(a) Justify why your proposed stockpile sizes are appropriate in delivering the objectives of a FPP to:

- minimise the likelihood of a fire happening;
- aim for a fire to be extinguished within 4 hours; and
- minimise the spread of fire within the site and to neighbouring sites.

(b) Demonstrate what additional measures may be in place to manage the risk of fire from proposed stockpile sizes that are greater than those in our guidance.

The maximum pile sizes for wood wastes stored on your site are outlined in Table 11 of your FPP – for Grade A 10 mm fines/wood fines this is 583m³ and for Grade A animal bedding 40 mm chip this is 720m³. Section 9.2 of our guidance, maximum pile sizes, states that the maximum pile sizes for wood (<30 mm) is 300m³ and for wood (30 mm – 150 mm) is 450m³. Both these figures are less than the maximum pile sizes proposed in Table 11 of your FPP.

16. In relation to the import, storage and treatment of many different types of wood in many different areas on site:

(a) Demonstrate how site operations ensure only virgin wood and source segregated grade A waste wood are burned in the biomass boilers.

(b) Demonstrate that there is no potential route for other waste woods to be hand sorted or visually sorted from other wood imports to site into the stockpiles to fuel the biomass boilers.

There are a number of sections within the FPP that indicate Grade A waste wood (and virgin wood) as the sources of wood burned in the biomass boilers – for example, Section 5.2.1, “biomass plant boilers have a continual demand for Grade A wood waste or Outgoing Virgin Chip” or Section 5.4.2, “This allows the site to process waste stockpiles regularly utilising the shred in the biomass boilers on site (Grade A only)”.

The process schematic drawing, Biomass Processing Flow Chart, appears to indicate a route by which visual inspection of “Source segregated Grade A, Grade B/C wood, virgin timber (chip), non-waste materials” can result in wood being directed to a Grade A stockpile which can then be utilised as fuel for the biomass boilers.

You must demonstrate that there are robust systems in place to ensure only virgin wood or source-segregated Grade A waste wood are burned in the biomass boilers.

Potential Impact of Biomass Building on Dispersion of Flare Stack.

17 (a) Demonstrate that the gaseous dispersion from operation of the flare stack has not been altered due to the construction, height and location of the nearby biomass building;

(b) If the biomass building has the potential to alter the dispersion from the flare stack, demonstrate how any change to dispersion of the flare’s emissions and its potential environmental impact will be assessed.

There seems a misunderstanding of what was requested by question 27 of the Schedule 5 Notice dated 9th December 2020. Your response to this question focuses on why the air dispersion report submitted in the application for the biomass plant did not consider the emissions from the flare. What was requested is an assessment of whether the new biomass plant (and associated building) which is higher than the flare stack could impact on the dispersion from the flare stack when the flare operates.