Support to Member States in improving hazardous waste management based on assessment of Member States' performance (DRAFT RESULTS)

13th EUROSAI WGEA Annual Meeting - Valetta
Session on Auditing Issues Related to Industrial Waste and Chemicals
06 October 2015
1. Project methodology

2. Results of analysis regarding HW management practice in the MS and major problems:
   - Classification and labelling
   - Record keeping and data collection
   - Permitting and inspections
   - Collection and storage

3. General recommendations for enforcement improvement
BiPRO‘s Services

- Chemicals
- Sustainability & Innovation
- Health
- Environment, Climate & Energy
- Waste & Resource Management
- Support for Developing and Transition countries
BiPRO Waste and Resource Management

- technical and legal questions of waste management legislation (e.g. limit values for pollutants, evaluation of BAT, classification)
- environmental and socio-economic impact assessment
- verification of implementation and enforcement of waste law (e.g. treatment operations, transboundary shipment of waste)
- drafting and assessment of waste management plans
- analysis and evaluation of waste statistics
- waste prevention, recycling and recovery concepts (waste hierarchy, circular material flows, flow analysis, EPR)
- elaboration of guidance, communication, education and training
1. Project methodology
### Overview of the project

**Project runtime:** October 2014 – October 2015

<table>
<thead>
<tr>
<th>Work Package (WP)</th>
<th>Status</th>
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<tbody>
<tr>
<td>WP 1: Develop criteria and a methodology for the assessment of national waste management practices to the specificities of hazardous waste management (screening methodology)</td>
<td>✓</td>
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<tr>
<td>WP 2: Screening of national waste management practices against the criteria developed in WP 1 and selecting ten Member States</td>
<td>✓</td>
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<tr>
<td>WP 3: Identifying hazardous waste management practice, problems as well as best-practice of 10 selected MS (in-depth analysis for the ten selected EU Member States (Bulgaria, Estonia, Finland, Germany, Latvia, Luxembourg, Ireland, Italy, the Netherlands and the United Kingdom).)</td>
<td>✓</td>
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<tr>
<td>WP 4: Elaborate a set of general and specific recommendations for improving hazardous waste management in the Member States</td>
<td>Ongoing - Mid October 2015</td>
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<td>WP 5: Preparation and organisation of a workshop</td>
<td>✓</td>
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## 23 criteria for screening of 28 EU MS

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<thead>
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<tbody>
<tr>
<td>1.1 HW in WMP</td>
<td>2.1 Support of HW classification</td>
<td>3.1 Requirements for collection and storage of HW</td>
<td>4.1 Existence/ quality of HW generation/treatment data</td>
<td>5.1 Responsibilities and inspections</td>
</tr>
<tr>
<td>1.2 Industrial HW generation in WMP</td>
<td>2.2 Procedures of HW labelling</td>
<td>3.2 Separate collection of WEEE</td>
<td>4.2 HW data available to public</td>
<td>5.2 Regular inspections and capacities</td>
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<tr>
<td>1.3 HW prevention targets in WPP</td>
<td>2.3 Existence of HW record keeping system</td>
<td>3.3 Separate collection of batteries and accumulators</td>
<td></td>
<td>5.3 Penalties and fines</td>
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<tr>
<td>2.4 Requirements for record keeping/ tracking system</td>
<td>3.4 Reliance on disposal for HW treated: in the MS</td>
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<tr>
<td>2.5 Registration/permit procedures</td>
<td>3.5 Within/exported to other country</td>
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<tr>
<td>2.6 Mixing ban</td>
<td>3.6 HW recovery of: spent solvents</td>
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<tr>
<td>2.7 Derogation from mixing ban</td>
<td>3.7 ...acid, alkaline and saline waste</td>
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<tr>
<td></td>
<td>3.8 ... used oils</td>
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In-depth analysis of 10 EU MS

- Assessment of **HW management practice** in the 10 selected EU Member States regarding:
  - Classification
  - Labelling
  - Record keeping
  - Permitting
  - Mixing ban
  - Collection
  - Storage
  - Inspections

- Identification of **particular problems with statistical data and reporting procedures**

- Clustering of **specific problems with HW management**

- Collection of **good examples and best practice**
2. Draft Results
## Classification and labelling

<table>
<thead>
<tr>
<th>Compliance with legal requirements</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Support of HW classification</strong></td>
<td>12 MS Detailed description of support measures</td>
<td>16 MS Basic information on HW classification</td>
</tr>
<tr>
<td><strong>Procedures of HW labelling</strong></td>
<td>27 MS Labelling at national level</td>
<td>1 MS Labelling system at regional level (BE)</td>
</tr>
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</table>

### Problems as regards HW classification:

- Entries of the waste classification system are not very distinct → wide interpretation and wrong classification

- Missing harmonised threshold values for certain mirror entries (PAH content) and availability of different test methods (CEN, UN ADR ....)

- Further EU guidance for end-of–waste criteria and definition of by-product is needed

- Different reporting obligations and requirements lead to uncertainties in classification (Basel y-code, LoW, national)
Classification and labelling

Problems as regards HW labelling:

• Missing company in-house expertise for HW labelling leads to wrong labelling
  → Especially for SMEs that miss necessary know-how

• Different labelling requirements depending on different modes of transport and composition of the waste (Basel, GHS/CLP, ADR)

• Labelling difficulties resulting from false classification

• Old labels on containers are not removed → double labelling that misleads waste treatment operators

• Correct labelling and classification is not sufficiently controlled by enforcement authorities
## Record keeping and data collection

### Compliance with legal requirements

<table>
<thead>
<tr>
<th>Compliance with legal requirements</th>
<th>21 MS Centralised registry system</th>
<th>4 MS Decentralised registry system (BE, ES, FI, SK)</th>
<th>3 MS No registry (CY, RO, SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of HW record keeping system</td>
<td>16 MS Record keeping covering all steps from collection to final treatment</td>
<td>11 MS Requirement to keep/store data but no reporting obligation</td>
<td>1 MS No information (RO)</td>
</tr>
</tbody>
</table>

### Reporting of data to EUROSTAT (data-base)

<table>
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<tr>
<th>Reporting of data to EUROSTAT (data-base)</th>
<th>Scoring</th>
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</thead>
<tbody>
<tr>
<td>6 MS Use registry data to report to EUROSTAT (AT, BG, DE; HR, IT, NL)</td>
<td>✔️</td>
</tr>
<tr>
<td>6 MS Reporting to EUROSTAT based on reporting obligation</td>
<td>🔄</td>
</tr>
<tr>
<td>16 MS use survey and sample as basis to report to EUROSTAT</td>
<td>⚠️</td>
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</table>
Hazardous waste data availability

- Treatment routes for nearly 29.3 Mt (28%) cannot be tracked in Eurostat
- Significant differences between MS in shares and absolute terms

Δ 6.3 Mt
Δ 5.7 Mt
Δ 3.6 Mt
Δ 2.1 Mt

Gap between generation* and treatment in %
(*generation + imports + exports)

- Treated amounts within the MS
- Identified gap
Record keeping and data collection

Problems as regards HW record keeping:

• Challenges for correct record keeping depending on personal capacity and infrastructure (weighing and trained staff)
• Different record keeping practices at regional levels within countries that don’t have national requirements
• Difficulties of back-tracking of HW transports amongst federal state level with several interim processes
• Record keeping and reporting obligation only for activities requiring a permit
• Lack of user-friendliness of reporting systems (change from paper to electronic system)
• Duplicate reporting obligations leading to loss of HW traceability
### Permitting and inspections

<table>
<thead>
<tr>
<th>Compliance with legal requirements</th>
<th>![Checkmark]</th>
<th>![Blank]</th>
<th>![Warning]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration / permit procedures</td>
<td><strong>25 MS</strong> Permits required for all HW operations</td>
<td></td>
<td><strong>3 MS</strong> Exemptions possible (DK, IT, UK)</td>
</tr>
</tbody>
</table>

**Enforcement of hazardous waste legislation:**

Structures are set and declared (implementation report on WFD)

- **All MS** define responsibilities for enforcement
- **All MS** have systems of penalties and fines defined
- **15 MS** describe system of regular inspection, general inspection capacity and number of inspection performed
Permitting and inspections

Problems as regards permitting:

- Permitting procedures tend to be slow due to lack of capacities within authorities → Hampers innovation and establishment of new technologies
- Permits for HW treatment are difficult to obtain, only with higher thresholds (public opinion related)
- Public tendering for HW treatment is focused on lowest price
- Waste oil incinerators (throughput <0.5MW) are exempted from permit procedures under Waste Incineration Directive
- Permits for HW treatment plants are not available to public
- Permitting requirements vary depending on regional level
Permitting and inspections

Problems as regards enforcement and inspections:

- Inspections are done routinely for IPPC companies, but **less frequent for the non-IPPC companies**

- **Penalties** imposed in reality for non-compliance with environmental permits are much lower than the maximum rates

- **High number of authorities involved in inspections**; thus making coordination and planning difficult

- Inspections are in place, regulation is very strict, but implementation is limited
  (large number of SME)
Problems as regards enforcement and inspections:

• **No sufficient rules for inspections**; on-site inspections often take the form of occasional control during collection and are not regular; document controls are more frequent

• **Insufficient communication** between authorities and companies; authorities are not aware of problems that companies faces

• **Significant regional differences** in implementation of HW management hampering uniform enforcement

• **Enforcement powers against ‘sham’ treatment** are not sufficiently robust, implementation of high treatment standards in industry

• **More regular and stricter inspection** on sites are needed to contribute to compliance
All MS include **requirements for separate collection and storage in legislation**

9 MS reaching/over-achieving 45% target of 2016 for WEEE

6 MS reaching/over-achieving 45% target of 2016 for batteries
Collection and storage

Problems as regards collection are:

• Infrequent controls lead to HW collection without a licence

• In some countries the collection of **asbestos and waste oil** is not sufficient and has to be improved; informal sector involved

• Valuable parts of **WEEE like metals are disposed** as scrap metal and not as WEEE and thus not brought to authorised waste handlers and collection points

• Uncollected HW due to a lack of collection facilities for HW from a diverse range of sources, mostly small scale, including households, small businesses and farms (waste oils, medical waste, pesticides)

• No formal system for collection of farm HW

• Collection is controlled by **too many authorities**, thus making coordination and planning difficult

• HW quantities contained in **construction waste are not properly collected**
Problems as regards storage are:

- **Little storage space** available, due to the resulting high price for storage, it is often cheaper to treat HW abroad
- **Storage of HW at production sites does not require an environmental permit** if the operation itself does not require a permit,
- Storage is not always controlled under an environmental permit and left out of the permitting obligation in HW management
3. General recommendations for enforcement improvement (Draft)
Specific recommendations for enforcement

Record keeping:

- Enforce data reporting obligation also for imports/exports of waste, if possible issue penalties for non-reporting of HW

Classification and labelling:

- Support and control the correct classification of HW and provide advice on test methods to be applied, i.e. laboratory testing. Provide a helpdesk for classification difficulties

- Reclassify HW if there is doubt of correct classification

- Give advice on different labelling obligations and control correct labelling during site visits (GHS/CLP, ADR)

→ Correct labelling is a major problem for which no good practice was identified
Specific recommendations for enforcement

Collection and storage:

- Control collection permits regularly and do not issue unlimited permits
- Provide an online (updated) database for all authorised HW collectors per LoW code
- Support the collection of smaller HW quantities (Household, SMEs, farms)
- Give guidance on correct storage, e.g. during site visits

Permits and HW mixing ban:

- Control the mixing ban **within the ex-ante controls** (prior to permitting; permit conditions) and by regular site-visits during the operation period
General recommendations for enforcement

- Support SMEs since they often miss necessary knowledge and expertise in HW management
- Use inspections/site-visits as help and improvement chance when problems occur for the 1st time rather than direct infringement
- Also focus on HW operations that do not require an environmental permit, e.g. temporary storage or treatment operations, SMEs
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