Session 7

SPISE TWG activities and SPISE advice on PAE not yet considered by harmonized Standards

SPISE advices for functional inspection of special trains and other vehicles for chemical weed control on railways and public roads
THE PROBLEM

High use of pesticide for railway lines weeding
(eg.: - Italy ~ 2% of PPP yearly used)

STRONG ENVIRONMENTAL IMPACT

SUD → Mandatory yearly inspection

No specific international reference standard for the inspection of these PAE

Similar situation and lack of information for the inspection of PAE used for weed control on roads and highways
very heterogeneous Equipment
Requirements and methods of verification

• **General requirements (before inspection)**
  Place for inspection / Pre-inspection (cleaning, moving parts pipes and hoses / structural parts and framework….)

• **Requirements**
  leakages / pump capacity / agitation / spray tank / cleaning devices / regulation systems / lines / filtering / nozzles / chemical dosing systems / weed detecting systems…

• **Test methods and test equipment**
The inspection shall be made in a location avoiding any risk of pollution of environment, this means that at least the sprayed/leaked liquid shall be collected and transferred back into the sprayer tank at the end of the test.
Calculate the dosing rate as a percentage from using the following formula:

\[(A/B-A) \times 100\]

A = Chemical dosing system flow rate, using clean water.
B = Total discharge in l/min of the complete system (pump flow rate + dosing system flow rate) after the mixing device.
nozzle flow rate – very high
test protocol shall give at least the following information

- Test station;
- Name and contact details of the inspector and, where different, the testing organization and signature;
- Date of inspection;
- Owner’s identity;
- Owner’s address;
- Sprayer type (special train/special truck);
- Serial number or other identification;
- Year of construction/production;
- Any malfunction of the sprayer. If the malfunction is a result of sprayer design this should be noted;
- Any information on malfunctions of the sprayer useful to identify the corrective work required;
- Results of measurements.
**test protocol - attachment**

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**V (m)**

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**Dosanzeichen**

- ID 01
- ID 02
- ID 04
- ID 08

**Notes:**
- SPISE 6, 13 to 15 September 2016 Barcellona
THIS SPISE ADVICE HAS BEEN RECENTLY APPROVED BY THE SPISE COMMUNITY AND IS NOW AVAILABLE AND DOWNLOADABLE ON THE WEBSITE:

http://pub.jki.bund.de

Advice for functional inspection of special spraying trains and other vehicles for chemical weed control on railways and public roads