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The implementation §1,2 & 3 of article 8 of the sustainable use of pesticide directive in Sweden

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Abstract

This text reflects thoughts and ideas from draft material in the ongoing process of creating a system for mandatory inspection of pesticide application equipment. The idea is to inspect equipment already included in harmonized standards according to the rules of the current voluntary system. For equipment not yet included in harmonized standards we recommend that a risk assessment for human health and the environment according to § 3 to be made. In an ongoing process, as standards are harmonized, we suggest that the equipment is either excluded according to 3§ or included in the system. Finally we give some examples of different perspectives in the decision making.

Background and disclaimer

The Swedish Board of Agriculture has received a task from the Ministry of Agriculture to propose a system for mandatory inspection of pesticide application equipment according to article 8 in the Directive of sustainable use of pesticide. The resulting report will be delivered to the ministry in the end of November. This text is to be seen as a description of some ideas in the draft material that is collected and put together in the process by the Plant Protection Division. The final result of the mission and the final decisions from the government might be different from the thoughts in this text.

Today

Today Sweden has a voluntary system for inspection of sprayers in use. Private companies carry out the inspections according to EN 13790. The workshops are aloud to make necessary adjustments and reparations before the equipment is approved. At the inspections calibration and knowledge of the operator are also stressed in addition to the technical status of the sprayer.

It is mainly boom sprayers that are inspected and the major incitement for the farmers are quality assurance programmes that give the opportunity to better prices for agricultural products. For most sprayers the recommended interval between inspections is two years.

Proposal

Equipment included in already harmonized standards

Our suggestion is that application of pesticide with equipment for which there is harmonized standards for inspection in place, demands an approved sprayer from the season 2012 for one half of the Swedish farmers, depending of what municipality their farm belongs to (figure 1). For the rest this legal demand will come into force 2013.

The two-step introduction is a result of experience. When the voluntary system was introduced in the late 80-s many farmers inspected their sprayers the first year. Following given advice, they didn't inspect their sprayers the second year but the year after that. This wave pattern is still visible in the statistic of inspections and causes problems for workshops to plan their work. With this type of introduction, hopefully the demand on inspections will be more even and thereby equal the working pressure on workshops. Workshops usually have their customers from many municipalities.



Fig. 1 Swedish municipalities divided in two groups, with different year of introduction of the mandatory inspection system.

Our idea is to inspect equipment included in already harmonized standards according to the rules and recommendations of the current voluntary system. The workforce and equipment in the current system represent an asset in the effort to reach a sustainable use of pesticide.

Since new sprayers according to the changes in the Machinery directive now fulfil most parts of a Swedish inspection for sprayers in use, new sprayers may bee seen as fulfilling the requirements when they leave the factory and are after that dealt with according with regular rules.

Equipment not included in already harmonized standards

For equipment for which there are no harmonized standards the introduction of mandatory inspection will be postponed until such standards are in place.

Knapsack sprayers

Our point of view is that for knapsack sprayers, the operator's technical skills in many cases have more influence on the effect and hazards than the technical status of the sprayer, especially compared to other types of sprayers. The risk for the operator carrying plant protection products and working close to the place of application, nevertheless shows the need for inspections of the status of the knapsack sprayers.

One idea under investigation is to arrange group inspection of knapsack sprayers/education of operators coordinated with the courses that users of plant protection products have to do anyway.

Other handheld equipment

We recommend that a risk assessment for human health and the environment, including an assessment of the scale of the use of the equipment should be made fore this type of equipment. In many cases we believe that this makes it possible to exclude this type of equipment from mandatory inspection. If not so it might be a better idea to include education in the mandatory training (according to §3) instead of constructing an inspection system for these equipments.

For spraying equipment mounted on trains or aircraft

We think that inspections on this type of equipment would benefit a lot from closer cooperation between European countries. At least for equipment mounted on aircraft it is hard to se any market for inspection companies in Sweden alone.

Other equipment

One large subgroup in this category is spray equipment in greenhouses.

We suggest that the risks and the scale of use of this kind of equipment is investigated so that a proper decision can be made close to the release of the harmonised standards.

Different perspectives in the decision making

The requirements in the directive can be followed in many ways depending of the perspective of the decision maker. One may emphasise environment issues. Others might emphasise a low bureaucracy approach or equal business opportunities for Swedish farmers compared to their colleagues from other EU-countries.

From the environment protection side points like "a regulation where the interval between inspections isn't shorter than the requirements in the framework directive, might in fact lead to fewer inspections in parts of southern Sweden where at present voluntary inspection is common might be heard. That is if the quality assurance programmes, that today demand following of the voluntary rules of the Swedish Board of Agriculture, not make their own rules. This will lead to larger environmental hazards from the use of pesticides. This is probably not the intention of the directive.

The low bureaucracy approach will try to keep the system simple and minimize the required work for farmers. This may inflict for example the registration of the inspections.

There are also aspects of consideration for farmers living in very sparsely populated areas. While the requirements are the same, the cost for the farmer is likely to differ if the person conducting the inspection has to travel 1000 km. The "lonely" farmer might also advocate that the possible pollution from his business should be spread on larger area.

Everyone will use the cost aspect. Sadly there are some shortages in the statistics that inflicts the calculations. We don't know exactly how many field sprayers there are (and even less about other equipments). A new inquiry of the farmers pesticide use sets the number of boom sprayers to 14000 in the year 2006. It also shows that half of the farmers use an inspected sprayer, indicating that at least 3500 inspections should be done every year. We have never printed more than 2000 stickers per year...so the fact for analyses gives a possibility for some improvements...

As a conclusion the content of the resulting final mandatory inspection system is still a very open issue. When in place it will probably, at least in the beginning, face continuous changes.