



CFOA
Chief Fire Officers
Association

Fire Futures Forum

Waste Management Facility Fires | 27th November 2013



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Preface

On the 27th November 2013, the Chief Fire Officers Association (CFOA) hosted a round table event designed to bring together colleagues and stakeholders with the aim of producing a Road Map toward the reduction of fires and mitigation of their impacts regarding incidents at Waste Management and Recycling Centres. CFOA would like to formally thank all those individuals and organisations who either attended the event or contributed towards its production.



Foreword by Roy Wilsher

The summer of 2013 carried a recurring theme played out over the national media, which can be summarised by the CFOA press statement released following a large Recycling Centre fire in Stockport, "Yet another serious fire has occurred at a UK waste recycling site. Such fires have the potential to burn for days, even weeks and can have a huge impact not only on the local community and environment, but also to the economy via enforced road closures and the commitment of significant firefighting resources" (CFOA, 2013).

To emphasise this point, the incident at the Jayplas Recycling Depot in Smethwick produced some truly startling statistics, with approximately 100,000 tonnes of recycled plastic involved in a fire that at its height required the deployment of 39 Fire engines and over 200 Firefighters. In the first 12 hours of operations, 14 Million litres of water were used simply to contain a fire that released an estimated 19,000 tonnes of carbon into the atmosphere. (West Midlands Fire Service, 2013).

As can be appreciated, aside from our primary concerns for public health, Firefighter safety and the very considerable community and environmental impacts, responding to fires of this magnitude places a huge strain on the resources of not just the Fire and Rescue Service, but also on partner agencies such as the Police, Environment Agency, Local Authorities, Health & Safety Executive and Public Health organisations.

That said and however tempting it may be in some quarters to demonise the waste management sector, site operators are also massively affected, first of all by direct economic loss, the Smethwick fire caused an estimated £6 Million worth of property damage, which can force a company out of business. Secondly, from an increased perception of risk that can drive up insurance premiums across the sector. Finally and more importantly, from the adverse publicity which damages the reputation of the individual operator as well as the wider waste sector and can lead on to strident calls for tougher legislation to be enacted.

Taking these issues into consideration, it is clear that we need to work collaboratively to effect a positive change, via the production of appropriate solutions that are proportionate to the risk, cost effective and achievable for both the industry and enforcing authorities, in terms of implementation and management. To this end, CFOA were pleased to host a Fire Futures Forum event where key individuals from the Waste Management and Insurance sectors worked alongside strategic leaders, regulators and Local Government representatives in order to gain a clearer understanding of each other's perspectives, achieve consensus on the issues at hand and thereby enable the identification of the potential solutions documented within this report.

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1. Attendees

Mark Andrews

Chair, CFOA Waste Management and Recycling Centre Fires Working Group

Julian Appleby

London Waste Ltd

Peter Buckley

Greater Manchester Fire and Rescue Service

Peter Butt

Wood Recyclers Association

Paul Chainey

CEO, Miles Smith Insurance

Celestine Cheong

Business Sprinkler Alliance

Peter Cottrell

Department for Business, Innovation and Skills (BIS)

Dave Curry

CFOA Director for Prevention, Protection and Road Safety

Howard Davidson

Director, South East England Environment Agency

Glenn Davies

Veolia Environmental Services

Barry Dennis

Environmental Services Association (ESA)

Jeremy Douglas

ACE Insurance

Maggie Dutton

Environment Agency

Keith Freegard

British Plastics Federation

John Galvin MBE

Department for the Environment, Food and Rural Affairs (DEFRA)

Mark Garnier MP

Constituency of Wyre Forrest

Cllr Kay Hammond

Chair, Local Government Association, Fire Services Management Committee

Henrietta Harrison

Public Health England

Ian Hetherington

British Metals Recycling

Cllr Phillip Howson

Deputy Chair, Local Government Association, Fire Services Management Committee

Chris Jones

Chair, Waste Industry Safety and Health (WISH)

Katie Lomas

Zurich Insurance





Steve Manchester

Building Research Establishment (BRE)

Bruce McGlashan

Environment Agency

Tracy Moffat

Chartered Institution of Wastes Management (CIWM)

Howard Passey

Fire Protection Association

Alan Patrick

Chubb Insurance

Mark Preece

Hereford & Worcester Fire and Rescue Service

Pandora Rene

Environment Agency

Terry Price

Allianz Insurance

Ian Rochester

Wood Panel Industries Federation

Pip Sadler

Aviva Insurance

Mark Sheppard

Association of British Insurers

Chris Smith

Environment Agency

Andy Stapleton

Department for Communities and Local Government (DCLG)

David Styles

Department for Business, Innovation and Skills (BIS)

Peter Taylor

Tyre Recovery Association

Gordon Thompson

Renewable Energy Association

Louise Upton

Department for Communities and Local Government (DCLG)

Dave Walton

CFOA Lead on Hazardous Materials

Wayne Williams

Health and Safety Executive (HSE)

Cllr Thomas Wright

Local Government Association,
Fire Services Management Committee

Roy Wilsher

CFOA Director of Operations

Mark Yates

CFOA Lead on Health and Safety



2. The View from Parliament: Keynote Address by Mark Garnier MP

I would like to begin this address by thanking the Chief Fire Officers Association for giving me the opportunity to speak at this extremely relevant and important forum.

My interest in the matter of waste management facility fires resides in the fact that my constituency hosts only one major recycling centre, but this site has suffered two major fires within a twelve month period – the second of which was a very significant event, with a fire that burnt for weeks before eventually being extinguished.

Therefore, I am able to approach this forum as a simple constituency MP, albeit with first-hand experience of the issues involved and a keen interest in helping you achieve the outcomes you desire.

I was pleased to note that the Environment Agency has written to some 8,000 UK Waste Recycling Centres, with a range of ideas on how to prevent fires and reduce their impact; however it strikes me that his guidance seems a tad simplistic and limited purely to advice? There seems to be a number of difficult questions that I feel could and should be addressed by law makers and I would therefore like to be in a position, at the end of this forum, to present the House with those questions alongside some possible answers.

The economics of running a recycling centre appear to incentivise the on-site storage of waste products – a waste depositor pays to drop it off and whilst there is a cash value to the recycled product, there is also a cost of residual waste going to landfill. Therefore, does this cash flow incentive drive large accumulations of waste and in so doing increase the risk of fire? - Can legislators change the payments process to drive earlier removal of waste and in so doing accelerate the process of transmission through recycling centres?

Similarly, if there are limits on how long certain types of waste can be stored at any given centre - is the process of enforcement sufficient to ensure that the time limits are adhered to? And - what is the process of enforcement and is it sufficient across the whole range of measures and licensing?

Furthermore, whilst we acknowledge the measures put in place by waste operators to mitigate the likelihood of fire breaking out, the potential remains, therefore given that these recycling centres may well contain toxic substances - are we being foolish by allowing them to operate in built up areas or near to catchments that supply drinking water? With over 230 such fires occurring in 2013 alone, many people have been exposed to the dioxins present in both the smoke and firefighting water run-off, who would otherwise have received less exposure had the waste management premises not been sited in their neighbourhoods.

So, should there be specific planning restrictions placed on recycling centres to locate them away from population centres and water courses that contribute toward drinking water supplies? Indeed, should site operators build suitable bunds around their premises to capture the enormous quantities of water required to extinguish a fire?

Moving on, I am particularly pleased that this forum has given me the opportunity to voice three personal concerns, the first of which is the vital issue of communicating effectively with the community during the immediate response and recovery phases of an incident. To be precise, it is part of what I refer to as a “stand easy” protocol that could be used to provide reassurance via coordinated, easily accessible, up to date information and advice for both the local community and businesses, regarding the potential health impacts as well the measures being put in place to manage the local area during and immediately after an incident.



The fire in my constituency, in 2013, saw a lack of information which caused consternation and confusion to a number of organisations, not least to the Head of a local School who needed to know if it was safe for her pupils and teachers to stay at school during the incident, whilst a very large dark smoke cloud loomed over their heads.

So, my appeal is that you add your collective support to the idea that local authorities take responsibility for the delivery of a “stand easy” response, if appropriate, in what looks to the untrained eye like a major disaster.

Secondly, I would ask “What more needs to be done with regard to fire insurance?” and from that “What benefits will site operators see from an investment in substantial fire protection and pollution control systems?” alongside “What changes can be made to ensure that the emergency response plan is based on health and safety requirements, rather than obstructed by issues of cost?”

As I am sure you will agree, these are important points and I merely recount them to you as the concerns of my constituents, regarding the health of their families, employees and the impacts of waste management facility fires on the wider community and environment.

Finally, my last appeal is that you fully engage with your local Members of Parliament in these endeavours, as we fully support your efforts and recognise that our community’s interests are best served by helping you achieve a successful outcome.



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3. Waste Management and Recycling Centre Fires

The years 2012/2013 witnessed a number of very high profile fires involving the storage and recycling of waste materials, with media coverage of two particular incidents helping define the issue in the public imagination.

The first of these was a fire in Dagenham, during the closing ceremony of the Olympic Games, which, at its height, required the attendance of 45 Fire Engines and was subsequently described by London Fire Brigade Commissioner Ron Dobson, as a fire that “We’ve not seen the size of, in London, for several years - it’s certainly a dramatic end to the Olympics for the London Fire Brigade” (BBC, 2012)

Followed by the Smethwick fire, in July 2013, that caused an estimated £6 million worth of damage and was described by the West Midlands Fire Service Incident Commander as “The largest fire that we have ever had in the West Midlands” (Sky, 2013). This incident produced the iconic image of Firefighters working amidst a sea of waste, which flashed around the world’s media outlets.

Such images are certainly dramatic but – are they an accurate reflection of the overall state of our waste management facilities and the perception that waste fires are increasing? Environment Agency statistics, taken from their National Incident Recording System, actually indicate that “there has been a fall in the total numbers of fires since 2011, but the number of serious and significant fires remains constant at a rate a little above one a month”.

That said a number of contributory factors, relating to the severity of fires on some sites have been identified, these include the steady accumulation of waste leading to enlarged stacks with minimal separation between stacks, buildings or other features on the site, which has on occasion led to rapid fire spread and extremely challenging firefighting operations. Other “causal factors” may be less easy to prove but may include the development of new processes such as the production and storage of Refuse Derived Fuel (RDF) or the activities of a very small band of so called “rogue traders” operating with little appreciation or regard to the potential consequences of their actions.





CFOA however recognise that the vast majority of companies, involved within the waste management sector, operate both within the law and with a genuine desire to work with partners to reduce fires and their impacts. Indeed some sites have seen substantial investment in engineered solutions that provide highly effective fire protection and pollution control systems.

How does this translate for future risk management considerations? A common misconception is that the overall quantity of waste continues to rise inexorably, whereas the actual figures tell us that the total quantity of waste produced and processed in the UK accurately reflects the on-going economic trend. However, due to a number of factors, including the diversion of waste from landfill sites, due to EU and UK legislative requirements, financial incentives, such as the landfill tax and not least the fact that we, as a nation, are becoming increasingly successful at recovering and recycling waste materials, has led to a situation where the overall number of waste sites and the amount of time waste is above ground and awaiting processing have increased.

Moving forward, these factors could be construed as increasing the risk and likelihood of a fire occurring, unless preventative measures are implemented, therefore, acknowledging work already undertaken, CFOA has invited partners from the Environment Agency, Health and Safety Executive and Waste Management sector to form the Waste Management and Recycling Centre Fire Working Group. The group has two distinct work streams to support the delivery of its aims, these are:



Work Stream 1 – Prevention and Protection

A key part of the overall strategy will be to reduce the likelihood and impact of fires at waste sites in the future. This work stream is focussed on providing a framework within which regulators can work cooperatively with site owners to achieve compliance alongside a principle of better regulation. There will be a number of deliverables within this work stream:

- Preparation of a Memorandum of Understanding (MoU) between the key regulators to provide an agreed line of action for enforcement and permitting of waste sites within an area.
- Production of Waste Sector Guidance (Code of Practice) describing how site operators can comply with the requirements of regulatory waste sector codes, in terms of preparing an on-site action plan, appropriate fire safety arrangements and all other necessary measures to minimise risks posed by the site.
- Development of a framework and a protocol for information sharing between the regulators to ensure robust records are created and important data is exchanged relating to the existence and management of waste sites.
- Establishment of the legal parameters within which all regulators work when managing waste sites which will clearly set out the powers available to them when carrying out enforcement action on waste site operators and highlight any cost recovery processes available both in terms of enforcement as well as in terms of cost recovery when preparing plans.
- Consideration of the first principles of better regulation to reduce the burden on business where possible and ensure we strike the right balance between protecting the community and freeing the operator from unnecessary bureaucracy.

Work Stream 2 – Response

The working group recognises that despite all the efforts of regulation and planning, incidents and fires will still occur at such sites. This work stream has been set up to review the firefighting tactics currently employed and analyse lessons from recent major fires, in order to provide appropriate operational guidance on planning, firefighting and damage control measures in waste management facilities. The work stream has a number of deliverables:

- Review current operational tactics and produce some case study material from recent major fires across the country identifying what went well and where lessons have been learnt.
- Carry out a literature review to comprehensively identify any existing or draft documents relating to waste fires or procedures, to ensure these are reflected and referenced within this work stream and any published documents.
- Produce operational guidance based on the above work to inform future operational procedures, risk data gathering, pre planning and firefighting tactics. Provide a range of techniques that fire and rescue services can employ at a range of waste type fires. This guidance should be supported by a Generic Risk Statement (GRS) and Standard Operating Procedure (SOP) to ensure a nationally consistent approach.
- Research new equipment and firefighting techniques from the UK and abroad which may assist firefighting crews in bringing major waste fires under control more quickly and in so doing, reduce the impact of water run-off and potential for environmental contamination.
- Provide clear guidance on the role of other agencies when responding to a major fire at waste sites, outlining their role and responsibilities. Specifically, the key role of the EA in the early response stage and that of Public Health organisations in both the response and recovery stages.
- Produce Environmental Protection guidance, on the most appropriate method of controlling or extinguishing a major fire, for the Fire and Rescue Service Incident Commander.





4. Industry Perspectives

The perspectives of the four main sectors involved with fires at waste management facilities, were put forward by:



Howard Davidson – Director Environment Agency (South East England)

Howard Davidson is a highly experienced Environmental Management professional with over 35 years worth of experience. He is a member of the London Sustainable Development Commission, Chair of Water Resources in the South East group and Chair of river basin panels for the Thames and S.E. England. In addition Howard is a Chartered Engineer, member of the Chartered Institute of Environment Management and the Royal Society of Arts.



Chris Jones – Director Risk Management & Compliance, Corey Environmental

Chris has worked in the waste industry for the last 25 years advising and managing Health, Safety, Welfare, Quality, Environmental, and Transport issues. As a Member of the Chartered Institution of Wastes Management, he has been actively involved in the evolution of the Waste Industry Safety and Health Group (WISH) from the concept stage in 2001 and was subsequently elected as its first Chair in 2008.



Katie Lomas – Senior Risk Analyst, Zurich Risk Engineering

Katie has made a career in the Insurance industry, originally working in claims before progressing through underwriting and sales before eventually becoming a Risk Analyst, 17 years ago. She has been with Zurich since 2007 and works within one of the UK Property Practice teams, carrying out surveys for underwriters across the Broker, Corporate and Zurich Municipal markets.



Mark Andrews – Deputy Assistant Commissioner, LFB Fire Safety Regulation.

Mark has over 24 years of Fire & Rescue Service experience working initially in West Sussex before moving to London Fire Brigade in 2008 where he took up a senior role in fire safety regulation. His work involves the delivery of fire safety across the capital as well as responsibility for policy and support. Mark chairs the CFOA Waste Management and Recycling Centre Fires Working Group.

The presenters have kindly agreed to share their presentations, which are free to view at: cfoa.org.uk/12246

5. Fire Futures Forum: Roadmap to Fire Reduction

With the realisation that the issues involved with fires at waste management facilities, both in terms of immediate cause as well as long term solution, are complex the Forum was conceived as an opportunity to gather as broad a church of delegates as possible representing the waste management sector, Insurers, HM Government, enforcing authorities and technical experts alongside Chief Fire Officers, in order to produce evidence for the production of a roadmap toward the reduction of fires and the mitigation of their impacts rather than making an attempt to resolve the issues in a single sitting.

To that end three fairly simplistic questions were posed, couched in terms of acknowledging the underlying factors that have contributed toward fires before moving onto what we can collectively do to reduce them. These questions were augmented by a series of subset questions designed to assist the thought process.

Question 1 – What factors are at the root of waste management facility fires?

- Is there a growing problem?
- Is there a lack of engagement with the waste industry by enforcing authorities or insurers?
- Does poor on site / organisational risk management play a part?
- Is extant legislation unsuitable?
- Does the storage of too much waste allied to lengthy processing time contribute toward the cause and severity of fires?
- Is there an issue with the stockpiling of some types of waste related products i.e. RDF bales
- Are there elements of rogue activity?
- What other contributory factors are involved?

Question 2 – What can we collectively do to reduce the likelihood of fires occurring and mitigate the impacts of those that do?

- What are the impacts of such incidents?
- What are the challenges to implementing effective change?
- Who should take the lead with such reforms?
- How do we ensure cross sector engagement?
- How do we recognise and disseminate good practice?
- How do we ensure any rogue activities are stopped?
- Do we need more robust legislation / guidance?
- If so; how do we ensure it is broadly enforceable?
- What happens if it becomes onerous / expensive?

Question 3 – What would be the consequences of failure?

- Politically, Legally, Economically, Environmentally?
- Health and the Community?
- Reputational risk?
- Would it, in fact, matter that much?



The following narrative should be viewed as a summary of delegate responses, their collated verbatim responses are provided as an appendix to this document.

Question 1 – What factors are at the root of waste management facility fires?

Is there a growing problem?

Delegates broadly agreed that the waste management sector is rapidly growing and developing making it difficult for both site operators and regulators to keep pace with the changes.

However, more divergent views were also expressed as some delegates acknowledged that there might be a growing problem due to the fact that “more materials are falling into the classification of waste as technology allows them to be recycled” and “increasingly stringent targets could be driving an increase in the scale of the problem”.

Whilst others pointed towards the issue being one of perception “numerical evidence suggests [that it is not a growing problem] however media reporting is felt to be sensationalist in tone” alongside the feeling that “the problem for the industry is a growing one, but predominantly of a reputational nature”.

The impacts on public health were also considered in this context with one table of delegates stating that “a move from out of town landfill to urban recycling brought a greater proximity to the public and with it the health hazards associated with waste fires”.

Is there a lack of engagement with the waste industry by enforcing authorities or insurers?

This question was answered positively, with delegates believing that engagement is “generally good and indeed improving” with the CFOA Forum cited as a good example.

Opinion was again fairly uniform regarding how to improve engagement and with it provide a better and broader understanding of the issues involved, this can be summarised as “the provision of freely shared information and data by all parties which would allow an increasingly rich picture to evolve and be, in turn, shared”.

Does poor on site / organisational risk management play a part?

Poor risk management was cited as a contributory factor in many cases, whilst the efforts of larger waste operators were duly recognised. The role of regulators was also discussed with one particular quote summarising the general consensus of opinion as:

“On site risk management can be patchy, often good particularly amongst the larger operators, what is lacking is a general risk awareness, this is compounded by the fact that different agencies can inspect without a complete awareness of each other’s responsibilities, policies and powers”.

Is extant legislation unsuitable?

Whilst there were no calls for additional legislation, it was suggested that “Poor decision making in regard to approving planning consent for new waste management facilities” could be viewed as a contributory factor and that the permitting process, with particular regard to exempt sites, may require review as it provides the opportunity for poor risk management.

Does the storage of too much waste allied to lengthy processing time contribute toward the cause and severity of fires?

Whilst the Fire and Rescue Service have clear examples of some individual site operators storing waste well over their permitted amounts, which has greatly exacerbated fire situations on those premises, representatives from the waste industry were keen to stress that holding large stockpiles of waste material is not actually in their best interest [neither economically nor for general operations] and that there is little evidence to suggest that stock is held to secure maximum profits, with a comment made that the “market is just not that volatile” it is therefore in their interest to process it as soon as possible.

It was further remarked, “Market forces have little overall impact and leave scope for the development of fairly predictable, intelligence led prevention measures”

Is there an issue with the stockpiling of some types of waste related products i.e. RDF bales?

The “bulk” storage of RDF bales has, in some cases, been viewed by the Fire and Rescue Service as a potential factor regarding the intensity of fires; it however accepts that further information and data analysis is required before a definitive position is taken.

Are there elements of rogue activity?

This issue has generated a good deal of debate, with the waste industry keen to distance themselves from the activities of “rogue traders” and indeed encouraging regulators to deal robustly with offenders. A range of reasons have been cited for rogue trading such as “the issue of ‘gate fees’ being high that can drive the rogue market where operators take on a stock and then abandon it” alongside “the possible use of deliberate fire setting as a means of reducing stockpiles”.

However, it is recognised that a clear delineation needs to be made regarding what constitutes rogue trading activity against the actions of legitimate traders who have run into difficulties and require advice from regulators and / or their own trade bodies and how the route to gaining such assistance is clearly signposted.

What other contributory factors are involved

Delegates raised a number of additional contributory factors, including the broader financial picture with some perverse incentives identified alongside the [perceived / actual] volatility in disposal costs, landfill tax and the cost of dealing with residual waste once all recycling operations had been effected.



Question 2 – What can we collectively do to reduce the likelihood of fires occurring and mitigate the impacts of those that do?

What are the impacts of such incidents?

Each of the delegate tables contributed toward a joint acknowledgement of the impacts:

- Immediate risk of death and injury for employees and responders during the incident
- Longer term health risks to employees, responders and the wider community due to environmental pollution
- Immediate economic impacts on local / regional community and businesses due to road closures and access restrictions
- Longer term economic impacts on the site and operator affected, which may result in closure.
- Immediate and longer term response and recovery costs met by insurers, industry, local authorities and Fire and Rescue Services as well as organisations such as the Environment Agency and Public Health.
- Longer term reputational risk to the waste sector via; business continuity, environmental / planning issues, loss of insurer and public confidence, loss of stock, employees and not least the threat of litigation.

What are the challenges to implementing effective change?

This issue generated a good deal of discussion with the general acknowledgement once again being that faced with an “Increasingly complex and diverse sector, not easily understood by all participants” a greater mutual understanding of the underlying issues is required, which will in turn confirm exactly what changes are required and smooth the pathway toward their implementation.

A range of specific issues were also identified, which can be summarised as:

- **Financial** – whatever changes are sought must be cost effective and proportionate otherwise they will encourage rogue activity.
- **Political** – whatever changes are recommended must have all party support.
- **Practicality** – alongside proportionality the changes must be practical and as easy as possible to implement by site operators, with minimal impact on their processes.

Who should take the lead with such reforms?

The consensus of opinion was that although the process should be a collaborative effort, the outcomes should be waste sector led and preferably include an Industry Code of Practice.

How do we ensure cross sector engagement?

This issue has been one of the most widely discussed, both pre and post Forum, with commentators endorsing the requirement for increased dialogue leading onto a greater mutual understanding particularly with the Insurance sector and lamenting what they see as the almost “knee jerk vilification of the waste industry, in the national media, before the full facts had been established” it is felt that in the worst case scenario this could lead to disengagement from some within the waste industry and in turn strengthen calls for a solution via legislative means.

How do we recognise and disseminate good practice?

In conjunction with the matter of ensuring cross sector engagement, this issue has generated a great deal of debate, both from Forum delegates as well as other interested individuals.

Although some delegates put forward the opinion that “Good practice is currently not well shared, in the main as the waste industry has still not matured in certain areas and such practice and methods for sharing are still developing” It was widely acknowledged that the dissemination of good practice, particularly from the larger waste management operators tailored toward small and medium sized businesses will greatly assist in the reduction of fires and mitigation of their impacts via improved risk management processes.

It was also recognised that regulatory authorities have their part to play both in assisting the wider waste sector to “Develop a more long term view of itself and its business practices” and in exploring the potential for offering “soft assurance schemes, in conjunction with trade associations, to reward good practice”

How do we ensure any rogue activities are stopped?

Forum delegates were forthright in their opinion that “rogue traders” must be identified and their activities curtailed, most agreed with the need for improved, more focused guidance alongside the sharing of data, potentially leading on to the adoption of a “risk based method, identifying bad operators and moving purposely to reform or ultimately close them down” an approach that should include “Tightening up the system of checking individuals / organisations applying for licences and establishing a National Database of Waste Management Operators and Sites”.

The vital role of insurers was also highlighted with a particular comment noting that “They have a key role to play in making an accurate assessment of the risk, as most sites operate with insurance -contrary to popular belief”

Do we need more robust legislation / guidance?

Whilst the general consensus was that additional legislation is not required, it was equally voiced that a review and possible consolidation of the existing guidance regime would be desirable, to include improving accessibility and clarity for smaller operators.

A number of delegates identified the potential for a more integrated planning process, fully involving the Environment Agency and Fire & Rescue Service alongside Local Authorities, who would work together in deciding on appropriate locations for waste management facilities, the issue and regulation of waste permits, the assessment of risk and in offering the appropriate advice and guidance on suitable risk management processes to be adopted.

If so; how do we ensure it is broadly enforceable?

Responses to this question underpinned those given previously in as much as any legislative or guidance schemes must be practical, fully supported by the sector and easily understood by all parties.



Question 3 – What would be the consequences of failure?

Overall the Forum was fairly pragmatic on this question; they did not feel that any particular groundswell of political opinion had formed as some of the potential trigger points had, fortunately, not occurred, which may have led to a lack of political impetus for further legislation or litigation on a scale that would make people “sit up and take note”, although clearly this possibility exists.

The short to medium term consequences of failure were largely seen to be economic as operators would be increasingly unable to obtain insurance as the industry appetite for risk lessened, this could in turn drive some waste operators out of business.

That said, all forum delegates agreed that the situation requires remedial action before it reaches a point where either the insurance industry decline to offer cover or politicians are forced to enact stricter legislation with all the impacts that would engender.

6. Next Steps

Firmly Establish the Context

We currently possess a large amount of observational evidence taken from a variety of incidents, although subject to a degree of analysis that, at least in the Fire and Rescue Service, remains largely an exercise in statistical compilation.

Therefore we now need to widen our scope and actually quantify the issues at hand by drawing on data from a variety of sources and analysing it to produce both qualitative as well as quantitative information that identify any particular trends in terms of causal factors as well as potential mitigative ones.

The information obtained alongside the outcomes of the Fire Futures Forum should be reviewed by, in the first instance, the CFOA Waste Management Fires Working Group to further develop the roadmap and begin the process of delivering effective outputs.

Broaden the CFOA Working Group membership

The vital role of the Insurance industry in fire reduction and mitigation at waste management facilities has been reaffirmed by the Forum and therefore the CFOA Waste Management Chair will look to ensure Insurance sector representation on the working group.

Review the outcomes of the Forum and move the workstreams forward

Delegates at the Forum have given their clear endorsement in regard to the establishment of the CFOA Waste Management Working Group and by their thoughts and opinions provided a direction of travel for the group’s outputs. These will be reviewed alongside the data analysis to move our workstreams forward.

Produce a timeline of outputs

By far the most requested item, at least in the consultation stage of this document, was the production of a timeline of work outputs, detailing milestones and progress towards implementing the measures described in previous chapters.

To enable progress to be tracked and measured a live timeline will be placed on the CFOA website and available for partner agencies to view at www.cfoa.org.uk/12246

APPENDIX – A

These verbatim responses were provided by delegates either as part of the forum exercise or immediately post event and will be used to provide the evidence that will shape the roadmap.

Question 1 – What factors are at the root of waste management facility fires?

Is there a growing problem?

- Numerical evidence suggests not however media reporting is felt to be sensationalist in tone.
- There may be because more materials are falling into the classification of waste as technology allows them to be recycled. It was also felt that a move from out of town landfill to urban recycling brings with it a greater proximity to the public and with it the health hazards associated with waste fires
- It is felt that increasingly stringent targets could drive an increase in the scale of the problem, though household waste only accounts for approximately 30% of the total volume.
- The problem for the industry is a growing one, but predominantly of a reputational nature.
- Both the site operators and regulators are not keeping pace with the rapidly growing and evolving industry
- A direct result of a growing, changing and developing industry.

Is there a lack of engagement with the waste industry by enforcing authorities or insurers?

- Engagement generally seen as good and indeed improving
- There is a requirement for a better and broader understanding of the issues involved and an analysis of each incident to extract learning points
- Improvements can come from developing an increasingly rich picture of the exact nature of the issue by better information and data sharing, an example of this was sharing an understanding of the seasonal nature of some recycling issues.
- A better general understanding of the issues is needed alongside analysis of data to provide a clearer picture of the true facts

Does poor on site / organisational risk management play a part?

- More diverse players – some with no experience coupled with a lack of knowledge and understanding of the principles of good risk management
- On site risk management can be patchy, often good particularly amongst the larger operators, what is lacking is risk awareness, this is compounded by the fact that different agencies can inspect without a complete awareness of each other's responsibilities, policies and powers
- There does not seem to be a thorough understanding of risk within the industry.

Is extant legislation unsuitable?

- Exempt facilities, that are not so well regulated, have more opportunity to mismanage
- Poor decision making in regard to approving planning consent for new waste management facilities [could be a contributory factor].
- Are all partners adequately engaged in the permit process? [both operators and enforcing authorities]



Does the storage of too much waste allied to lengthy processing time contribute toward the cause and severity of fires?

- Greater volumes of waste, predominantly from businesses and industrial processes [could be a causal factor]
- Some waste industries [notably wood recycling] are counter-cyclical in nature, meaning that the season of peak arising's [spring & summer] is opposite to the season of peak demand [winter]. This will inevitably mean that stock levels are generally higher at certain times of year than at others.

Is there an issue with the stockpiling of some types of waste related products i.e. RDF bales?

- More quantity and lengthier storage of combustible materials – RDF bales.
- The bulk storage of RDF bales and the likelihood of self-heating with increased storage times.

Are there elements of rogue activity?

- Criminal opportunities to extract themselves from problems – arson?

What other contributory factors are involved

- The broader financial picture including some perverse incentives were identified alongside the volatility in disposal costs, landfill tax and the cost of dealing with residual waste once all recycling operations had been effected.
- Some severity issues allied to lack of availability of water for firefighting coupled with issues of the release or containment and treatment of contaminated water

Question 2 - What can we collectively do to reduce the likelihood of fires occurring and mitigate the impacts of those that do?

What are the impacts of such incidents?

- Immediate risk of death and injury for employees and responders during the incident
- Longer term health risks to employees, responders and the wider community due to environmental pollution
- Immediate economic impacts on local / regional community and businesses due to road closures and access restrictions
- Longer term economic impacts on the site and operator affected, which may result in closure.
- Immediate time and longer term response and recovery costs met by insurers, industry, local authorities, Fire Service as well as agencies such as the Environment Agency and Public Health.
- Longer term reputational risk to the waste sector via; business continuity, environmental / planning issues, loss of insurer and public confidence, loss of stock, employees and not least the threat of litigation.

What are the challenges to implementing effective change?

- Increasingly complex and diverse sector, not easily understood by all participants.
- Tendency for small scale operators not to appreciate the inherent risks or have the ability / will to apply practical risk management solutions.

- **Financial** – whatever changes are sought must be cost effective and proportionate otherwise they will encourage rogue activity.
- **Political** – whatever changes are recommended must have all party support.
- **Practicality** – alongside proportionality the changes must be practical and as easy as possible to implement by site operators, with minimal impact on their processes.

Who should take the lead with such reforms?

- Collaborative effort, waste sector led.
- Industry Code of Practice should be developed and driven by the sector.
- Producers of waste should take a measure of responsibility, particularly large commercial

How do we ensure cross sector engagement?

- Mutual understanding and acceptance of impacting issues
- Avoid the generic “blame game” in the media until facts are established.
- Offer soft assurance in conjunction with trade associations to reward good practice.
- Continue dialogue via forums and cross sector working groups
- Ensure the involvement of the Insurance sector at all stages
- Stakeholders need to examine market changes and their implications, with particular regard to:
 - Conditions relating to throughput
 - Total quantities involved
 - Prioritisation of site inspections by risk related to market changes even if previously good performers

How do we recognise and disseminate good practice?

- Currently not well shared, in the main as the waste industry has still not matured in certain areas and such practice and methods for sharing are still developing.
- By establishing a greater knowledge of the industry and its associated risks / mitigative efforts
- Increase dialogue between larger waste companies with better risk management facilities and smaller, less well funded operators to disseminate good practice.
- Industry needs to develop a more long term view of itself and its business practices
- Setting an industry standard, identifying particularly good practice / ideas / initiatives alongside operating models for SME operators.
- Publish a best practice document – involve insurers and risk engineers

How do we ensure any rogue activities are stopped?

- Draft better, more focussed guidance rather than legislative change.
- Share data and information between industry and enforcing agencies.
- Adopt a risk based approach, identifying bad operators and moving purposely to reform or ultimately close them down.
- Tighten up the system of checking individuals / organisations applying for licences; establish a National Database of Waste Management Operators and Sites.



- Insurers have a key role to play in making an accurate assessment of the risk, as most sites operate with insurance, contrary to popular belief. Offer financial incentives for good practice whilst installing penalties for poor practice.

Do we need more robust legislation / guidance?

- Review and consolidate the existing guidance regime, additional legislation unnecessary.
- Sign post guidance, particularly for smaller operators.
- More integrated planning process required with involvement from the Environment Agency and Fire & Rescue Service alongside Local Authorities to decide on appropriate locations for waste management facilities, regulated permits for waste in terms of type and total quantity alongside better advice and guidance on suitable risk management processes to be adopted.
- Make better guidance rather than legislation
- Reassess the existing permit structure, including:
 - Who is it issued too [link to proposed National Database]
 - Controls on types, quantities, location and duration of waste storage
 - Scale of fines for non-compliance
- Co-regulation with Environment Agency ,Fire & Rescue and Local Authority involvement from planning approval to site operation inspections [shared risk assessments]

If so; how do we ensure it is broadly enforceable?

- Make it practical, supported by the sector
- Ensure that it is easy to understand by all parties, enforceable by a single planning and inspection regime involving all enforcing authorities.

Question 3 – What would be the consequences of failure?

- Increase in “not in my back yard mentality” amongst communities
- Increase in costs associated with operations, not least insurance premiums.
- Potential limitations in third party investment, even for good operators.
- Likelihood of encouraging more rogue trading elements
- Reputational risk to all parties concerned
- Media reporting line may harden further and lead on to calls for tougher legislation



Selected unattributed quotes from Forum delegates



“The waste industry is keen to stress that holding large stockpiles of waste material is not in their best interest and there is little evidence to suggest that stock is held to secure maximum profits - the market is just not that volatile. It is therefore in their interest to process it as soon as possible. The issue of ‘gate fees’ being high can drive the rogue market where operators take on a stock and then abandon it. Market forces have little overall impact and leave scope for the development of fairly predictable, intelligence led prevention measures.”

“The Environment Agency shared their document ‘Review of incidents at hazardous waste management facilities’ as an example of good practice being shared. The group liked this, most however were not aware of its existence, probably because the word ‘hazardous’ was involved which gave it a specific niche. A ‘non-hazardous’ version would be well received if pitched at the correct level.”

“Insurers clearly have a key role to play in making an accurate assessment of the risk, as most sites will operate as insured sites, contrary to popular opinion. Those sites (Band A) that have seen an increase in incident count can best afford to do something about it. The insurance industry acknowledges the role of sprinklers and said that, in some cases, premiums could be adjusted to reflect an increased level of control measure.”

“A possible solution is the consolidation of the industry into fewer, better managed/regulated and more responsible operators. This will be driven by the economic factors such as the ability to effectively insure and manage market forces.”

“We have seen a number of major incidents that have focused attention on the fire risks associated with waste management operations and the challenges these have had on the fire and rescue services in response to these incidents. We are now seeing concerted action by a range of stakeholders and industry bodies to address this issue”





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