

Consequences of including inspection of sprayers in use in the new Regulation on official controls

J. Wahlander

Plant Regulations Division, Swedish Board of Agriculture, Jönköping, SWEDEN

DOI 10.5073/jka.2015.449.0015

The Swedish Board of agriculture does not support the proposal from the Commission to include inspection of sprayers in the Regulation on official controls¹. Unfortunately the proposal creates many obstacles regarding our current work to produce a new mandatory system of inspections (according to article 8 of the **Sustainable Use Directive** 2009/128/EC (**SUD**)) on the basis of the existing voluntary system.

1 Summary

- Inspection of sprayers in use in its current form cannot be carried out under the control regulation because:
 - Neither size of sprayer inspections nor the use of pesticides is large enough to support the administrative structure of the regulation of official controls. Too high costs need to be transferred to the customer.
 - It is unclear if the control regulation allows free pricing.
 - The fee for an inspection of sprayers in use regulated by the control regulation would affect the number of sprayers and thereby diminish the market
 - The possibilities to implement inspection of sprayers in use outside a workshop decreases. The demand that inspections should be free from any conflicts of interest may make repairs and advisory services impossible
 - The control regulation does not provide any guidance as to how inspection of sprayers in use should be done in practice. The administrative control adds no positive value to the business. Planned improvements in quality assurance will be impossible
- This official proposal creates difficulties to give straight answers to companies that want to expand their business. Since an expansion is necessary to provide access to inspections for all plant protection users, straight answers is crucial to implement mandatory inspections.
- If inspection of sprayers, despite our arguments, should be included in the regulation on official controls, the decision should be based on an impact assessment including a cost-benefit analysis, and whether there are alternative ways to achieve the benefits. Our assessment is that the cost of the regulation for corporate profitability, the environment and working conditions for all personal and, above all, increased administration at all stages is not offset by improvements.

1 COM (2013) 265 final

2 Background

Due to the requirements in the SUD that all equipment for the dissemination of plant protection products should be inspected at least once, not later than 26 November 2016, the Swedish Board of agriculture has presented a proposals for how today's optional inspections (that have existed since 1988) could serve as a basis for a new compulsory activities. The Swedish government has proposed that Sweden implement the proposal and that the existing voluntary inspection system should be transformed in to a mandatory system.

In the review of the Regulation 882/2004 of official controls, it is proposed that the SUD should be included in the official controls. Specifically, under article 159 the article 8 of the SUD is amended and instead the Commission is empowered to adopt delegated acts. Member states should even so be obliged to follow the SUD until these delegated acts is adopted. **This document attempts to describe the impact on inspections of sprayers in use if the inspections are made under the regulation instead of the SUD.** In the parts which depends on what the Commission chooses to include in the delegated acts the analysis, by necessity, becomes a little speculative.

3 The Swedish inspection system of today

There has been no need to redo the inspection system from scratch in order to adapt them to the SUD. There has been a high confidence for the inspections, especially in those parts of the country where the inspections has been most frequent. The number of boom sprayers is estimated to be just over 14,000. In an interview-survey, respondents indicated how often they inspected their sprayers. The percentage of sprayers that was inspected as recommended, each or every other year increased from 35% to over 50% between 1998 and 2006. Some sprayers were inspected on a regular basis but with three years or longer intervals, and for some there was no information given. That indicates that more and more sprayers are tested regularly, even if the inspections are optional.

Sweden has invested a lot in the sprayer inspection system. Throughout the years we have trained many inspectors, of which approx. 100 are active today. The inspectors have also been granted aid to test equipment. Since 2006, subsidies have been granted for the purchase of about seventy test equipment. But some more supported equipment is in use because purchase of equipment was also supported prior to 2006. The equipment now belongs to the inspection companies and is used in the business and for many companies it is an essential part of their rural entrepreneurship.

Today, a typical Swedish inspection business is carried out on a part-time basis during some parts of the year by small business owners who typically have farms, mechanical workshops or less engineering activities as their main occupation. Inspections are carried out either on farms or in workshops.

An inspection contains the following elements:

- Technical control of the sprayer according to the standard EN 13790 and some additional national requirements
- Repairs and adjustments of faults and shortcomings
- Information and advice to the operator. An important element here is the calibration of the sprayer.

The Swedish inspections have according to the spray owners led to:

- A safer working environment for the operator
- Less risk to the external environment
- Better placed for adequate effect of treatment with the lowest possible dose
- Greater operational safety.

All in all, Inspection of sprayers in addition to environmental and safety benefits, lead to a more efficient and economical food production.

If inspection of sprayers result in a well maintained and calibrated sprayer that give the operator a possibility to reduce the dose, then inspection may become a tool to reduce the use of chemicals and to lower residues on the products. However for food safety, the choices of plant protection product have a greater significance for residues than the spray pattern.

4 Difficulties to conduct today's inspections under the control regulation

Today for most Inspections companies the inspections is a form of complementary business activities in rural areas.

If the Inspection is going to be done under the regulation the whole concept has to be reevaluated and changed accordingly. The reason for this will be discussed below.

4.1 The size of spray inspection and the use of plant protection products is not adapted to the administrative superstructure of the regulation

In connection with an investigation about how to introduce compulsory inspections we also investigated how to insure the quality of the inspections. One option was to require accreditation of the inspections, according to EN/ISO 17020. To reach a limit where the cost of accreditation would constitute less than 10% of the total price of an inspection, at least 50-60 sprayers per year was required to be inspected. The average Swedish workshop inspects 67 sprayers per year. Since then, the estimated price of an accreditation has risen to more than the double, which means that the number of sprayers that need to be inspected in order to keep the quality assurance's share of the total cost down also needs to increase. If the operation should be incorporated in the control regulation, accreditation would be a general requirement under article 26.

Because of the "superstructure" required under the regulation, the cost for a control of the workshops do not only consists cost caused by article 26, the price for an inspection have to be increased considerably beyond what is required only for the accreditation.

The inspectors are negative to a quality assurance through accreditation as the cost of accreditation for their limited operations is too high to be able to be passed on to the customer. Moreover, they fear that the administrative burden in the inspection companies rises.

In some other cases where open system for control has been introduced and the cost for accreditation has been too high, the result has been that operations have ceased and the accredited inspection bodies were completely lacking. The authorities has been forced take over the control them self, with increased expenses as a result.

4.2 Provides the control regulation the possibility of free pricing?

It is not entirely clear whether SUD forms part of the control regulation in chapter IV (articles 75-82), the financing of official controls. If so, the model with inspectors as free entrepreneurs who put the price on what they deliver does not work.

4.3 The fee for an inspection under the control regulation decrease the number of sprayers and thereby shrinking the market for inspection

There is a limit of how much an increasing size of the sprayers is a benefit in the plan protection work. A large sprayer that have high usage during the season and used over large areas, cannot be used as optimal since the timing of the treatment is harder.

The increase in costs resulting from increasing price/inspection fees will mean that the number of sprayers falls. This will happen as a result of the transition to mandatory inspections, but become even greater if the control should be carried out in accordance with the control regulation.

Less optimal conditions during treatments will have negative effects for the environment and for the business. Fewer and sparser localized sprayers also give a smaller economic base for the workshops.

4.4 The possibilities to implement inspections outside the workshop are adversely affected

Conditions in some parts of Sweden are not entirely different from the ones in Central Europe, but differ significantly from other parts of the country. In the Netherlands (41 526 km²), there are approximately 20,000 boom sprayers and in Denmark (43 094 km²) even more, giving a “density of sprayers” of about 1 sprayer on two 2 km². In Scania (10 939 km²), in southern Sweden, we estimate the number of sprayers to be just over 3400. The “density of sprayers”, 1 at 3 km², is close to the one in Denmark and the Netherlands. In the county Jämtland (49 443 km²) we estimated the number of sprayers to 39 and in Norrbotten, 98 911 km² there is 42 sprayers. The “density of sprayers” is thus 1 sprayer of 2355 km² in Norrbotten.

In the work with the European standards for inspection of sprayers EN 13790 part 1, there has been different opinions about how to measure the performance of the sprayer. Currently, there are two methods allowed. This is appreciated by Sweden since there is a difference in mobility between the different methods. The method where the spray pattern is measured along the boom is not so mobile and easier to perform in a Workshop. Although there are advantages to measure the spray pattern along the entire boom, we also need techniques with equipment that can be moved to the sprayer.

If, in a delegated act in accordance with the regulation, the Commission decides that the inspections should be performed with a less mobile scanner along the entire boom, the effects will be different and probably more severe for a Northern spray owner than for a spray owner from Scania.

In many countries, there is a desire to execute control independently of the repairs and advisory services. The idea is that the inspectors shall not be tempted to require costly repairs that they will profit on before approving the sprayer. This corresponds well with paragraph 1b of article 4 of the control regulation which requires that those who perform the checks should be free from any conflicts of interest.

However, for entrepreneurship in parts of Sweden where there is a longer distance between the sprayers than in the major agricultural counties, the consequences will be se-

vere. Assume that there is only one inspector in a county, which is not an unreasonable assumption. Then he could have around 100 miles to go in order to inspect a sprayer. Transportation becomes a large part of the test cost. Assume that he finds a hose that needs to be replaced. Following the regulation he then has to go home and come back another day after a repairman has done the same trip. To cover the whole area of expertise for an inspector, maybe there is also a need for another person, an adviser, to make the same trip. If it is the sprayer that needs to be transported to the inspection, the consequences for the spray owner are even bigger. Transport costs are already a vast reason why the Swedish inspections are quite expensive compared to other European countries. So it is probably a benefit also for the owner of the sprayer that an inspection also includes advices and repairs.

4.5 The Regulation on official controls does not provide any guidance as to how the inspections should be done in practice.

We know that the inspections carried out improve the quality of the sprayers being inspected. On the other hand, we have no control of the quality of the inspections carried out. We know, therefore, that the inspectors find and detect errors, but we do not know if they find all errors, or if their estimates are consistent with each other. It cannot be shown that all inspections are carried out in a uniform manner by all the inspectors. This is a source of irritation among some Inspectors because they feel that competitors may keep lower fees because they are not doing a proper inspection. We believe that in a mandatory system a basic quality and uniformity of the inspections would be welcomed by the majority of both inspectors and customers.

But the quality insurance of the inspectors according to the Regulation on official controls is very much into checking checklists. The need for instructions and someone to discuss different solutions is something that is not dealt with.

5 Other possible consequences

5.1 Risk of delay in the introduction of obligatory inspection

There is a risk that the Commission's interpretation of what to include in an inspection and included in a delegated act take considerable time to decide. Therefore there might be a risk that the imposition of mandatory inspections in Europe will be delayed because there will be a reluctance to invest in and establish the inspection system based on article 8 of the SUD, which can be revoked at any time by a delegated Act.

The voluntary inspection system in Sweden has rested on an uncertain legal basis over an extended period of time. It has made the recruitment of Inspectors and the necessary investments in equipment more difficult. The SUD gives an opportunity to correct this. The fact that the inspection of sprayers is included in the proposal for control regulation can increase uncertainty and degrade these opportunities. As long as the uncertainty about the control regulation will apply, it is more difficult to motivate new inspectors to invest.

5.2. Possible benefits of having a single control for inspection

The obvious benefit of having a common framework for the inspection of sprayers in use is that trade with plant protection services is made easier. This is already taking place in parts of Europe. For Sweden, these services have so far been of a very small scale. But the reason for this is probably geographical and not administrative.