1. ------IND- 2020 0682 S-- EN- ------ 20201116 --- --- IMPACT

Impact assessment under Ordinance (2007:1244) on the Assessment of the Impact of Regulatory Arrangements

# Description of the problem and what is to be achieved with the proposal

The proposal means that both professional and non-professional use of plant protection products is prohibited in private gardens, in allotment garden areas, in greenhouses that are not used professionally, on plants indoors except in production premises, warehouses and the like, and in areas primarily intended for recreational areas that the public has access to. The purpose of the proposal is to minimise the use of primarily chemical plant protection products in these places and thereby reduce the risks to human health and the environment. This contributes to meeting the national environmental quality objective ‘A Non-Toxic Environment’ and the provisions of Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (Directive 2009/128/EC ).

# Risk assessment

Introduction

The plant protection products whose use is affected by the proposed prohibition on use are mainly those that are approved in class 3, i.e. products that can be used by anyone, without training. In September 2016, the Swedish Chemicals Agency was commissioned to analyse the need for and the possibility of limiting the non-professional use of chemical plant protection products in Sweden. The authority presented its proposal in a report in May 2017 (Report 4/17, ‘Restriction of non-professional use of chemical plant protection products in Sweden’, Ref. No. M2017/01318/Ke). The report analyses risks and problems related to the private use of plant protection products. The risk areas that the Swedish Chemicals Agency identifies in the report at an overall level as associated with plant protection products that are used non-professionally are

* pollution of surface and groundwater
* risks to children and pets
* damage to other vegetation
* skin and eye irritation in users
* risks to birds, mammals and pollinating insects.

#### The risk to human health

The purpose of chemical plant protection products is to protect plants and plant products against pests, in various ways affect their life processes and sustainability, destroy unwanted plants and hold back or prevent unwanted growth. However, plant protection products do not only have effect on pests and weeds. They can also affect the surrounding environment and pose risks to human health. Because children during different periods in their development are more sensitive than adults to the effects of chemicals, the effects of these chemicals can be particularly harmful to children’s health. Thus, it is inappropriate both to store and to use such plant protection products in and around areas where children are staying. Children can also be subject to indirect exposure to plant protection products, for example through contact with a treated lawn.

Only those active substances that are judged to be acceptable from a health and environmental point of view can be approved for inclusion in chemical plant protection products, but due to their inherent properties, the substances are always classified as hazardous to health.

The risk of pollution of surface and groundwater

Even smaller areas than those treated during professional field use may be relevant in terms of risk of groundwater pollution, as a large part of the water that supplies a drinking water well can come from the groundwater formation in the vicinity of the well. The use of herbicides on hardened surfaces, such as stone pavements, asphalt surfaces and buildings, can pose a risk of polluting surface and groundwater. Professional use of plant protection products on surfaces of asphalt or concrete or other hardened materials is currently prohibited according to the Pesticide Ordinance unless the municipal board has given permission for the use. On the other hand, non-professional use of plant protection products on such surfaces is currently not particularly regulated, apart from the fact that the approval of a product may contain restrictions. In that case, it appears on the product’s marking or in the instructions for use. At present, mainly substances containing the active substances glyphosate, geranium acid and acetic acid are used on this type of soil surface. Soil surfaces without topsoil and with limited vegetation have a low ability to bind and break down plant protection products, which leads to an increased risk of leakage to the groundwater.

One of the purposes of hardened surfaces is to get an efficient drain directly into storm drains or the like. There is thus a risk that plant protection products through superficial water transport or leakage reach environments that can be polluted and damaged. Other vegetation worthy of protection can be damaged, and storm drains, drinking water wells and nearby watercourses can be polluted. Other types of uses of chemical plant protection products can also involve a risk of pollution of surface and groundwater.

In urban areas, proximity to storm drains is most common, but there are also drinking water wells in such areas. According to information from the Geological Survey of Sweden, about 10 per cent (about 45 000 wells) of the individual wells are within urban areas. Just over a third of these are dug wells, where the risk of pollution via surface water transport to the well can be a particular problem. In rural areas, individual drinking water wells dominate on private property. According to the Geological Survey of Sweden (SGU), just over one million permanent residents and approximately the same number of leisure residents have their own drinking water supply from their own well. Energy wells can also in some cases involve a transport route to the groundwater.

Although it is unclear exactly which emissions private use contributes, it can be assumed based on the areas of use for, for example, the active substance glyphosate, that they can be added to the aquatic environment. Glyphosate, the degradation product of the glyphosate AMPA, and MCPA, an active substance previously used in class 3 agents, has been found in, among other things, incoming and outgoing water to and from urban areas, and also in sewage sludge and storm water from such areas. A report[[1]](#footnote-2) from the Swedish University of Agricultural Sciences (SLU) confirms that private use of glyphosate in densely populated areas can lead to leakage.

The risk for insects, birds and mammals

The use of plant protection products in places covered by the proposed prohibition on use may pose a risk to, among others, birds, pollinating insects and other insects seeking food in home gardens. Birds can eat the granules that are spread in the garden, while pollinating insects are at risk, especially when insecticides are used in flowering crops. Bees and other pollinating insects are often very sensitive to pesticides. Even in the quantities that may be involved during use in home gardens and in allotment garden areas, the total spread can therefore affect pollinating insects. The most important pollinating insects in the cultivated landscape are solitary bees and bumblebees. The more than 250 species of solitary bees found in Sweden are important to protect because their behaviour, size and choice of host plant vary. Solitary bees are found in most environments on land.

# Alternative solutions

An alternative to the proposed restriction regarding use is increased information to consumers regarding alternatives to the use of mainly chemical plant protection products. However, increased consumer information is not considered to be a viable way to reduce the risks to human health and the environment from the use of chemical plant protection products in the places covered by the proposed prohibition. Even with increased information, it cannot be expected that more than a small group of particularly committed consumers will opt out of the more dangerous plant protection products if these are available and allowed to be used.

Another alternative is to introduce a simple training requirement for the use of products in authorisation class 3, combined with a new authorisation class that does not require training, for the use of, for example, low-risk products. Such a training requirement would need to be combined with a requirement for the transferor of the products to check that the buyer has a valid training certificate, in the same way as currently applies to the transfer of the products in class 1 and 2 that already require training. The alternative gives private users the opportunity to continue using the same products as before, which means that the risk reduction referred to in the proposal does not occur. It is also judged to be too administratively burdensome for authorities as well as for companies that sell plant protection products.

# Effects if the regulation is not adopted

If the regulation is not adopted, the non-professional use of plant protection products in the relevant places will probably remain unchanged, which means that the risk reduction for health and the environment that could be achieved through the proposal will not occur.

Professional use is already prohibited today in some of the places in question unless a special municipal permit has been granted, so in this respect the effects of the regulation not being adopted are more limited.

# Who is affected by the regulation

The regulation affects users of plant protection products and traders who sell plant protection products or offer services in the garden area. Relevant authorities are the Swedish Chemicals Agency, the Swedish Board of Agriculture, the Swedish Environmental Protection Agency, the municipalities and to some extent the land and environmental courts.

# Impact

## Consequences for private individuals

Individuals benefit from the proposal as their exposure to plant protection products decreases. At the same time, the regulation means that individuals will not be able to control unwanted vegetation in gardens and in the home environment in the same way as today. According to the proposal, however, the Swedish Chemicals Agency will be able to issue regulations on exemptions from the prohibition on such active substances in plant protection products which are considered to pose a limited risk to human health and the environment. The Swedish Board of Agriculture may issue regulations on exemptions from the prohibition in order to prevent the introduction, establishment and spread of quarantine pests as well as exemptions needed for the cultivation of plants preserved in the Swedish National Gene Bank or in the Nordic Genetic Resource Centre. The Swedish Board of Agriculture may also issue regulations on exemptions from the prohibition in order to prevent the introduction, establishment and spread of invasive alien species on meadows or pastures that are not suitable for ploughing but can be used for mowing or grazing. The Swedish Environmental Protection Agency may issue regulations that are needed in order to prevent the spread of invasive alien species in other places where prohibitions apply.

To the extent that the agents that are permitted to be used in accordance with regulations issued by the Swedish Chemicals Agency, the Swedish Environmental Protection Agency and the Swedish Board of Agriculture do not have the desired effect, the proposed prohibition of use may entail an increased physical burden for those who currently use plant protection products in the areas covered by the prohibition, as it means that mechanical weeding may be the only option.

Other preventive and alternative methods also mean spending more time and planning on plant protection overall to achieve the same results as through the use of plant protection products. This can be experienced as a reduced benefit. To protect gardens against fungal and insect infestations, the Swedish Chemicals Agency points out a number of measures on its website as alternatives to plant protection products. Among others, the following are recommended

* resistant plants
* pre-cultivation of the soil
* use of culture tissues
* use of adhesive traps
* showering plants with water to get rid of aphids, for example
* drainage of the garden
* fertilisation
* pruning of trees and shrubs.

These measures are largely in line with the general principles of integrated pest management as set out in Annex III to Directive 2009/128/EC.

To the extent that products already purchased will not be able to be used due to the proposed prohibition of use, this is justified by the general interest in health and environmental protection, and in that perspective does not impose a disproportionate burden on the individual. For the consumer who has already purchased larger quantities, however, it can of course be experienced as such.

## Impact to human health

The reduced risks to health are of benefit to anyone staying in or near the places affected by the proposed prohibition of use. The consequences of the proposal regarding human health that are clarified by the Swedish Chemicals Agency’s report 4/17 are about reducing a number of risks, especially for children.

## Impact on the environment

The proposal leads to increased protection for the environment, mainly in the form of increased protection against pollution of surface and groundwater and increased protection of birds, mammals and insects, not least pollinators.

## Consequences for traders

According to Chapter 2, § 40 of the Pesticide Ordinance, it is already prohibited to *professionally* use plant protection products without special permission from the municipal board

1. on plots of land for multi-family houses (also refers to buildings on the plot),

2. on school yards and yards to pre-schools,

3. on playgrounds that the public has access to,

4. in parks and gardens that the public has access to,

5. in sports and leisure facilities,

6. in planning and construction work,

7. on road areas and on gravel surfaces and other very permeable surfaces, and

8. on surfaces of asphalt or concrete or other hardened materials.

However, the permit requirement in the points 7 and 8 of the first paragraph does not apply to the use of plant protection products on road areas in order to prevent the spread of invasive alien species or other species covered by regulations on control issued by the Swedish Board of Agriculture, or on embankments.

The proposal means that professional use in the areas referred to in points 1 to 4 is instead included in a new provision prohibiting these – and a number of other – places against *all* use of plant protection products. The Swedish Chemicals Agency may issue regulations on exemptions for substances that entail a limited risk to human health and the environment. The Swedish Board of Agriculture may issue regulations on exemptions from the prohibition in order to prevent the introduction, establishment and spread of quarantine pests as well as exemptions needed for the cultivation of plants preserved in the Swedish National Gene Bank or in the Nordic Genetic Resource Centre. The Swedish Board of Agriculture may also issue regulations on exemptions from the prohibition in order to prevent the introduction, establishment and spread of invasive alien species on meadows or pastures that are not suitable for ploughing but can be used for mowing or grazing. The Swedish Environmental Protection Agency may issue regulations that are needed in order to prevent the spread of invasive alien species in other places where prohibitions apply.

The municipal board will in the individual case be able to grant an exemption from the prohibitions of use, if the plant protection product is approved by the Swedish Chemicals Agency and the use is in accordance with the conditions for approval, and it is needed for the cultivation of plants preserved in the Swedish National Gene Bank or the Nordic Genetic Resource Centre or for other special reasons.

The plant protection products whose use is affected by the proposed prohibition of use are mainly in class 3. Today 55 plant protection products approved for use in authorisation class 3 (or the equivalent for certain biological agents; ‘may be used by anyone’) are available. 18 of them are what is referred to as NIS agents (nematodes, insects and arachnids), which are still approved by the Swedish Chemicals Agency. Since 1 July 2016, NIS does not need to have an approval for the product as such, but it is sufficient that the species is approved for use as a pesticide by the Swedish Environmental Protection Agency.

In its Report 4/17, the Swedish Chemicals Agency conducted an overview of the companies that had plant protection products approved in class 3 in Sweden during 2016. At the time, a total of 15 different companies were involved. Some were larger, multinational companies that were active in several different product areas in agriculture or chemistry and had several products in several markets. Others were small and specialised Sweden-based companies, with a single product in plant protection. A third category had several different registered products in Sweden that they either imported or manufactured, sometimes combined with other operations. Today, 6 companies have products approved in class 3, but the Swedish Chemicals Agency assesses that the review is still relevant.

One consequence of the proposal is that the revenues for producers, importers, distributors and shops from the sale of the plant protection products that according to the proposal will no longer be allowed to be used in certain places are reduced. Reduced revenues mean fewer profits and fewer jobs in the group of companies in question, and can affect smaller traders in particular most significantly. However, it is difficult to more accurately estimate the magnitude of the effects.

To exemplify the order of magnitude, the Swedish Chemicals Agency in its report made estimates of the total sales value at the store level for products in class 3 that contained the active substances glyphosate, acetic acid or MCPA[[2]](#footnote-3). The store value of these products was estimated at SEK 230 million including VAT. Reduced profits for the stores were estimated at SEK 6 million. The estimated sales value corresponded to 115 employees at the store level.

Stores that sell plant protection products are, for example, department stores, garden stores and garden department stores. In many cases, these also offer products for alternative control, such as various tools for weed control. In this way, the stores’ reduction in revenue for sales of plant protection products can be partially offset by increased revenues from alternative products.

Manufacturers, importers, distributors and shops involved in the sale of plant protection products which, by way of derogation, may continue to be used even in places affected by the proposed prohibition of use may, as a consequence of the measures, benefit from increased sales. This also applies to companies that offer services in the horticultural industry. However, it is difficult to estimate how large the sales increase may be for these companies.

The proposal can also be expected to have an inhibiting effect on the development of such products whose use as a consequence of the provisions is limited.

Today, it is forbidden to use plant protection products professionally without special permission from the municipal board in several of the places that will be covered by the new prohibition of use. The new provisions mean that professional users without a municipal permit will be able to use the same products as non-professional users in these places. In this respect, the proposal simplifies the preconditions for traders.

## Consequences for relevant authorities

The Swedish Chemicals Agency, the Swedish Environmental Protection Agency and the Swedish Board of Agriculture will need to examine the preconditions for introducing the necessary exceptions through regulations. The Swedish Chemicals Agency, the Swedish Environmental Protection Agency and the Swedish Board of Agriculture will need to revise their supervisory guidelines.

Operational supervision of the use of pesticides is exercised by the municipalities. The supervision that is prompted by the proposal should be able to be accommodated within the framework of the supervisory activities that are conducted today, and thus not entail any cost increase. The proposal has no impact on municipal self-government.

## Government financial consequences

The proposal is not considered to have any government financial consequences in any part.

## Consequences of the alternatives

### Increased information to consumers

Increased information to consumers about alternatives to the use of chemical plant protection products can help raise awareness of the consequences of incorrect handling and distribution of plant protection products. However, information is not considered to be a sufficient measure to achieve the goal of increased protection of health and the environment. Even with increased information, it cannot be expected that more than a small group of particularly committed consumers will opt out of the more dangerous plant protection products if these are available and allowed to be used. In addition, those who transfer plant protection products to non-professional users must already today inform about the risks to human health and the environment that the use of plant protection products is associated with (Chapter 2, § 29 of the Pesticides Ordinance). It is especially about informing about hazards, exposure, storage, handling, spreading and disposal as well as low-risk alternatives. In order to achieve the goal of increased protection of health and the environment, the use of plant protection products therefore needs to be limited more than is the case today.

### Training requirements for the use of class 3 products and a new eligibility class for, e.g. low-risk products

Training requirements for class 3 products means that private users are given the opportunity to continue using these products, provided that they have undergone a simpler training. This means, among other things, that plant protection products can continue to be used in home gardens and thus subject children to exposure, despite requirements in Directive 2009/128/EC that the use of plant protection products must be minimised or prohibited in areas where children stay. As plant protection products will continue to be available to private individuals, there is a risk that people without training will use them, for example, someone in the same household.

A training requirement for class 3 plant protection products should, in order to achieve a sufficient effect, be combined with a requirement that buyers of the products have a training certificate. This solution thus entails an increased administrative burden not only on the authorities that would then be responsible for the training, but also on the traders who would be responsible for checking training certificates when selling the relevant products. For both the authorities involved and the traders concerned, the current proposal is a considerably less burdensome way of achieving increased protection for health and the environment.

# The proposals’ compliance with the provisions on property protection and freedom of trade

The proposals prohibit both professional and non-professional use of plant protection products in certain areas and may have consequences for individual traders. The proposals may therefore raise questions in relation to both the right to protection of property and the freedom to conduct business. To the extent that the proposals entail a restriction on the freedom of trade according to the Swedish Constitution, they are justified by important public interests, namely protection of human health and the environment. The proposals are not considered to constitute a restriction on property protection according to the Constitution, which in addition to restrictions on resourcefulness in respect of land and buildings also aims at expropriation and other similar dispositions. The First Additional Protocol to the European Convention entails more extensive property protection, which could therefore be updated. This means that the proposals must be weighed against the interests of individual traders, even though their purpose is to satisfy legitimate public interests that weigh heavily in a proportionality assessment.

The regulatory frameworks need to be implemented with a suitable adjustment period. Of importance for the assessment of which adjustment deadline is appropriate is that the proposal now being referred is a modification of the proposal regarding the use and transfer of plant protection products, environmental sanction fees in the field of plant protection products and training for handling certain pesticides, M2019/01453/R, which was submitted by the Ministry in July 2019. It is also important that the Swedish Chemicals Agency was already commissioned in 2016 to analyse the need for and possibility of limiting non-professional use of chemical plant protection products in Sweden, and that the Agency’s presentation of its proposal in a report in May 2017, ‘Restriction of non-professional use of chemical plant protection products in Sweden’, Report 4/17, Ref. No. M2017/01318/Ke, was referred by the Ministry in 2017. The market is thus not judged to be unprepared for the changes as such.

The period of adjustment which may be considered appropriate also needs to be linked to the provisions of Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC (Regulation [EC] No 1107/2009). Article 46 of the Regulation sets out what applies to the sale, storage and placing on the market of existing stocks, if the Member State withdraws or amends a product approval. Such a deferral period may not exceed six months for sale and distribution and a maximum of one more year for existing stocks of the plant protection products concerned to be disposed of, stored and used. The Member State is not obliged to grant a deferral period.

The deadline for adjustment provided by the proposed entry into force on 1 February 2021 is thus deemed to be sufficient.

Overall, the proposals are considered proportionate. The proposals are also considered compatible with the right to freedom of trade and property under the EU Charter of Fundamental Rights.

# Conformity of the proposal with EU law

Placing on the market and use of plant protection products are regulated in Regulation (EC) No 1107/2009. The use of plant protection products is also regulated in Directive 2009/128/EC.

Directive 2009/128/EC aims to reduce the risks and impacts of pesticide use on human health and the environment. To achieve this objective, the Member States shall take all necessary measures to promote plant protection with a low pesticide input and, to the fullest extent possible, give priority to non-chemical methods.

The Directive obliges Member States to develop an action plan for the sustainable use of plant protection products and to describe in such a plan how they intend to ensure the implementation of the principles of integrated pest management. The action plan shall, inter alia, include targets for achieving the objective of the Directive and for encouraging the development and introduction of alternative methods and techniques in order to reduce reliance on pesticides. The Member State shall establish reduction targets for the use of plant protection products and use all the methods necessary to achieve those targets.

According to Regulation (EC) No 1107/2009, the Member State may impose appropriate conditions on the use of plant protection products in order to meet the objectives of the national action plan for the sustainable use of plant protection products (recital 29 and Article 31(4)(a) of said Regulation).

In its action plan for the sustainable use of plant protection products, Sweden has set six goals to reduce the consequences and risks of the use of pesticides for human health and the environment, and to encourage the development and introduction of integrated plant protection and alternative methods or techniques to reduce the dependence on plant protection products. Three of these objectives are relevant to the protection interest which justifies the current draft regulation, namely the overall objective of reducing the risks to the environment and human health; that the levels of plant protection products in surface and groundwater should be gradually reduced to close to zero; and that the use of plant protection products that are harmful to pollinating insects must be adapted so that the risks are minimised.

# The impact of the proposal on free movement

The placing on the market of plant protection products in the Member States is regulated by Regulation (EC) No 1107/2009. The provisions require that a plant protection product must be product approved in the Member State where the product is to be placed on the market and used. The proposal does not affect the provisions on product approval but only means that the use of the approved funds is restricted in certain places.

The proposal may raise questions about how mutual recognition of product approvals is affected and about what happens to existing approvals in the rest of the northern zone. However, this is not a matter of changing product approvals, but of changing standards for use in Sweden in particular.

# The impact of the proposal on trade with countries outside the EU

Neither the WTO’s TBT nor SPS agreements are deemed to be applicable to any of the proposed provisions, as the proposals only apply to the use of plant protection products in Sweden, and do not cover or will not cover plant products that have been produced outside Sweden.

# Entry into force and transitional provisions

The entry into force of the regulation, on 1 February 2021, is adapted in that it may enter into force only when the notification procedure according to Directive (EU) 2015/1535 has been completed, which normally takes three to six months.

Municipal permits for the professional use of plant protection products that have been decided in accordance with older regulations are proposed to continue to apply, however, not after 31 December 2022.

No special care is deemed to be necessary with regard to the date for coming into effect.

# Special information initiatives

There is a need for special information efforts regarding the proposed prohibition of use, especially from the Swedish Chemicals Agency.

1. Jonsson, O et. al. Screening of pesticides in storm water from residential areas - with a focus on glyphosate. CKB [Swedish Institute for Transport and Communications Analysis]. Report 2019:2. Centre for Chemical Pesticides, SLU 2019. [↑](#footnote-ref-2)
2. MCPA is no longer included in any approved class 3 products. [↑](#footnote-ref-3)