

REA response to the Environment Agency Fire Prevention Plan Consultation- March 2016



Introduction

The Renewable Energy Association (REA) is pleased to submit this response to the Environment Agency in connection to the proposals for the fire prevention plan guidance released in November 2015.

The current fire prevention guidance was issued in March 2015 (version 2) and the industry was disappointed that this document was not consulted on prior to its release as there were a number of aspects within it which were not achievable. If this was maintained in the future it would have a significant detrimental impact on the sector.

About the REA

The Renewable Energy Association represents a wide variety of organisations, including generators, project developers, fuel and power suppliers, investors, equipment producers and service providers, and companies and public sector organisations involved with the management of biodegradable wastes. Members range in size from major multinationals to sole traders. There are over 750 corporate members of the REA, making it the largest renewable energy trade association in the UK. Within the REA, its Organics Recycling Group promotes the sustainable management of biodegradable resources, covering both aerobic and anaerobic technologies. The Wood Heat Association is a subsidiary of REA, the largest renewable energy industry association in the UK.

This response comes from the Organics Recycling Group (ORG) of the REA which deals specifically with all issues relating to the collection, treatment and use of biodegradable resources. The REA consulted with its members to formulate this response.

REA views

QUESTION 1: Do you agree with our approach for a maximum acceptable duration for sheltering to be 3-4 hours?

The REA fully support the idea that all action should be taken to reduce the time of sheltering and ultimately fighting a fire within a 3-4 hour window. The nature of every fire will be very different and the time taken to extinguish each fire will be dependent on a range of factors. Time should be based on advice given by the fire service at the time of the incident.

The REA believes that a bespoke approach needs to be adopted, as the size of site, type and length of waste held on site and its burn characteristics, proximity to local residents and sensitive receptors and the time it would take to ensure people are safe, will vary from site to site.

The REA believe that the burn tests that are underway will provide a better understanding of burn characteristics which will assist in making a more informed decision in the future.

The REA are keen to understand how this provision will be enforced or regulated against.

QUESTION 2: Do you agree with the presumption that active fire fighting should be the preferred option and that all sites should be operated in a manner that allows for active fire fighting?

The REA believe that active firefighting should be the preferred option for this. It should be recognized that staff on composting and wood waste sites are neither suitably trained nor possess the correct equipment to fight fires. The local fire service is trained to carry out this activity and should be the principal fire fighting force to be used. We DO NOT seek for operators to become active fire fighters; the site's role is to work on a preventative strategy as a means of reducing the risk of fires occurring in the first place.

Sites should have the capacity to fight minor (?) fires in a limited capacity with staff suitably qualified to carry out this task. As above, it is important that the sites staff do not consider themselves as the principal firefighting task force, this has to rest firmly with the fire service.

QUESTION 3: Do you agree that the FPP must be a standalone document, so that it is very clear what has been approved and also exactly what risk control measures will be followed on site?

The REA believe that the FPP should be a stand-alone document but it needs also to be referenced within the existing site working plan. The REA believe that should also be a clear link to already well established emergency procedures. A number of the techniques noted in the current guidance are duplicated in Emergency Procedures, EMS, ISO requirements and even the Industrial Emissions Directive. The REA consider that it would be good practice for sites to work proactively with their local fire service in order that they can highlight key infrastructure and measures already in place to deal with any incident. It is imperative that the FPP needs to be readily accessible on site and understood by all staff and updated and reviewed on an annual basis.

QUESTION 4: Do you agree that these are appropriate sensitive receptors and that those within 1km should be identified in the FPP? If not please provide an explanation as to why and provide evidence to support your explanation and your view.

The REA considers that the listed sensitive receptors are appropriate. Where appropriate, site operators should liaise with the management of these known sensitive receptors (schools etc) regarding emergency procedures. Emission data should influence the impact radius as emissions from green waste will be significantly less toxic than that produced from plastics or RDF, so this needs to be taken into consideration when reviewing the impact of fires from a range of different waste management activities.

With regards to assessing the risk of each of the receptors being affected, weather conditions, in particular wind direction will largely determine the risk of a receptor being impacted by a fire outbreak.

The REA believe it is already common knowledge which receptors are most likely to be affected by a fire by considering the position of the receptor compared to the location of the site.

The REA is keen to understand how the 1km zone was arrived at and what decisions underpinned this distance being selected.

QUESTION 5: Do you agree a quarantine area of the size specified in the FPP guidance is required?

The REA strongly refute the need to impose a 10m quarantine area. There is no evidence to support such action and this draconian proposal will only act as a mechanism to shut down the sector. The

moving of burning material around the site to a quarantine area presumably using site equipment, risks the release of burning embers on to non-burning piles of material and starting multiple fires.

Assuming that “the quarantine area should be large enough to accommodate the largest pile of waste with a minimum 10m separation on all sides to the nearest pile, building or site boundary”, this would equate to a very large area of unused space. This requirement would result in site having to reduce the volume of material that they treat to such an extent that they would no longer be viable to operate.

QUESTION 6: If a quarantine area was not a requirement of a FPP, then do you consider site specific separation distances derived using bespoke heat flux calculations are appropriate? If not, what do you propose as an alternative to a quarantine area?

The REA do not feel separation distances or a quarantine area is appropriate for active composting material, they may be appropriate for storage of oversize material (the REA recognize that this material is more likely to pose a risk than the active composting fraction) If these proposals were to be implemented, processing sites would need to be significantly larger and the REA believe that this cost would fall on the site operators and as margins are slim, this would be unaffordable and unsustainable leading to sites having to close.

Additional sites would be required to make up the volume shortfall and gaining planning consent for new sites is very difficult.

QUESTION 7: Do you agree with the limit on the storage duration of combustible waste to reduce the risk of self-combustion? If not please provide an explanation and evidence to support your explanation and your view.

The REA considers that the storage duration should not apply to actively composting material, but only to material post composting. The greatest risk on a composting site relates to the oversize fraction (large woody fraction). For material such as this that is not ‘actively’ managed through turning we recommend that it should be left for no more than six months without being turned. Use of monitoring equipment for heat detection and monitoring is also a practical option for this material.

The REA considers that compost post screening that has achieved an end of waste position (through compost certification scheme certification (PAS100 and CQP)) is not liable for any controls within the FPP. This material has to reach a certain level of stability and the degree of biological activity has to be reasonably low (therefore less likely to heat up and potentially combust) and for this reason it should be excluded from the requirements.

It should also be noted that the supply of feedstock to composting sites is very seasonal in respect to volumes of material received into the site and also material leaving the site. The primary market for compost is within the agricultural sector so the ability to get this material to land is very weather dependent and the REA requests that a degree of flexibility is permitted for this reason.

QUESTION 8: Do you agree that a suitable water supply needs to be available for fire fighting?

Yes, the REA considers that a water supply should be available (but not necessarily potable water). There needs to be a discussion with the fire service as to what volume of water is required for use in tackling any fires, as potentially the disposal of this water can also pose a significant environmental

issue post application to fires. The REA recommends that the volume of water stored is limited to a sensible volume rather than requiring sufficient water to cope with a 'worst case' scenario.

The REA also recognises that many composting sites are located in rural areas so water pressures will be variable and often out of the control of the individual operator.

QUESTION 9: Do you believe that wherever possible fire fighting water should also be prevented from entering surface or groundwater? If not please explain and provide evidence in support.

The REA considers that wherever possible water should be contained, however this may not be possible to achieve on all sites. In some instances where human life, buildings and machinery are not at risk, it may be more prudent to allow the fire burn itself out rather than causing a wider pollution incident through excessive use of water.

Many sites will have sealed drainage systems in place which will prevent the escape of any contaminated water from the site.

QUESTION 10: Do you agree that these measures should be required? If not please explain and provide any evidence in support of your view.

The REA agrees that it is necessary to take certain precautionary measures to prevent the self-combustion of materials. It is important that the regulator recognises the differing risks posed by the wide range of materials within the waste and recycling sector and that each site and material is treated according to their risk profile. Composting garden waste which has a moisture of about 60% is unlikely to self-combust whereas dry oversize fraction with a fines component may be susceptible if the temperature is not monitored after it has been in storage for a period exceeding three months.

The REA would like to see greater clarity on the rule regarding monitoring of a waste pile once it has been stored for over 3 months. The REA notes the line '*If the waste has previously been stored at another waste site then the total duration of time stored at both sites needs to be taken into account.*' If waste is stored on a site for three months or more and then stored on agricultural land prior to spreading, would this waste still require the same degree of monitoring? The REA believe there are already sufficient rules outlined within landspreading deployments to ensure the quality of the material being spread and do not believe that additional monitoring requirements are required.

QUESTION 11: Do you agree with the proposed content of a site plan? If not then please provide details.

A site plan detailing all the necessary information such as water supply, sensitive receptors makes good sense. As discussed in previous questions windrow separation distances and a quarantine area will prevent the sector from functioning and these requirements need to be withdrawn at the earliest opportunity.

Existing plans already demanded by the EA will cover a great deal of what is asked for here. The REA requests that duplication of information is minimised wherever possible.

QUESTION 12: Do you agree with the maximum prescribed pile sizes? If not please explain why and state what pile sizes should be and provide evidence to support your explanation and your view.

The REA do not agree with the prescribed pile sizes. The inclusion of compost (typically with over 50% moisture content) in the same category of waste types as plastics, rubber and tyres and WEEE appears illogical. Compost is less likely to self-combust. Similarly the inclusion of paper, cardboard, textiles, metal & unprocessed wood in the same category appears perverse. The only fraction of

compost that poses a significant fire risk is that of 'the 'oversize' fraction and this is where most compost fires occur. It is not necessary to control the size of active compost which is in the process as this is regularly monitored for temperature as part of the PAS 100 compost certification scheme or permit and good practice requirements.

Oversize piles should be maintained at sensible economically viable volumes. Table 1 (on page 14 of the consultation document) places compost in the same waste box as plastics and rubber. The fire risks for these materials are very different and storage volumes for each need to be directly proportionate to the risk. The REA considers that 450m³ of oversize or screened compost is too small a volume of material to store in one pile and this volume should be decided on after the fire tests which are currently being carried out have been completed and assessed.

The amalgamation of these somewhat impossible objectives, i.e. quarantine area, stack/batch size, separation distances makes it nearly impossible for our members' business to operate. Stock pile sizes should be re-addressed following the results of the on-going fire tests which are currently taking place for various waste types.

QUESTION 13: Do you agree with the measures proposed for waste separation? If not please explain and provide evidence to support your view.

The REA consider the proposals for waste separation distances to be wholly unsatisfactory and if implemented would result in the closure of many biological treatment facilities. Site capacity for most operators would be reduced by 30% as a conservative estimate if these measures were enforced and impact on the financial viability of the majority of sites in the UK.

Additional infrastructure would be required to treat all the green waste currently being treated and gaining planning consent for new sites would not be possible.

The REA, with other industry representatives, has already raised concerns regarding this new proposed rule. We welcome however the update that the Environment Agency informed us about titled '*Biowaste Treatment sites and Fire Prevention Plans*' (FPPs, which states, '*we will not specify a distance between windrows but would expect a digger to be able to gain access to the windrows throughout the process*'). This effectively takes away this restriction but also demonstrates the lack of knowledge and experience that went into writing drafting these proposals.

QUESTION 14: Do you agree that a suitably designed and constructed fire wall can provide adequate separation between piles while enabling fires to be actively fought within 3-4 hours?

Whilst the REA recognises that for some materials (such as plastics and highly flammable materials) fire walls can provide adequate separation, the REA do not support the requirement of these for composting. The REA requires the regulator to take a proportionate approach to fire prevention with sites who are taking a risk based approach to preventing fires on sites.

QUESTION 15a: Do you think that we should specify minimum standards for fire walls in the FPP guidance? Please explain what those standards might be.

As with Q14, the REA does not support any additional cost burden when a lower cost and more practical solution can be administered which confers the same benefits.

The REA believes that a "one size fits all" approach cannot be attributed to any aspect of FPPS, as a more bespoke approach needs to be taken on this subject. Every organics recycling facility is unique

and a site specific approach should be taken. The REA would like to see guidelines given to local Environment Officers allowing them to deviate from any head office guidance if required.

QUESTION 15b: If you do not think that we should include specific minimum standards for fire walls do you think that the design should be left to an appropriately qualified person from the 'Red Book' and the Loss Prevention Certification Board?

As with Q14, the REA does not support any additional cost burden when a lower cost and more practical solutions can be administered which confers the same benefits. If however for materials other than compost, a fire wall is deemed to be the most appropriate solution, then the design should be made by a suitably qualified person.

QUESTION 16: Do you agree that storage within a building presents additional challenges and that we must require all buildings to have an appropriately designed and installed detection/suppression system? If not, please explain and provide evidence.

The REA agrees that storage of combustible materials within buildings does pose additional risks. The REA do not agree however that all buildings storing bio-wastes require a suppression system to be installed. This needs to be risk assessed to determine the needs of different buildings and materials stored within it. Materials such as un-shredded and shredded green waste should be considered as 'very low' risk and not categorised in the same way as plastics. If the process is 'managed' as part of the existing process control such as the turning of windrows within a building, then this also reduces the fire risk considerably.

QUESTION 17: What do you consider to be appropriate qualifications for someone designing the storage layout and detection/suppression system within a building?

Guidance from insurers, the fire service or following existing industry standards should be sought here taking into account site specifics and materials that are to be stored. This information should be communicated to The Environment Agency via the local officer and deviations from the guidance agreed with them directly.

QUESTION 18: Do you agree with all these risks and measures? If not please explain and provide evidence of suitable alternatives.

The REA agree with the measures suggested. This is not a significant issue for biodegradable wastes but more relevant to mixed waste streams.

The REA are not opposed to sites highlighting the potential causes of a fire on their site and the control measures which could be put in place to reduce this risk. However, in a number of circumstances, not all of the 11 potential causes of fire listed in the consultation will be relevant to a site. For example the use of industrial heaters is site dependent. Therefore it is necessary that any requirement to list risks and control measures to fires considers that the list is not finite.

QUESTION 19: Do you agree with the approach indicated above about the acceptable areas for deviation from the minimum standards? If not, please explain and provide evidence.

The REA do not agree with the approach for some of the parameters listed. As previously mentioned, the use of fire walls or separation distances for actively composting material is not appropriate. Neither is the requirement for fire suppression equipment in every building that stores waste regardless of the risk it poses.

Fire Prevention Plans – REA response

The REA are concerned that the comments in the consultation which state that ‘out of 80 FPPs which have been reviewed, only 4 have been approved’. This means that currently the Environment Agency believe that 95% of sites do not have sufficient measures in place to prevent a fire. This assumption is based on opinion and not any scientific evidence and we do not consider that the EA are suitably qualified to make judgements on fire safety but leave this to the fire service who are much better qualified to comment on this subject.

The REA believe that these standards are far too prescriptive and categorize all waste operators as the same. In many cases they are not achievable nor appropriate, taking into account the relatively low risk of a fire, and do not give any consideration to additional control measures that have been risk assessed and proven to mitigate the risk of a fire to people and the environment.

This ‘generic’ approach clearly shows that The Environment Agency wish to implement a “one size fits all” approach that is not supported by any scientific evidence that we have been presented with. We hope that the EA consider the feedback from the REA and review the requirements along a risk based approach, as currently it is likely that well managed and compliant operators will be penalised unfairly.

~ End of REA statement ~