EU-HCWM

“Developing an EU Standardised Approach to Vocational Educational Training Awards in Healthcare Waste Management”

Project No. 541982-LLP-1-2013-1-UK-LEONARDO-LNW

Vocational Training in Healthcare Waste Management

Themistoklis Kasampalis
SIGMA Consultants Limited

TINOS 2015 Conference, 3rd International Conference on Sustainable Solid Waste Management, Tinos Island
2-4 July 2015

Funded by the EACEA with the support of the Lifelong Learning Programme of the European Union
PROJECT

Purpose - is to develop a framework for a healthcare waste management qualification & training package, which will provide a unified approach to the development of Vocational Educational Training Programmes for Healthcare Waste Management across the EU Member States.

Methodology & Outputs - will reflect best practices and best available technologies for the management and treatment of healthcare wastes.
Healthcare waste management is a dynamic field of the waste sector and technology applications have radically changed over the past decades. As we become more aware of the risks posed by healthcare waste in terms of infection control and broader environmental impacts so our practices and technologies improve.
However, healthcare waste management practices are not always perfect.....
A standardised qualification and associated training package will not solve all the problems – but it has the potential to significantly improve waste management practices, through raising awareness and the provision of a structured capacity building programme to key system stakeholders.
PROJECT PARTNERS

- ICERMS, Scotland, UK
- SINERGIE, Italy
- REC for Central and Eastern Europe, Country office Ljubljana, Slovenia
- SIGMA Consultants Ltd, Greece
- Regional Environment Centre FYROM, FYROM
- NHS Confederation, Belgium
- ET Log, Germany
- European Union of Private Hospitals, Belgium
- Institute of Environmental Protection, Poland
- Club EMAS, Spain
- International Solid Waste Association, Austria
- REC Albania, Albania
PROJECT MAIN TASKS

The project has set the following objectives:

1. Conduct & report on an assessment of the healthcare waste management situation in the partner member states in terms of vocational training in the HCW sector; legislation provision; current practices re HCW management and lastly barriers to new qualification implementation
2. Prepare a comparative analysis report on each of the above findings
3. Develop a set of National Occupational Standards for the post of healthcare waste manager working in a healthcare facility.
4. Develop a Vocational Educational Qualification and underpinning PowerPoint based Training Programme in line with the requirements of the national occupational standard.
5. Develop an e-learning platform for the NOS
6. Develop an EU wide professional network for dissemination and support of the project outputs with a view to pan European implementation
EUROPEAN SURVEY

A survey, in 9 European countries (Albania, FYROM, Germany, Greece, Italy, Poland, Slovenia, Spain and the UK), was carried out among

• healthcare waste managers and healthcare providers,
• respective business associations and authorities and
• training organizations

in order to obtain first-hand data on the work requirements and qualifications as well as the vocational training courses provided to healthcare waste management.
The purpose of the questionnaire was to gather information about

• The role of a healthcare waste manager
• as well as a set of draft NOS which would become the basis of unit titles for an award in healthcare waste management and treatment.

There were two distinct outputs expected from this process:

• to learn from current waste managers what their job roles entailed, how they got those jobs and what qualifications and skills they had or were required.
• to get their collective opinions on a draft list of NOS which would be the basis for qualification units for the new award on healthcare waste management and treatment.
THE COMPARISON REPORT

Based on the European survey findings, a comparison report was synthesized.

The comparison report examined three distinct aspects of the healthcare systems in each of the partner member states:

• Overview of the Healthcare Systems
• Overview of the Healthcare Waste Management Legislation and Practices
• Overview of Skills, Competencies and Training of involved Personnel in Healthcare Waste Management
THE COMPARISON REPORT

• partner member states have a system of healthcare provision which to a greater or lesser extent is a blend between State provision and Private sector provision.
• all of the partner member states are working to national interpretations of EU waste legislation and practices of segregation which share, at least in principle, similar core foundations.
• But there is a significant difference across the member states participating in the assessment process. In some cases there is a defined formal route for VET in HCWM, in others there is a less formal route and lastly there are cases where there is no VET for healthcare waste managers.
THE HEALTHCARE WASTE MANAGEMENT QUALIFICATIONS FRAMEWORK

- EU-HCWM project has developed a suite of 28 vocational training units to cover a range of activities normally associated with delivery of healthcare waste management.
- These units are based on a set of 28 National Occupational Standards.
- These units can be undertaken in 3 distinct pathways depending on the job role of the candidate.
- All of the units are underpinned by PPT training modules which contain, either practical exercises or question and answer sheets, to ensure that the candidate demonstrates competence in the unit being undertaken. The training modules will contain embedded exercises based on activities in the workplace.
THE HEALTHCARE WASTE MANAGEMENT QUALIFICATIONS FRAMEWORK

• All of the training materials will be included in a candidate qualification & training manual.

• The manual has four basic sections to assist the trainer in delivering the course programme:
  • Structure of the Awards in a Unit Context
  • Assessment Guidance for the Qualification
  • Methodology for the Delivery of the Awards
  • Course Programme

• It is important to allocate enough time for the award delivery and to ensure that sufficient emphasis is placed on the practical tasks and site visits.

• The qualification delivery is underpinned by an assessment strategy which delivering VET centres must comply with
<table>
<thead>
<tr>
<th>Unit No.</th>
<th>Unit Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complying with Waste Management Legislation</td>
</tr>
<tr>
<td>2</td>
<td>Developing Healthcare Waste Management Policy and Plan Documents</td>
</tr>
<tr>
<td>3</td>
<td>Implementing a Waste Management Plan, Record Keeping and Reporting</td>
</tr>
<tr>
<td>4</td>
<td>Manage the collection of hazardous and non-hazardous waste from a healthcare facility</td>
</tr>
<tr>
<td>5</td>
<td>Manage the movement, sorting and storage of hazardous and non-hazardous waste</td>
</tr>
<tr>
<td>6</td>
<td>Monitor the procedures to control risks to health and safety of the waste management function at a healthcare facility/healthcare treatment facility</td>
</tr>
<tr>
<td>7</td>
<td>Manage improvements to waste management operations/practices at a healthcare facility, treatment centre or transport operations</td>
</tr>
<tr>
<td>8</td>
<td>Implementing a Waste Minimisation Programme, including the sorting and storage of recycled materials, at a healthcare facility</td>
</tr>
<tr>
<td>9</td>
<td>Ensure protection of the environment at healthcare facilities, treatment or transport operations</td>
</tr>
<tr>
<td>10</td>
<td>Managing Waste Transportation operations for the transfer of hazardous and non-hazardous healthcare waste at a healthcare facility (Dangerous Goods Safety Adviser)</td>
</tr>
<tr>
<td>11</td>
<td>Manage a budget to Supporting the efficient use of resources</td>
</tr>
<tr>
<td>12</td>
<td>Contribute to the development of tender/bid documentation, selection of, implement and manage, sub contracted services</td>
</tr>
<tr>
<td>13</td>
<td>Contribute to the selection of personnel for activities</td>
</tr>
<tr>
<td>14</td>
<td>Review the performance of teams and individuals</td>
</tr>
<tr>
<td>15</td>
<td>Create effective working relationships</td>
</tr>
<tr>
<td>16</td>
<td>Preparing for and Delivering In-house Healthcare Waste Management Training</td>
</tr>
<tr>
<td>17</td>
<td>Conducting an Internal waste management audit and pre-acceptance auditing at a healthcare facility</td>
</tr>
<tr>
<td>18</td>
<td>Sharps Waste Management and Biosecurity at a Healthcare Facility</td>
</tr>
<tr>
<td>19</td>
<td>Injection Safety</td>
</tr>
<tr>
<td>20</td>
<td>Effectively Manage Environmental Incidents and Emergencies</td>
</tr>
<tr>
<td>21</td>
<td>Prepare an Installation with an Environment Permit for an Inspection Visit (Permit Holder)</td>
</tr>
<tr>
<td>22</td>
<td>Climate Change Adaptation Auditing &amp; Reporting at a Healthcare Facility</td>
</tr>
<tr>
<td>23</td>
<td>Understanding Waste Management in the Environmental Management System</td>
</tr>
<tr>
<td>24</td>
<td>Manage the reception of infectious wastes at a healthcare waste treatment facility</td>
</tr>
<tr>
<td>25</td>
<td>Manage site operations for the treatment of infectious healthcare waste at a healthcare facility</td>
</tr>
<tr>
<td>26</td>
<td>Manage the disposal of outputs and residues from infectious healthcare waste treatment operations or, healthcare waste transfer operations, at a healthcare facility</td>
</tr>
<tr>
<td>27</td>
<td>Manage maintenance and other engineering operations at a healthcare facility, infectious healthcare waste treatment facility or during healthcare waste transport operations</td>
</tr>
<tr>
<td>28</td>
<td>Monitor the procedures to control risks to health and safety during healthcare waste transport operations</td>
</tr>
</tbody>
</table>
THE HEALTHCARE WASTE MANAGEMENT QUALIFICATIONS FRAMEWORK

Structure of the Awards in a Unit Pathway Context

The three suggested pathways are as follows:

- **Pathway 1**: Managing Healthcare Waste at a Healthcare Facility with an optional add on of units where the hospital has its own treatment facility.
- **Pathway 2**: Managing Healthcare Waste treatment Operations – Infectious Waste
- **Pathway 3**: Managing Healthcare Waste Transport Operations

The suite of award units have been designed to meet the needs of waste management professionals working in the healthcare sector. The units comprising the award pathways have been designed as management units, and should be undertaken by persons working in management or supervisory capacities.
The Healthcare Waste Management Qualifications Framework

Assessment Guidance

• This award will be a formal qualification and will ONLY be delivered by vocational training centres registered with the National Qualification Authority.

• In this regard the centre must have the following personnel capable of delivering the training programme and operate in line with the requirements of the National Qualification Authority guidelines on vocational training centres and vocational qualification delivery:
Assessment Guidance

• Internal Verifier
An Internal Verifier is the person within the centre that internally verifies the decisions made by the assessors at the centre. Internal Verifiers must be qualified in line with National requirements.

• Assessor
The Assessor is the person at the centre who assesses the competence of the candidates undertaking vocational qualifications through the centre. Assessors must be qualified in line with National requirements.

• Trainer
The trainer is the person at the centre who is providing the candidates with the training programme which underpins the formal qualification. Trainers must be approved by the competent authority.

The vocational centre MUST be the subject of annual external verifications by the National Qualification Authority.
THE HEALTHCARE WASTE MANAGEMENT QUALIFICATIONS FRAMEWORK

Training Course Programme

- There are 28 Units in the suite and these are underpinned by 56 Power Point modules which contain embedded exercises and which also have associated tasks.
- Candidates are expected to provide evidence from their workplace to support their attainment of competence.
- Product evidence provided by the candidate must meet the requirements laid out within the assessment strategy developed for the delivery of the units.
## THE HEALTHCARE WASTE MANAGEMENT QUALIFICATIONS FRAMEWORK

<table>
<thead>
<tr>
<th>UNIT</th>
<th>TOPIC</th>
<th>Power Point Modules</th>
<th>Practical Exercises &amp; Evidence List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complying with Waste Management and Environmental Legislation</td>
<td>Mod01 – Unit Overview&lt;br&gt;Mod02 – Complying with Waste Management Legislation</td>
<td>PE1 Draft a list environmental legislation relevant to the activities at your facility or for your operations&lt;br&gt;Questions and Answers&lt;br&gt;Practical Exercise&lt;br&gt;Product Evidence&lt;br&gt;Observation&lt;br&gt;Photographic/Film&lt;br&gt;Schedule of Environment/Waste Legislation&lt;br&gt;Licence or Permits&lt;br&gt;Regulatory Inspections</td>
</tr>
</tbody>
</table>
The concept of vocational training infers that the candidate is assessed at their place of work that the trainer or assessor delivering the training has a number of options in relation to this assessment process.

In the last column of the table a number of possible assessment methods have been proposed for the assessment of the candidate undertaking the specific unit.
CONCLUSION

• Some member states have VET systems or part VET systems in place within the context of a formal vocational qualification framework while others have nothing in place at all.

• It is imperative that the key EU VET and HCW industry stakeholders agree on the importance of the national occupational standards; the vocational qualifications and the underpinning training materials for healthcare waste managers.

• The research undertaken in the process of the development of the new proposed professional qualifications for HCWMs and the promotion of the new proposed VET courses for the training of staff working in the field of Healthcare Waste Management were fully related to the general innovative perspectives and interim results of the EU-HCWM project. The overall aim of the project as it move into its second phase is the creation of new job positions, the improvement in capacities of existing HCW Managers & the strengthening of healthcare waste facilities’ environmental performance and sustainable development.
CONCLUSION

• The project at this midway point has demonstrated the importance of bringing together the industry users with the service providers was integral, in terms of the approach to the long term sustainability of the project outputs and the multiplier effect of the inclusion of the pan European associations and federations was also a crucial factor in the consideration of the project outputs and their sustainability.

• It has also resulted in the establishment and maintenance of national networks in regard to the project initiatives will no doubt serve to further strengthen those links and promote the project products.
PROJECT DISSEMINATION

- KEY FOCUS ON DISSEMINATION ACTIVITIES – VERY IMPORTANT TO THE SUCCESS OF THE PROJECT

- ENCOURAGE INVOLVEMENT FROM HEALTHCARE PROFESSIONALS, WASTE MANAGEMENT PROFESSIONALS, HEALTHCARE WORKERS, ORGANISATIONS & AUTHORITIES, WORKING GROUPS & ASSOCIATIONS, ETC. IN PARTNER MEMBER STATES PROFESSIONAL NETWORKS.

We now need to better engage non partner members states in this process

CONTACT US TO SIGN UP TO THE NETWORK – info@hcwm.eu

OR....
PROJECT DISSEMINATION

Join our EU-HCWM group on LinkedIn:

www.linkedin.com/groups/euhcwmmm-7472255
PROJECT WEBSITE

www.hcwm.eu

scott@icerms.com

Thank you