ADBA EXPO: 3rd July 2019

PRACTICAL MANAGEMENT OF ODOUR EMISSIONS

PERCEPTIONS & WORKLOAD

A CASE STUDY

BORE HILL FARM BIODIGESTER







BORE HILL FARM BIODIGESTER

- 28,000 tpa food waste
- Excellent road connections
- Operational June 2012
- High visibility:

Visitor Centre

Exemplar Design

Innovation & Excellence

Flexible Inputs

• Bespoke In House Odour Control System



Bore Hill Farm Biodigester







LOCATION - RECEPTORS

- Roads
- A36 trunk road & A350 on doorstep
- Edge of Town
- 45 neighbours 200 300m
- Roads & roundabout
- Pavement & public foot path
- Countryside
- Salisbury Plain
- AONB
- River Avon SAC









FOOD WASTE TYPES

- C & I Waste
- Liquids
- Loose Primary Packaged
- Palletised Secondary & Tertiary Packaged
- Containerised: Dolavs,IBCs, Barrels





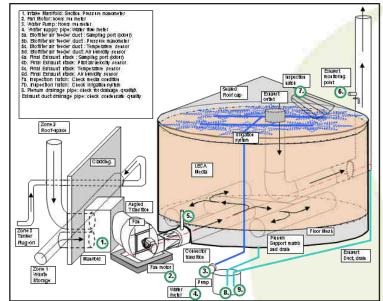


ODOUR CONTROL

- Odour Management
- Design out issues
- Easy to Implement
- Regular Monitoring
- Proportionate Response
- Key Principles
- Prevention known inputs, delivery methods, reception procedures
- Reduction timely processing, staff awareness, point source extraction, regular washing down
- Treatment flexible air rate, variable filter contact time, robust design









ODOUR TREATMENT

Collect as close to source as possible

Reduces air handling volume

Reduces risk of leaks / fugitive emissions

■ Variable volume throughput

■ Trickling bio-scrubber

irrigation (rain water harvesting + top up)

Clay aggregate media

Variable air flow fan draws air to scrubber

Upward air flow through scrubber

Variable flow irrigation

Closed loop dirty water processing

Emission stack







ODOUR MONITORING & RESPONSE

- Daily Walk Round Checks
- **Site Activity Records**

- Velocity Velocity Static
- Site diaries manager, reception hall, process technician
- **Differential pressure logs** throughout scrubbing process
- **Front door control** sign in/out, manned reception, inductions
- Complaints date, time, location, odour characteristics, prompt response & engagement
- Stakeholder engagement
- **Uninformed** public, visitors, site tours/events
- Informed EA, staff, deliveries & collections
- Be open to improvements







DAILY WALK THROUGH CHECKLIST

(Prefix: WT)

DATE: 100518

Document Purpose: To act as a regular method of monitoring and to collate maintenance work tasks

EMPLOYEE: COLIN + MILE DAY: THUM

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COMPLAINT RESPONSE

Biofertiliser

Record Sheet 11

Complaints

The complaints procedure falls within the Quality Management System of the AD Plant form may be used for recording the details of and the response to complaints or concerns about the quality or usability of the digested materials from the plant. This would also include complaints about odour from the digestate

Complainant

lame of person	Coop in hance of
Organisation name	EA O (West and duty)
Address	
Telephone	07919 308 728
Fax	
E-mail	
Date	28/7/18

Nature and record of complaint

CL received adour complaint at 11:30 pm last night ragan of 0000 thus morning. I briefed heron my drive round @ 09150 this norming (no odow) She recorded as unsubstantiated + will notify Sheh. Marriot @ EA 16 misted her on my conv. w/ T. Fill of this morning

Procedure

- Receive & Log Complaint (10 mins
- Check Site Activity (15 -60 mins)
- Verify (walk/drive) (15-30 mins)
- Plan Mitigation (I + hrs)
- Contact & Feedback: voice (15-30 mins)
- Confirm Actions: email (20-60 mins)
- Implement Mitigation (I + hrs)

	TEOM.
Name of person	
Rois	Directors
Received by	Letter / email \telephone / fax / meeting
Date received	28/7/18

Confirm Actions: email (15-30 mins)

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BORE HILL FARM BIODIGESTER

AIR QUALITY MONITORING LOG

Date	Time	Location	Description	Name
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DAILY WALK THROUGH CHECKLIST

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ODOUR COMPLAINT MANAGEMENT

- Work Load (min 3.5 hrs per complaint)
- **Multiple Community Engagement**
- Site events open house/learning/tours/discussions
- Open door policy
- Group stakeholders town council/eco groups/community action groups/neighbours
- Individual stakeholders vocal minority/other agendas/NIMBYism
- Scalable comms: Website/email/telephone
- **Controllable** comms

Regulator Engagement

Recipient-based comms







CONCLUSION



- 6.5+ yrs operations
- High standards
- Visible & Approachable
- Integrated site
- **Early stage design mitigation**

- Operational Control
- Continual Communication
- Proportionate response
- Aim to be Best in Class
- Collaboration & Innovation







THANK YOU

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