PREVENTION OF FIRE AT WASTE TRANSFER STATIONS

Dr Graeme Hansell
Michael Slattery Associates
Recent fires at Non-hazardous Waste Transfer Stations

- Municipal waste
- Commercial and industrial waste
- Construction & demolition waste
Duty of Care of owner / occupiers

Guard against fire outbreak
Provide fire safety measures & procedures
Ensure measures & procedures are constant
Safety of persons
PRINCIPLES OF FIRE SAFETY
FIRE SAFETY AUDIT

Identify the fire hazards

Reduce the risk of those hazards

Determine:

Physical fire precautions
Management arrangements
Common causes of fire

– Arson/vandalism
– Naked flames/welding/cutting
– Ignition of flammable vapours
– Electrical faults/equipment failures
– Spontaneous combustion/self-heating of waste

UK Environment Agency guidance “Preventing fires at waste sites” (2013)
biological activity / relatively dry materials
large well insulated piles
limited air flow / temperature build up
non-uniform mix of materials
poor moisture distribution
100 – 150°C
Limiting Fire Spread

Containment
Spacing Stockpiles
Early Detection
Fire Suppression
Fire Containment
Spacing Stockpiles
Early Detection
Visual checks
CCTV
Probe monitoring
Heat or flame detection
Smoke Detection
Air Sampling
Suppressing Fire
QUESTIONS
EPA WASTE WORKSHOP

Hodson Bay Hotel, Athlone, Co. Westmeath. Thursday 24th October 2013