

Composting – The Role of the EPA

Dr Tom McLoughlin
Senior Inspector

Office of Licensing and Guidance,
Wexford

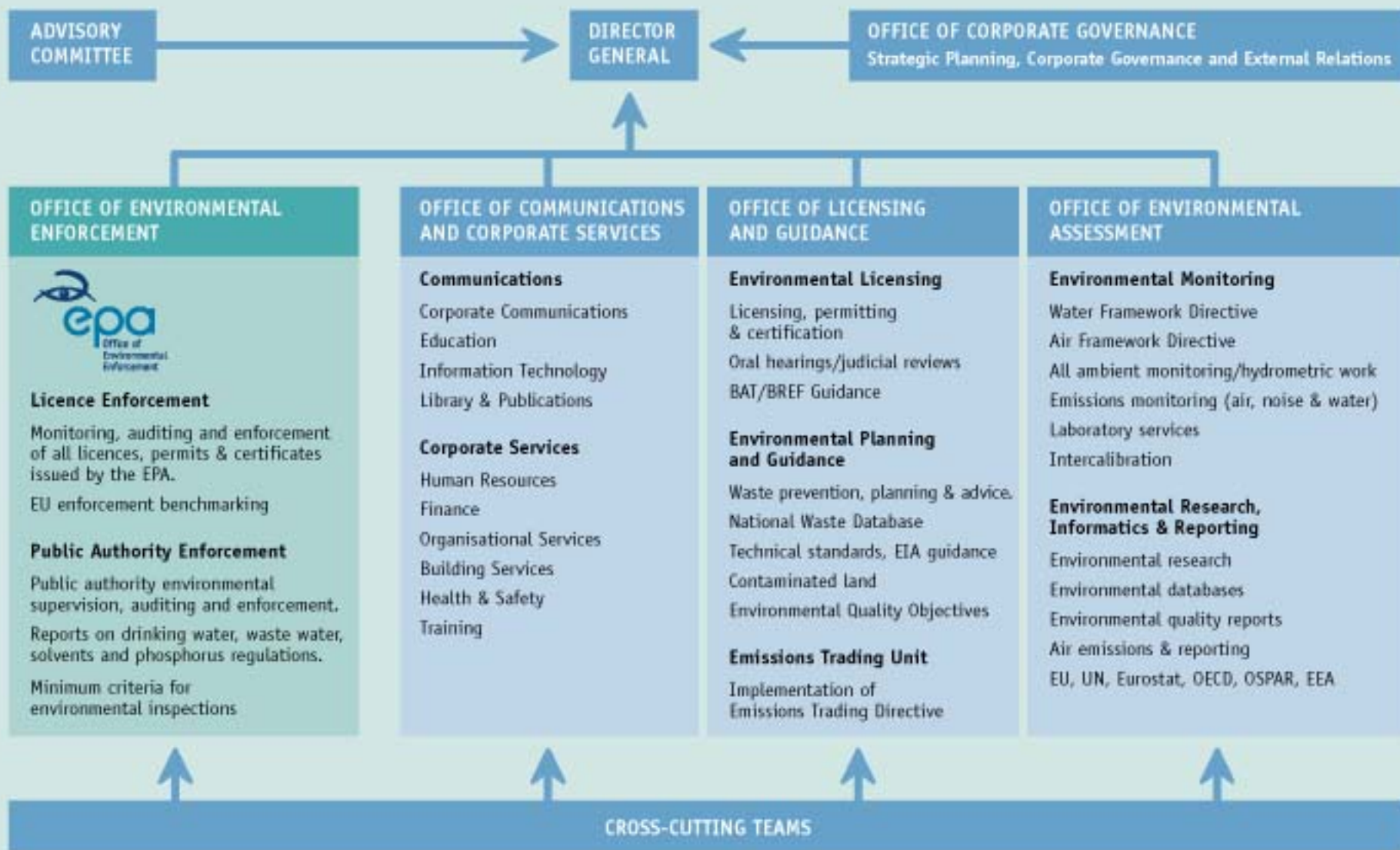
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Background of the EPA

- EPA Act 1992
- HQ in Wexford
- Regional Inspectorates in Cork, Castlebar, Dublin, Kilkenny, Monaghan, also office in Mallow, Letterkenny

Organisational Structure



EPA and Composting

- Licensing of larger composting facilities, i.e. >1000m³ on-site at any one time
- Pre-Application meetings with potential applicants
- Assessment of applications
 - Submissions
- Issue of Proposed Decision
 - Objections
- Consideration of Objections and issue Final Decision
- Enforcement of Waste Licence....ongoing..

EPA and Composting..contd..

- Promotes and co-ordinates environmental research
- Publishes reports on key issues
- National Waste Database
- Assessment and Evaluation of Outlets of Compost Produced from Municipal Waste
- Bioaerosols and Composting-A literature evaluation-draft report
- See www.epa.ie look in "R&D" link

Waste legislation

- Waste Permit Regulations to be amended in 2004/2005
- Waste Management (licensing) regulations, 2004
- POE Act 2003 – New Powers
- Working Document “Biological Treatment of Biowaste” 2nd Draft (Biowaste Directive)
- EC1774/2002 Laying down health rules concerning animal by-products not intended for human consumption (ABP Directive)
- Waste Management Act, 1996
 - Part v: Recovery and disposal of waste
 - Waste management (Licensing) Regulations, 1997 (amended 1998)
 - Waste Management (Licensing) Regulations, 2000, 2002

Licensing System for Composting Facilities

1. Licences

Major activities subject to a licence issued by EPA

2. Permits

Activities listed in the Waste Management (Permit) Regulations, 1998

3. Certificate of Registration

Minor Activities

Waste Licence Applications – Compost Facilities

- Classes of Activity:
 - 4th Schedule of WMA 1996, Recovery Activities
 - Class 2: Recycling or reclamation(including composting....
 - Class 13: Storage of waste intended for submission.....
 - 3rd Schedule of WMA 1996, Disposal Activities
 - Class 6: Biological treatment..... results in mixtures which are disposed of...
 - Class 13: Storage prior to submission to any activity.....

Common Issues in Assessing Waste Licence Applications

- Proximity to houses/sensitive receptors (noise/odours/bioaerosols) (250mEA)
- Odour modelling based on proposed throughputs
- Bioaerosols-Risk Assessment/Management
- Water management, both surface water and wastewater
- Technologies to be used (indoor/outdoor, odour abatement, final product) (Most applications for enclosed, some outdoor windrows)

Common Issues in Assessing Waste Licence Applications

- Technology to be used depends on site specific issues (location, feedstock, quantities)
- Tonnages of feedstock and type of feedstock (facility capacity, waste suitability)
- Facility operation and management & process control
- Less proposals means licence may be written with caution (more restrictive)

Timescales from Application to Proposed Decision and Final Decision

- New application may take ~ 12 months, will depend on quality of application
- Application needs to comply with SI 185 of 2000 and EIS Regs where applicable
- Review of existing waste licence is much quicker
 - Agency may specify what information is required as per SI 336 of 2002
 - Only those issues pertinent to the proposed changes at the facility need be addressed
 - EIS will be required if the percentage or actual increase in waste acceptance exceeds the threshold in the EIS Regs.

Submissions & Objections

- Submissions are received during the application assessment
- All valid submissions are considered and included in IR
- Objections are received post PD – pre FD
- Technical Committee consider objections
- Objections may be from applicant and/or third parties

Changes from Permits to Licenses

(1000m³ at any time)

- Licence may have more stringent controls
- Reporting may be increased in Licence
- Annual reports and ongoing monitoring requirements will be increased (Air, Noise, Dust, Surface Water, Odour, etc)
- Licenses should be more consistent, as permits are issued by each LA.

Changes from Permits to Licenses...contd

- Licence provides and expects ongoing development of the facility in terms of operations and management
- Licenses means larger scale production, means greater potential for pollution/nuisances, means greater policing and control required
- Cost of compliance may be greater
- A number of permitted sites that have been visited by the Agency have not been well run (feedstock quality)

Typical Structure of a Waste Licence

INTRODUCTION (Non-Technical Summary of licensed activities)

- Reasons for the decision (S 40(4) of WMA 1996)
- *Part I Activities Licensed* (Classes as per Schedule 3 & 4 of WMA 1996)
- INTERPRETATION (Definitions)
- *Part II CONDITIONS*
- **CONDITION 1** SCOPE OF THE LICENCE (Opening hours, Waste Types. etc.)
- **CONDITION 2** MANAGEMENT OF THE FACILITY (Facility Manager, EMS, EMP, etc)
- **CONDITION 3** FACILITY INFRASTRUCTURE (buildings, drainage, air handling, etc)
- **CONDITION 4** FACILITY OPERATIONS (Waste acceptance procedures, process control, etc)
- **CONDITION 5** EMISSIONS (Air, Wastewater, Surface Water, ELV's)
- **CONDITION 6** NUISANCE CONTROL (Inspections, dust, odour, litter)
- **CONDITION 7** MONITORING
- **CONDITION 8** CONTINGENCY ARRANGEMENTS (Incidents, ERP, Emergencies)
- **CONDITION 9** RECORDS (Waste records, complaints, etc)
- **CONDITION 10** REPORTS AND NOTIFICATIONS (Incidents, AER, ABP)
- **CONDITION 11** CHARGES AND FINANCIAL PROVISIONS (Charges & Risk Assessment)
- SCHEDULE A : Waste Acceptance
- SCHEDULE B : Specified Engineering Works
- SCHEDULE C : Emission Limits
- SCHEDULE D : Monitoring
- SCHEDULE E : Recording and Reporting to the Agency
- SCHEDULE F : Standards for Compost Quality
- SCHEDULE G : Content of the Annual Environmental Report

Controls Required by Waste Licences

- Biofilters are most common odour abatement to-date
- Negative pressure, emissions pass through water scrubbers and biofilters
- Noise control: Enclosures, Acoustic barriers, Planting
- Visual/Odour: Screening & Planting
- Water Control: Collection & reuse of all “dirty water”, segregation of rainwater from “dirty areas”monitoring!

Focus of Compost Waste Licenses

- Provision of Infrastructure
- Management, monitoring, recording and reporting
- Programme for continuous improvements (EMP) to achieve BAT/BATNEEC
- Improved operational controls
- Public Interaction
- Financial Provisions

Waste Licence Enforcement Non-compliance's

- Vary from major to minor
- All non compliance's need to be addressed
- Graduated response by EPA
- Ultimate sanction is prosecution

Enforcement of a Waste Licence - EPA

- Agency will visit the facility at least 2 times per year
- Also will include annual Audit of the facility
- Site Visits by the Agency will include:
 - Examination of records, procedures
 - Review of monitoring returns
 - Site Inspection
 - Litter, Noise, Dust, Odours, bioaerosols
 - Water Management
 - Waste Types
 - Nearby water bodies
 - Suitable infrastructure in place
 - Interview personnel on-site

Common Non-Compliances noted at Facilities

- Provision of infrastructure within timeframes
- Lack of procedures
- Waste records
- Reporting of incidents
- Monitoring requirements not being fulfilled
- Nuisances noted and lack of nuisance monitoring
- Facility Management

Licensed Compost Facilities in Ireland

- Limited number of dedicated composting facilities are licensed
- Proposals tend to be for biowaste rather than just green waste
- Planning Issues have played a significant role (Organic Kompost)
- In most cases there is a degree of local opposition to proposals
- Review of Waste Plans may help

All waste licences are available on EPA website:

www.epa.ie

Licensed Compost Facilities in Ireland

- Many composting facilities are integrated with Transfer Station/Landfill e.g. Barna Waste, Mulleadys, Pollboy, Silliot Hill
- Many permitted facilities may move into licensable quantities over the next number of years
- Privatisation of collection services and composting facilities is on the increase
- End-uses for treated biowaste

Application of Biowaste & ABP Directives into Waste Licenses

- Biowaste Directive
 - Feedstock as per Annex 1
 - Sanitation Requirements as per Annex II
 - Quality Classes as per Annex III
 - Class I – few restrictions on use
 - Class II – <30 tonnes dry matter/ha
 - Stabilised Biowaste – more restrictions, landfill cover, use on areas not for crop or fodder production, sanitation requirements if in contact with general public.
- ABP Directive
 - Conditions of licence requires licensee to provide report within specified timeframe outlining how they intend to ensure compliance, i.e. class of waste accepted and Temp °C v's Time

Conclusions

- National Picture (NWD report)
More compost facilities needed
- National Strategy on Biodegradable Waste-
DEHLG 'draft' report April 2004
- EPA Licence Requirements
(feedstock, sanitation, compost quality and
monitoring)
- Management & Training

Concluding Remarks

The overriding concern of the EPA in licensing composting facilities and in the implementation of the Waste Management (Licensing) Regulations is to ensure that their use does not have an adverse effect on human health or the environment