Amenity Weed Control
Alternatives & Thanet Project

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LanGuard Ltd.
First thoughts

- LanGuard VM
- Thanet Project?
  - Contractors Perspective
- Why LanGuard?
  - Company ethos
  - Horizon scanning
  - Previous trials experience
  - Previous non-herbicide experience
- Crystal Ball!
Project Conception

- Future need to protect groundwater resources by decreasing inputs of pesticides (Water Framework Directive etc.)
- Legislation posing threats on how we control weeds on hard surfaces (Sustainable Use Directive – under review)
- Lack of UK research into no chemical and integrated weed control on hard surfaces
- EMR involved with research project studying amenity pesticide application in Europe
- EMR keen to undertake UK project into amenity herbicide use. Links between KCC & EMR – KCC willing to be the host for the project
Project Objectives

- To develop new weed control specifications and test the effectiveness of no herbicide and integrated weed management
- Measure weed growth and identify weed species
- Determine herbicide losses to the wider environment
- Determine economic and environmental cost benefit analysis
- Develop and demonstrate guidelines for no chemical control/integrated control
- Obtain feedback from stakeholders
Location

[Map of the area around Margate and Ramsgate in Kent, England]
Plots

Trial Area covers 8.5% of the roads in Thanet or approx. 38km
Treatments

• Herbicide only – two treatments
  1. April and May
  2. August and September

• Integrated
  – Originally one programmed glyphosate application
  – combined with non-chemical methods

• No herbicide
  – Thermal & mechanical treatments only
Weediness Scale - Initial

APPENDIX 3

Weed Level Scale criteria for asphalt (see examples below)
Score each criterion separately and add together to determine the overall score and weed level class

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (mm)</td>
<td>Weed diameter or length (mm)</td>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>&lt;10</td>
<td>&lt;50</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10-75</td>
<td>50-100</td>
<td>3-4</td>
<td>2</td>
</tr>
<tr>
<td>75-150</td>
<td>100-150</td>
<td>5-6</td>
<td>3</td>
</tr>
<tr>
<td>150-200</td>
<td>150-200</td>
<td>7-8</td>
<td>4</td>
</tr>
<tr>
<td>200=300</td>
<td>200-300</td>
<td>9-10</td>
<td>5</td>
</tr>
<tr>
<td>&gt;300</td>
<td>&gt;300</td>
<td>11-12</td>
<td>6</td>
</tr>
</tbody>
</table>
Challenges

- Speed of operations
- Limitations of techniques – more frequent treatment required in non-chemical areas
- Surface types
- Edges and obstacles
- Pre-existing weed problem and detritus
- Determining an acceptable level of weeds
Issues
Changes

• Integrated treatment modified to allow flexible targeted use of glyphosate but not exceeding 50% of Herbicide treatment
• Weediness scale tweaked to tolerate larger & more numerous weeds
• Cooperative approach between client & contractor
• Zone excluded - Zone 7
• New techniques investigated
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<th>Score</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Height (mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10</td>
<td>&lt;3</td>
<td>1</td>
<td>No noticeable weeds</td>
</tr>
<tr>
<td>10-50</td>
<td>4-6</td>
<td>2</td>
<td>Occasional small weeds</td>
</tr>
<tr>
<td>50-100</td>
<td>7-9</td>
<td>3</td>
<td>Patchy weed growth with some flowering weeds</td>
</tr>
<tr>
<td>100-150</td>
<td>10-12</td>
<td>4</td>
<td>Numerous weeds, many flowering, view annoys or irritates public</td>
</tr>
<tr>
<td>150-200</td>
<td>13-15</td>
<td>5</td>
<td>Numerous large weeds, risk to slip or trip</td>
</tr>
<tr>
<td>&gt;200</td>
<td>16-18</td>
<td>6</td>
<td>Numerous large weeds, many tall and flowering, causing obstruction</td>
</tr>
</tbody>
</table>
Hot Foam

- Improved accessibility, similar to herbicide treatment
- Improved productivity by a factor of 3
- Improved Health & Safety
- Aided integrated approach
- Effective control of top growth & annuals
- Rapidly developed for Amenity use
Results

• Best Practice Guidance
• Costs
  – Integrated x2
  – Non-Chemical x8
• Weediness standards
• Design standards
Thanet outcomes

- Great client interest
- Integrated approach
- Financial realities
- Little uptake
Future

• Costs
• Glyphosate?
• New options
  – Chemical
  – Non-Chemical
• Changed priorities
• Europe?
Questions?