

Fire prevention plan guidance: version 3
Department for Environment, Food & Rural Affairs –
Environment Agency
RPC rating: fit for purpose

Description of proposal

The measure updated the fire prevention plan (FPP) guidance, which outlines requirements related to safe storage of combustible waste (e.g. tyres). The aim of the guidance is to reduce the frequency, scale and impact of waste fires. The revised guidance takes a more risk-based approach and allows greater flexibility. The previous document addressed 11 key aspects of waste storage; the new guidance from the Environment Agency (EA) changes most of these as outlined below:

1. Dedicated emergency areas – reduction in the size of the quarantine area, which provides a clear space that can act as a firebreak ;
2. Pile sizes – changes to maximum waste pile height, length and volume;
3. Separation distance between waste piles – reduction in the minimum required distance;
4. Fire walls – changes in minimum specifications;
5. Maximum waste storage durations –no change;
6. Temperature monitoring of waste – withdrawal of the requirement related to monitoring of moisture content;
7. Adequate water supply – reduction in the minimum required water supply available on site;
8. Infrastructure to prevent fire water runoff – an additional requirement was added for sites that do not store combustible waste on impermeable surfaces, which now need to assess and report on the effect of fire water on local ground water, surface water bodies and wells;
9. Fire detection – a new third party certification requirement on automatic fire detection systems;
10. Fire suppression – a new requirement for fire suppression systems to be designed, installed and maintained by suppliers accredited by a third party certification scheme; and
11. Detailed site plan – no change.

Impacts of proposal

The changes will affect 6,051 regulated sites, of which 2,815 already require an FPP and 3,236 that will now need to have the FPP requirement added to their permits. The assessment assumes that the first group will incur costs of compliance with the revised guidance when it is published. The second group will have the new requirements added to their permits over the next five years (and incur related costs) as they become necessary.

The EA assumes that the cost and benefits of the measure will accrue gradually over the duration of the policy, as some sites in scope of the guidance are believed to delay implementation of the new requirements. This assumption is based on the past record of compliance - based on a survey of 270 sites, the compliance rate for businesses already requiring FPP has been estimated at 42 per cent. The EA also assumes that the sites newly brought into the scope of the policy would have higher compliance levels of 70 per cent. The EA does not justify this assumption, though it states that these companies are more likely to comply as they are presumed to be more familiar with their obligations. The proportion of compliant businesses is assumed to increase at a rate of 5 per cent per annum.

The main benefit to business results from a decrease in the required size of emergency quarantine (firebreak) areas,. As only one survey response was received regarding this change, the EA has used information from a sample of 20 fire prevention plans, which included waste pile measurements, site plans and quarantine area sizes. It calculates the area saved as a result of the new guidance for the sites that submitted the plans and extrapolates the results across the sector, taking into account the distribution of site sizes. The EA assumes that the savings could arise either through disposing of freed-up land or utilising it to store more waste. Based on the Department for Communities and Local Government's estimates of the average cost of industrial land (approximately £60 per square metre), the regulator estimates an average saving of £47,000 per site.

The impacts of other changes were estimated based on consultation responses from 41 sites. The responses were weighted by the size of the subsector they represented in order to reflect the true structure of the sector. For example, the relatively frequent responses from sites specialising in storing tyres were discounted as these sites make up only a small proportion of all affected businesses.

The table below summarises the impacts of each element of this measure.

Impact (per average business) - summary		
Amendment	One-off cost	Recurring cost (annual)
1. Dedicated emergency areas	-£47,215	£0
2. Maximum pile sizes	£43,086	£0
3. Maximum separation distance between waste piles	-£40,017	£0
4. Fire Walls	£299	£0
5. Maximum waste storage durations	£0	£0
6. Temperature monitoring of waste	£0	£0
7. Adequate water supply	£0	£0
8. Infrastructure to prevent fire water runoff	£18	£0
9. Fire detection	£11,254	£211
10. Fire suppression	£10,935	£0
11. Detailed site plan	£0	£0
12. Familiarisation	£195	£0
Total	-£21,445	£211

In total, the regulator estimates a net one-off benefit of approximately £21,000 per business, accrued at the point when it comes into scope of the guidance. In addition each business is expected to face net ongoing costs of around £200 per annum. It has been estimated that, over a ten-year period, 5264 sites will comply with the policy. On this basis the overall net present value of this measure is estimated at £99,960,000.

The RPC verifies the estimated equivalent annual net direct cost to business (EANDCB) of -£11 million. This will be a qualifying regulatory provision that will score under the business impact target under the rules applying for the 2015-17 parliament.

Quality of submission

The assessment describes, but does not monetise, the overall societal benefits of the measure in terms of fire prevention, and briefly discusses risk management around the main element of deregulation.

The assessment would have benefited from greater clarity about the methodology used to estimate impacts. For example, by setting out more clearly the weightings the regulator has applied to estimate overall impacts.

The RPC recognises that the EA has invested a proportionate level of resource in collecting and analysing data given the scale of the measure and the low response

rate to consultation. It also recognises the EA's efforts to distinguish costs to compliant and to non-compliant businesses in analysing its survey responses. Nevertheless, the IA could be considerably improved by setting out more clearly the basis upon which the EA determined that responses were invalid, or based on non-compliant behaviour, or both. It would have been especially helpful if the assessment could have explained more clearly how the EA made use of valid responses that challenge its expectations about how the guidance will affect businesses.

The extent to which land freed-up by the policy can be used productively is not discussed in the assessment. The RPC accepts the use of cost of land as a proxy for economic benefit accrued by businesses as a result of relaxation of the requirements. However, the regulator should have explained why the land price used is likely to reflect the value of the productive use of the land. The assessment claims that the real economic value of the newly available land is likely to be greater than the estimate used in the analysis but does not back this claim up with evidence. The Agency should have elaborated on this assumption by discussing whether there is likely to be variation in the benefit realised by different sites. For example, the IA could have discussed what fraction of businesses could in practice store more waste on the additional land.

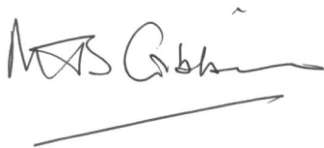
The assessment would also have benefitted from a more detailed justification of assumptions related to the level and growth of compliance – in particular the assumption of 70 per cent compliance for newly included businesses.

Departmental assessment

Classification	Qualifying regulatory provision (OUT)
Equivalent annual net direct cost to business (EANDCB)	-£11 million
Business net present value	£100 million

RPC assessment¹

Classification	Qualifying regulatory provision (OUT)
EANDCB – RPC validated	–£11 million
Business impact target score	–£55 million



Michael Gibbons CBE, Chairman

¹ For reporting purposes, the RPC validates EANDCB and BIT score figures to the nearest £100,000.