Fire prevention plan consultation

Proposals for the fire prevention plan guidance

November 2015

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We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

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Executive summary

The Environment Agency released the fire prevention plan guidance in March 2015 which built on earlier guidance aimed at reducing the fire risk at sites storing combustible waste. The guidance was in response to a number of high profile fires at wastes sites and a joint action plan between Defra and the Environment Agency to tackle waste crime. The fire prevention plan guidance required permitted waste sites storing combustible waste to have a fire prevention plan.

When the guidance was issued we said that we would undertake a consultation in Autumn 2015 and subsequently review the guidance.

The Environment Agency is now hosting this consultation which sets out the standards in the guidance we are proposing to amend and what we propose remain unchanged. This consultation has also given us the opportunity to set out the rationale and key principles behind the guidance. We are asking for your comments on these proposals.

Contents

1. About this consultation

This document explains why we are consulting and what we are consulting you on. It is designed to help you understand and comment on our fire prevention plan (FPP) guidance.

1.1. Why are we consulting?

In October 2013 we published our first technical guidance aimed at preventing fires at permitted sites storing combustible wastes. The current guidance was issued in March 2015 (https://www.gov.uk/government/publications/permitted-sites-fire-prevention-plans) (the FPP guidance).

We said we would reassess our guidance. We have done that and this consultation sets out our proposals. We have come to the view that most of the requirements remain necessary and proportionate to reduce the risk of fire, minimise the consequences of any fire for people and the environment and provide clarity to industry and others. However, we are proposing some changes to the requirements stipulated in the current guidance. We would like your views both on the things we intend to change and those we are proposing not to change.

The Environment Agency, the Fire and Rescue Services, local councils, Public Health England and the Health and Safety Executive all have a role in the regulation of, or advice on the risks posed by fire. We each have specific responsibilities in relation to fire prevention and we want to work with our partners to effectively prevent and control any impact of fire. Our role is to seek to ensure the activities we regulate do not pose an unacceptable risk of pollution, including harm to human health. It isn't to advise on fire safety such as the number or location of fire extinguishers, means of escape or preventing fire spread to other buildings.

1.2. What are we consulting on?

The consultation covers three areas:

- general considerations and the need for the guidance
- standards in the guidance we consider should remain unchanged
- standards in the guidance we consider should be amended

1.3. We want your views

We think that this consultation will be of particular interest to:

Operators, trade associations and business: this is your opportunity to ensure that the guidance works for you and your industry but also provides the necessary protection to human health and the environment. We would like any suggestions you have on our principles and standards of the FPP guidance.

Other regulators, the public, community groups and non-governmental organisations with an interest in environmental issues: this is your opportunity to ensure that the guidance provides the necessary protection to human health and the environment, whilst still being workable for industry.

2. General considerations and the need for the guidance

This section details the background to the guidance and the principles behind the minimum standards.

2.1. Need for the guidance

The Environment Agency has a regulatory duty to protect people and the environment. We provide technical guidance to operators to ensure that they know what we consider to be the minimum regulatory standards, and these are the standards which we expect them to follow on site. If an operator does not follow these standards then we can take enforcement action to require them to follow them.

The FPP guidance sets out the minimum regulatory standards which we expect operators of permitted waste sites storing combustible waste to follow to ensure that the site causes minimal risk to the local community.

In formulating and reviewing the guidance we have taken into account the Waste Industry Safety and Heath (WISH) guidance[1]. The WISH guidance provides general advice on a variety of matters to be considered in relation to combustible waste.

In addition to the WISH guidance, we have drawn on our considerable experience of regulating waste sites and data collected in our response to waste fire incidents. Given the serious impact on the environment that fires at waste sites can have, a precautionary approach which is clear to understand and regulate is justified. We will continue to evaluate any relevant information that becomes available and consider what, if any, revisions are needed to our guidance in the light of that in the future.

We are co-funding a series of "waste fire burn tests" alongside WISH in the winter of 2015/16. These tests will give us a variety of useful data on the behaviour of waste when it burns which may influence the standards in future revisions of our FPP guidance. We would expect the conclusions of these tests to be available in late 2016. Following the publication of these conclusions we will review the guidance to see if any changes are necessary.

Fires at waste sites produce smoke which can be harmful to human health. Smoke contains a variety of harmful emissions including asphyxiants and irritants. Symptoms of exposure to smoke include sore eyes, runny nose, sore throat, coughing, difficulty breathing, nausea and vomiting. All people can suffer from the effects of smoke however the most vulnerable include the elderly, children and those who already have a respiratory illness, for example asthma and bronchitis.

In most cases these effects are temporary and the symptoms pass, however the health impacts can become more severe and are less likely to be temporary when there is sustained and increased exposure.

In all but the smallest fires, we consider there is a potential that people can be affected within a radius of at least 1km of the site. We have drawn this conclusion from air quality monitoring data taken during 25 waste fires between 2009 and 2015 and in consultation with Public Health England.

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[1] Waste Industry Safety and Health (WISH)

WISH has a non-statutory advisory role to promote best practice guidance to the waste industry. It is made up of representatives from the waste industry, HSE, Chief Fire Officers Association, EA and PHE.

Our FPP guidance sets out the minimum regulatory standards that we believe are necessary in order to:

- prevent waste fires
- reduce the scale and duration of waste fires
- reduce the impact of smoke by removing some acid gases and particulates by the application of water sprays.

2.2. Who the guidance applies to

The guidance applies to all operators of permits, and those applying for permits under the Environmental Permitting (England and Wales) Regulations 2010 who store or treat combustible waste, irrespective of the tonnages of combustible waste they manage.

We also recommend that operators of lower risk activities, such as those exempt from the requirement for a permit, follow the principles of the guidance.

The guidance does not apply to sites which are:

- solely landfill, inert or liquid waste sites
- for substances stored under the Control of Major Accidents Hazards Regulations
- businesses which deal with non-waste combustible material
- for storage of hazardous waste, apart from waste electrical and electronic equipment (WEEE) containing plastic

2.3. What is our approach?

The first priority is to prevent fires, but when they do occur both the impact on people and the environment should be reduced.

Preventing waste fires

We believe that if all permitted waste sites that store combustible materials followed the minimum regulatory standards in the guidance, the number of fires that do occur would be significantly reduced.

Reducing the scale and duration of waste fires

Despite taking appropriate preventative steps, a fire may still occur. Should that happen, the standards in the guidance are designed to reduce the impact. We consider that measures should be in place with the aim of reducing the incident duration to a maximum of 3-4 hours with active fire fighting. This 3-4 hour time scale takes into account standard precautionary public health advice provided during a fire including sheltering indoors and keeping windows and doors closed. We consider that 3-4 hours is the maximum period of time vulnerable members of the local community can be reasonably expected to shelter.

Active fire fighting means a variety of techniques used to stop a fire burning. It does not just mean the application of water by the Fire and Rescue Service. We expect every site to be able to undertake active fire fighting. The techniques, which are often used in conjunction rather than isolation, include:

- the use of water or foam via hoses or designed suppression system
- covering the burning waste with soil or other suitable material to limit oxygen supply
- breaking apart the burning pile to allow water/foam to penetrate
- removing unburnt material from next to the fire or moving the burnt material to reduce the fuel available

The alternative to active fire fighting is to allow for a controlled burn. With a controlled burn the incident is likely to extend beyond an acceptable and reasonable time for sheltering. It may continue for several days or longer. The impact of the smoke on the local community is likely to be greater, which would lead to more risk to public health.

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

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?

3. Standards in the guidance we consider should remain unchanged

We do not intend to amend the existing guidance unless specifically mentioned in section 4 of this consultation paper. In this section we set out our view on certain aspects of the guidance and associated standards that have been raised with us by industry and others.

3.1. The requirement to have a plan

Modern permits require operators to have a satisfactory written management system. Most of the management system forms a dynamic document, which can be changed and updated by the operator at any point during the life of the site. However, there are certain elements of the management system, for example the fire prevention plan (FPP), which we believe are so critical that they must be approved by us before the permit is issued or varied. This also means that if the document is amended, the new version will require approval.

Permit holders who store or treat combustible waste will have a written FPP which has been approved by us. The FPP must assess the risk of a fire occurring on site and identify the measures that will be put in place to prevent it and minimise the impact of any fire should one occur.

We believe that because the FPP is such a critical document designed to safeguard the public and the environment it must be a standalone document. We expect an operator to demonstrate that all staff and contractors working on the site have read the FPP and that they follow it on site on a daily basis. The FPP guidance sets out what the FPP should contain.

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?

3.2. Sensitive receptors

We believe that a FPP must list all sensitive receptors extending out through 360 degrees, to a minimum of 1km from the site boundary. We have air quality monitoring data from 25 waste fires which have occurred between 2009 and 2015 which show that during a fire, sensitive receptors are most affected within 1km of the site.

Sensitive receptors include:

- human: schools, hospitals, nursing and care homes, residential areas, workplaces
- critical infrastructure: roads, railways, bus stations, pylons, utilities, airports
- environmental: surface and groundwater, protected habitats and air quality management areas

In addition to recording all sensitive receptors, we expect the FPP to assess the risk of each of the receptors being affected. This could include splitting the area around the site into sectors so that an operator knows which receptors could be impacted depending on the weather conditions at the time. This is important as it may change the strategy during a fire.

It must also take into account the key asphyxiants and irritants anticipated in the smoke as well as contaminants expected in any firewater. The FPP must set out each risk and explain how the measures will contribute to delivering the objectives described in section 2.3.

All sensitive receptors must be clearly identified on a scale map as part of the FPP.

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.

3.3. Quarantine

All sites storing waste in the open must have a designated quarantine area. This is an area into which burning material can be moved to, so as to extinguish it. It can also be used to move piles of unburnt waste, adjacent to a fire, in order to prevent spread.

One reason for the need for a quarantine area is that the 6m separation distance between piles (see section 4.3 on pile separation) is unlikely, on its own, to be big enough to prevent fire spreading to adjacent piles. This means it is likely to be necessary to move piles adjacent to the fire in order to minimise this risk. 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.

For operational reasons an operator may want to keep the location of the quarantine area flexible. In which case, all areas which the operator could identify for use as a quarantine area should be marked on a site plan. At all times there must be one area clear which has the minimum size and separation distance. There needs to be a system on site to ensure everyone working there or visiting knows where the quarantine area is and that must be kept clear.

We consider that a quarantine area should be a requirement of a FPP. We considered, as an alternative approach, increasing the separation distances between the piles of waste using bespoke heat flux calculations for different wastes. That is not our preferred approach because it could be difficult to apply in practice and would limit any changes the operator wanted to make to the waste mix on site.

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

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?

3.4. Storage duration and seasonality

Stockpiling of any combustible wastes for more than a short period of time represents an unacceptable risk of fire. There have been examples of wastes fires where a contributory factor was waste being moved from one site to another when it may already have started to degrade. Multiple periods of storage leads to an increased risk of self-combustion. We believe that all operators must have a business model to control inputs and outputs to limit the time waste is stored and encourage its movement to the final recovery or disposal destination. This would include appropriate contingency mechanisms for all combustible waste brought onto site.

Normally we would not expect wastes that are capable of self-heating to be stored for longer than 3 months. The maximum storage duration for any combustible waste is 6 months. The only exception to this may be a well managed compost operation which in some circumstances requires extended storage beyond this period. This should be justified and would require approval from us as part of the overall FPP.

For waste stored longer for than three months there are additional measures required to be followed. See section 3.6 on self-combustion.

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.

3.5. Water supply and containment

We believe that the site should be operated and managed in a way that enables active fire fighting, as this may reduce the duration of a fire. The use of water to extinguish a fire is part of a number of active fire fighting techniques.

In order to enable active fire fighting, a suitable water supply (volume and pressure) needs to be available. Wherever possible, fire fighting water should also be prevented from entering surface or groundwater. We believe that in the majority of cases this can be done through appropriate containment and then appropriate disposal or allowing discharge to the foul sewer.

Any firewater which is contained on site must be disposed of to a suitably permitted facility.

We recognise that in an emergency situation the risk to humans from the fire may mean that environmental compromises are justified and therefore it will not always be possible for all fire water runoff to be contained.

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

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.

3.6. Preventing self-combustion

Self-combustion occurs when a material, which is capable of self-heating, is allowed to generate heat at a faster rate than it can be lost to the surrounding environment. The temperature continues to rise in the material, and as it does so, it speeds up the rate of reactions releasing even more heat, until eventually the material reaches auto-ignition temperature. The material is then said to have undergone self-combustion.

The mechanism by which heat is generated is known as an exothermic reaction. There are many different exothermic reactions which cause self-combustion. These include chemical oxidation and also those which are driven by microbial degradation. The majority of wastes covered by this guidance are capable of self-heating.

For wastes which can self-heat, additional measures need to be contained in the FPP. These include monitoring if the waste is stored for longer than three months. The monitoring of temperature and moisture content allows for the identification of conditions that may give rise to self-combustion. This will allow an operator to intervene to prevent self-combustion.

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.

As part of the monitoring requirement we require an operator to set trigger levels. These are temperature or moisture levels when an operator will take action to reduce the risk of self-combustion. There should be details of the trigger levels and the action which will be taken if these are reached in the FPP.

We are proposing to retain the monitoring requirements already set out in our guidance in order to prevent self-combustion for waste stored for longer than 3 months:

- defining the risks with storing each waste stream and implementing a strategy which reduces the risks taking into account the form of the waste, the degree of contamination, the temperature and geometry of the pile
- monitoring sub-surface temperature and moisture content with a thermal probe or other device and ensure that this is capable of reaching the core of the pile or bale
- demonstrating a sampling and testing protocol to ensure those areas of the pile or bales most likely to be at risk are routinely monitored and that the sampling or monitoring is representative.

- defining trigger conditions and explaining what actions will be taken if any of the trigger conditions are reached.

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

4. Standards in the guidance we consider should be amended

This section details any changes we are proposing to the standards in the current guidance.

4.1. Site plan(s)

We believe that an FPP should have separate plans to show the site layout and to identify sensitive receptors (see section 3.2). We intend to amend what needs to be on the site plan. We consider a site plan must now detail:

- layout of buildings
- areas where hazardous items are stored on site (gas cylinders, chemicals, combustible waste, oil and fuel tanks, processing areas and machinery (static or parking areas)
- all access routes to the site both vehicular and pedestrian
- processing/treatment equipment eg shredding, baling, conveyors
- hydrants and water supplies
- weighbridge, wheel wash etc
- areas of permeable and impermeable surface
- drainage system, containment tanks and direction of flow
- layout of the piles/bays and including separation distances
- fire walls (optional)
- quarantine area
- detection and suppression equipment (optional)
- boundary fencing
- CCTV (optional)
- direction of north
- extent of permitted area

There may need to be more than one plan to show all the information clearly.

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

4.2. Pile sizes

We require sites dealing with combustible waste to separate waste into discrete piles and each pile to be of a maximum size for several reasons. These are to:

- prevent self-combustion in wastes which can self-heat by enabling effective heat dissipation
- enable the duration of an incident to be controlled in a maximum of 3-4 hours
- access all sides of the pile easily and to remove either burnt or un-burnt waste to a quarantine area during a fire
- minimise the risk of pile collapse and instability during a fire
- enable standard plant and equipment to easily access waste in the pile

The pile sizes in the FPP guidance document came from a multi-Agency document "Safe storage - combustible materials: prevent and control fire: PPG 29" which we consulted on in 2010. These

standards were then adopted, largely unchanged, into "Reducing fire risk on sites storing combustible materials; TGN 7.01".

One significant change in piles sizes between TGN 7.01 and current FPP guidance relates to wood piles. For both processed and unprocessed wood, we reduced the maximum pile sizes. Unprocessed wood presents a similar fire risk to other combustible waste like paper and cardboard, and so the height and size of the piles are now consistent with other similar combustible materials.

For this reason we have reduced the maximum acceptable pile height for unprocessed wood to 5m and the maximum pile volume to 750m^3. This has the added benefit of enhancing heat dissipation from the pile, reducing the likelihood of self-heating resulting in a deep seated fire in the pile.

Similarly, the reduced pile sizes for processed wood (a material more susceptible to self-combustion) enables more rapid heat loss from the piles and encourages wood to be stored on site in its largest (unprocessed) form.

Reducing the maximum height of the pile of unprocessed wood from 10m to 5m, allows for the use of standard machinery to safely move waste during an incident. It also allows standard 2-3m probes to be used to monitor the centre or core of the pile for the signs of self-heating. We have set a maximum height, length/width and volume for each pile depending on the waste type and the degree of processing in table 1. We have added standards for mixed unprocessed waste, compost and metal waste to the table. We have also removed the maximum area as it is covered by the maximum length, width and volume.

These standards are now only applicable to waste stored in the open.

Table 1 - Updated maximum pile sizes

Waste type	Height (m)	Length/width (m)	Volume (m^3)
Processed wood including shavings, sawdust, chips and pellets	3	10	150
Plastics **Rubber/tyres** **RDF & SRF** **Fragmentiser fluff** **Compost** **Mixed unprocessed waste** **WEEE containing plastics including fridges, computers and televisions**	5	20	450
Paper **Cardboard** **Textiles** **Unprocessed wood** **Metal**	5	20	750

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.

4.3. Separation distances

We believe that a single standard separation distance can be applied to all of the waste streams covered by this guidance when waste is stored in the open.

The standard separation distance between adjacent waste piles and buildings or compressed/flammable gas is 6m.

We are proposing to reduce the separation distance for WEEE from 15m to 6m, and to remove the additional separation of 20m required for multiples of 16 piles of all waste types.

The 6m separation distances are designed to:

- reduce radiant heat transfer from the pile on fire to an adjacent pile to reduce fire spread
- allow for the access and practical application of Fire and Rescue Service equipment to add water or foam
- enable operators to actively fire fight from all sides and use plant to move half a waste pile to the quarantine area within one hour to reduce the fuel available to a fire

For a flaming combustion fire we would expect that for the majority of waste types the time that fire takes to spread between piles with a 6m separation between piles would be approximately 30-60 minutes with no active fire fighting. The 6m minimum standard in conjunction with the quarantine area provides practical means and time to prevent the fire spreading and to take active measures to prevent spread.

In section 4.4 we are proposing that the separation distance may be able to be reduced if there are suitable fire walls in place. Also see section 3.3 in relation to quarantine areas.

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

4.4. The use of fire walls

We are intending to clarify within the FPP guidance the technical standards for the use of appropriately designed and constructed fire walls as an alternative to physical separation.

Fire walls can be used where they can be demonstrated to provide equivalent protection to the spread of fire to the 6m pile separation distance. The fire walls should be designed and constructed by an appropriately qualified person in accordance with the 'Red Book' (www.redbooklive.com) and the Loss Prevention Certification Board.

Such walls do not allow the access provision around waste piles and this is a limitation of their use. For this reason an operator needs to consider how to undertake active fire fighting when access to and movement of waste is more limited and detail their active fire fighting plan within their FPP.

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?

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.

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?

4.5. Storage in a building

Fires involving waste stored in a building represent greater risks and challenges compared to those where waste is stored outside in the open. In most cases a waste fire in a building will have limited oxygen, which causes incomplete combustion. This causes the chemical constituents generated during combustion to change into ones which are more harmful. In some situations heat from the fire is reflected back into the building from the walls and the roof which can lead to a more intense fire which can also spread more rapidly.

In the event of a fire within a building smoke will still escape. The Fire and Rescue Service are unlikely to enter a building to tackle a waste fire unless there is an immediate risk to life. We believe that it is important that our guidance reflects this and we therefore expect that wastes stored within a building are stored in such a way that a detection and suppression system will enable any fire to be extinguished within 3-4 hours. The system must be designed by an appropriately qualified person.

We recognise that buildings vary significantly in terms of how they are constructed and whether or not they are multi-storey. We have therefore removed the requirement to follow the pile sizes and separation distance standards. Instead we expect the pile sizes and separation distances to form part of the overall system designed and installed by an appropriately qualified person.

We are proposing to reference the 'Red Book' (www.redbooklive.com) and Loss Prevention Certification Board (LPCB) in terms of appropriately qualified persons and specifications for waste storage and suppression systems.

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.

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

4.6. General actions to minimise fire risk

All FPPs should assess the risk of fire and detail the measures in place to prevent, detect, suppress, mitigate and contain a fire.

Table 2 should be used to help produce an assessment of the site. The causes of fire identified within the assessment should be site specific but we have listed the most frequent risks and corresponding risk control measures. We intend to revise the list of potential causes detailed in table 2 and have linked these to the actions you may need to take to minimise these risks. We have taken into account previous feedback and changed some of the risk control measures from 'must do' to 'where appropriate'.

Table 2 - List of causes of fire and risk control measures

Causes of fire	Risk control
Arson or vandalism	Site security measures in place (eg security fencing, intruder alarms and CCTV). This should include arrangements for outside of working hours Implement a fire watch at the start and end of the day Install a fire detection system
Plant or equipment	Regular maintenance and inspection programme Vehicles should be fitted with fire extinguishers and dust filters

	When not in use plant should be kept separate from combustible material Where appropriate fit bucket strips to minimise sparks igniting dust or fluff
Electrical faults including damaged or exposed electrical cables	Electrics should be fully certified by a qualified electrician and maintenance procedures in place
Discarded smoking materials	Apply a no smoking policy or have designated smoking areas away from combustible waste
Hot works	Permitted systems for hot works
Industrial heaters	Documented procedures for the use of industrial heaters
Hot exhausts	Implement a fire watch at the end of each shift as dust from processing can settle on hot exhausts and engine parts Where possible fit mufflers on plant
Naked flames, heating pipes, light bulbs, space heaters, furnaces and incinerators	Sources of ignition should be kept 6m from combustible and flammable material. This includes reviewing the usual activities that are undertaken at neighbouring premises. Implement a fire watch at the start and end of the day Install a fire detection system
Build up of loose combustible material, dust and fluff from shredders/fragmentisers	Regular inspection and cleaning of the site to prevent the build up of dust and fluff as required
Reactions between incompatible or unstable wastes including lithium batteries	Procedures in place for waste acceptance checks Utilise quarantine area
Deposited hot loads	Utilise quarantine area

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

4.7. Clarifying what are acceptable deviations from the minimum standards

We believe that the standards detailed in our FPP guidance are both achievable and appropriate to prevent waste fires and minimise their impact/duration should a fire occur. We also recognise that there may be ways of achieving the same outcome with adoption of a different approach.

We have reviewed 80 FPPs of which 4 have been approved. 3 of these plans followed the minimum standards of the guidance. In most of the 80 FPPs we have assessed, the operators are proposing deviations that do not offer an acceptable level of protection to people and the environment and in only one case did the operator demonstrate acceptable deviations. We think it is important to manage the expectations of operators looking to deviate from the minimum standards.

We have set out below in table 3, some areas where we believe an operator may consider deviating from the minimum standards. We have based this on our experience of assessing FPPs. The table shows which deviations are more likely to be acceptable within a FPP and the information we would require to assess the deviation from the minimum standards. It also shows where we believe that deviation is not possible as the same level of protection as the minimum standards would not be met.

Operators should be aware that submitting a plan which deviates from any of the minimum standards may be more likely to be rejected.

For FPPs that deviate from any of the minimum standards, then providing suitable evidence that plan offers an equivalent level of protection to people and the environment may be expensive.

We propose including the following table in the FPP guidance

Table 3 - Standards where deviations are or are not acceptable.

Minimum standard	Can operators deviate from the minimum standards?
Contingency	No. All operators must show that they have a good business model with different outlets available in the event of closure of their normal outlet
Pile sizes in the open	No. These are designed for a 3-4 hour burn time with active fire fighting
Pile sizes in a building	No. These should be designed by a suitable person specifically for the building
Separation distances	Yes. These can be reduced if there are suitably designed fire walls
Quarantine area	Yes. However the separation distances between waste piles will need to be calculated and increased to prevent spread and allow for active fire fighting
Suppression in a building	No. There must be a suitably designed system for all waste stored within a building
Storage duration	Yes. Only for compost waste
Water supply	Yes. There are other methods of actively fighting a fire in order to extinguish it such as covering it with soils but these need to be available at all times and appropriate for all conditions
Water containment	Yes. There are situations where fire water may not have be contained depending on the type of receiving water (surface and groundwater) and compliance with Water Framework Directive
Monitoring self-combustion for waste stored longer than 3 months	No. All waste capable of self-combustion will require a monitoring strategy to be designed if stored for longer than three months, including the time the waste has been stored at other waste sites
General actions to minimise fire risk	Yes. The risks and actions to reduce the risk should be site specific but needs to consider the minimum standards

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.

5. Responding to this consultation

5.1. Important dates

This consultation will start on 26 November 2015 and will run until 4 March 2016.

5.2. How to respond

You can view the consultation documents and the questions online at https://consult.environment-agency.gov.uk/portal/ho/ep/fpp/review and submit your response. We would prefer you to respond online as it will help us to manage your response more effectively

If you would prefer to submit your responses by email or letter please send your completed response form by the closing date to Moira Barson at moira.barson@environment-agency.gov,.uk or post it to:

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To request a hard copy of the consultation documents and/or response form, please contact us on 03708 506 506 (Monday - Friday, 8am - 6pm).

5.3. Publishing our consultation results

We will publish our full response to the consultation by April 2016. It will include summary comments and queries we received in the responses and will outline our recommendations which will take these into account. The report will be on our website and circulated to all consultees and other interested parties.

5.4. How we will use your information

Throughout the consultation we will make all comments (apart from personal information) publicly available on the Environment Agency website. This includes comments received online, by email, post and by fax, unless you have specifically requested that your response be kept confidential. We will not publish names of individuals who respond, but we will publish the name of the organisation for those responses made on behalf of organisations.

If you respond online or provide an email address, you will receive an acknowledgement of your response. After the consultation has closed a summary of the responses will be published on the Environment Agency website. You will be contacted to let you know when this is available. We will also notify you of any forthcoming consultations unless you tell us otherwise.

In accordance with the Freedom of Information Act 2000, we may be required to publish your response to this consultation, but will not include any personal information. If you have requested your response to be kept confidential, we may still be required to provide a summary of it.

We will use the responses from this consultation when updating the guidance. Environment Agency staff dealing with the consultation will see all the responses in full.

5.5. Consultation principles

We are running this consultation in accordance with the criteria set out in the government's Consultation Principles.

If you have any queries or complaints about the way this consultation has been carried out, please contact:

Emma Hammonds, Consultation Co-ordinator Environment Agency Horizon House Deanery Road Bristol BS1 5AH

Email: emma.hammonds@environment-agency.gov.uk

List of abbreviations

FPP - Fire prevention plan

WISH - Waste Industry Safety and Health Forum

WEEE - Waste electrical and electronic equipment

RDF - Refuse derived fuel

SRF - Solid recovered fuel

LPCB - Loss Prevention Certification Board

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