Cost Effective Odour Control

Plan, Manage, Contain, Abate
Based on an article in Biocycle November 2014

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Environment Agency

So What, Who Cares?

Community impacts

- ~15k to 20k reports of odour pollution due to permitted activities each year
- Consistently the second most common type of pollution reported
- No apparent change since 2001, when records began

Industry impacts

- Expense and disruption to business
- Reputational damage / Stress
- Enforcement / Permit refusals / Business failure

Agency impacts

- Major operations cost
- Reputational damage / Stress
- Diversion from other work

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Business Plan

- Who are your customers and what services do you offer?
- What materials do you manage?
- Distance to receptors
- Sensitivity of those receptors

Best to consider these factors at the planning stage whenever possible.

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Management and Process Control

- ‘Fresh’ feedstock materials
- Rigorous inventory control (FIFO)
- Avoid venting
- Retention times and digestate maturity
- Digestate management
- Etc.

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Management and Process Control

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Containment

- Minimise your reliance on Containment and abatement £££
- Avoid the ‘Big Barn’ approach whenever possible
- Make containment as small and localised as possible
- Stratify containment measures
- Use qualified engineers to design ventilation systems
- Have performance criteria which can be routinely monitored

Containment

Containment

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Abatement

- Design to work together with your containment
- Consider treating different odorous air streams separately
- Match the abatement system to the chemical characteristics of the air to be treated
- It is cheaper and easier to clean small volumes of highly odorous air

Abatement

- Use qualified engineers and proven technologies with measurable performance parameters and guarantees
- Maintenance
- Monitor key parameters and performance
- Take care not to over-drive your abatement system

Abatement

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