Waste Risks

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Agenda

- Types of Waste Risks
- Features
Waste Risk Types

- Waste Transfer Stations
- Materials Recovery Facility
• Materials Recovery Facility

• Waste to Power & Incinerators
Well planned and managed
Busy and Mobile Plant
Busy – More Typical
Processes
Hydraulics, Conveyors, Sorting Rooms, Continuous Maintenance
Storage Issues
Oscillating Monitors
Emerging Hazards in Recycling Facilities
• Insurance premiums up by 300%
• Over 300 fires a year
• 60% chance of any waste having a fire
• Smethwick Fire – 6 million
• Cost to the fire service around £16million per year
Summary of the problem

• Waste v time
• Stockpiling/RDF
• Rogue traders
• High profile/recurring fires
• Prevention and regulation
Impact on UK PLC

• Community
• Economy
• Environment
• Fire Services
Common Causes

• Accumulation of waste leading to self-heating and combustion.
• Inadequate waste segregation and separation.
Failing business model
Poor EMS
Waste accumulation
Regulatory limitations
Market forces

External sources
Self-heating
Plant/machinery
Human factors
Chemical reaction

Potential

Inaccurate/unavailable site plans
Delayed / ineffective response
Inadequate waste segregation / separation
Inadequate fire detection / suppress

Ignition

Escalation

LONDON FIRE BRIGADE
Lawrence's Skip Hire Ltd, Kidderminster

- 5,000 tonnes of RDF
- burned for 6 weeks.
- 900 fish killed
- 80 fire fighters
- cost tax payer £250,000
- Operator into administration
<table>
<thead>
<tr>
<th>Harm to the Environment</th>
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<tbody>
<tr>
<td>Toxic Smoke plumes and airborne particles</td>
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<td>Fire water run off</td>
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<td>Hazardous waste formed on the site by the fire and impacts of firefighting</td>
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<td>Physical damage</td>
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<td>Harm to People</td>
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<tr>
<td>Unstable structure/stacks falling materials</td>
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<td>Access and egress</td>
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<td>Thermal radiation</td>
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<td>Pressurised containers (cylinders)</td>
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<td>Biohazards and infectious substances</td>
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<td>Unstable ground</td>
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<td>Animal attack</td>
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<td>Plant, machinery and vehicle movements</td>
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<td>Water and slurry Pits</td>
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<td>Needle sticks, sharps and penetration hazards</td>
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<td>Violence and aggression from people</td>
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<td>Skip weld explosion</td>
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<tr>
<td>Harm to Business Continuity/Economy</td>
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<td>Impact to nearby organisations</td>
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<td>Impact to transport and utility infrastructure</td>
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<td>Reputational damage</td>
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<td>Impact to partner organisations</td>
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<td>Financial impact to FRS</td>
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<td>Exhausting resources</td>
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<td>Legal action</td>
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<td>Cost of clean up</td>
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Engagement and progress

- Existing legislation
- Pollution Prevention Guidance (PPG29)
- Technical Guidance Note (TGN7.01)
- CFOA Waste Fires Working Group
Summary

• Investment in new fire protection measures
• Better Management
• Better Regulation
• Better collaboration