

Malta's National Action Plan for Sustainable Use of Pesticides

2013 – 2018



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List of Definitions

Agri-Environmental Measures means measures included in the Rural Development Plan whose aim is to promote the protection, maintenance and enhancement of the traditional rural environment of the Maltese Islands by the agricultural community. Its specific objectives are to encourage an increased level of environmental awareness and responsibility amongst those farmers applying under this measure.

Pesticides Control Board consists of a board appointed by the Minister which is responsible for -

- (a) advising the Director on any matter relating to the registration, restriction, importation, manufacture, sale or use of pesticides including those employed in integrated control management;
- (b) reporting to the Director on any matter relating to the regulating, enforcing and monitoring of all legislation relating to pesticides or on any matter regarding pesticides;
- (c) advising on measures to be taken on any matter arising from the application of any regulations made under the Pesticides Control Act;
- (d) reviewing and making proposals for revision of existing legislation relating to pesticides; and
- (e) such other function in connection with pesticides as the Minister may prescribe.

Professional user means any person who uses pesticides in the course of their professional activities, including operators, technicians, employers and self-employed people, both in the farming and other sectors;

Ready to Use products means products which may be used by non-professional users and whose formulation consists of a diluted form and no mixing and dilution of formulation will be necessary prior to its use.

Rural Development Plan is a programme made up of a range of measures that help in the achievement of the rural development policy objectives set out in Council Regulation (EC) 1698/2005 that regulates support provided for rural development by the European Agricultural Fund for Rural Development (EAFRD).

Vulnerable Groups means persons needing specific consideration when assessing the acute and chronic health effects of plant protection products. These include pregnant and nursing women, the unborn, infants and children, the elderly and workers and residents subject to high pesticide exposure over the long term;

Chapter One : Introduction

1.1 Background information on Malta¹

The Maltese Archipelago consists of three inhabited islands, Malta, Gozo, and Comino and several smaller uninhabited islands, having a total surface area of 315.59 km². According to surveys carried out by the National Statistics Office (NSO) the total population consists of 412,277.

In 2010 a total of 12,940.1 ha of agricultural land, of which 88.5 per cent were declared as utilized agricultural area, while unutilised agricultural area and other areas made up the remaining 9.5 per cent. Arable land accounted for 79.3 per cent of the total UAA, while permanent crops and kitchen gardens made up the remaining 10.9 and 9.8 per cent respectively. The cultivation of forage crops, covering 5,552.8 ha or 61.2 per cent, was predominant. Permanent crops amounted to 1,251.2 ha, of which 49.1 per cent was dedicated to vineyards. Fruit and berry plantations, mainly peaches, had a share of 29.7 per cent of total permanent crops, while citrus, olive and nurseries accounted for 8.9, 11.2 and 1.1 per cent respectively. 1,122.9 ha were utilised for kitchen gardens. This reflects the high number of small agricultural holders.

A significant feature of Maltese agriculture is that the majority of agricultural holdings in Malta and Gozo are relatively small. 340 holdings, or 2.7 per cent, that do not have any land area, were engaged in other agricultural activities such as livestock rearing.

1.2 Plant Protection Products Usage in Malta²

1.2.1 *Areas treated*

In 2007, according to the Plant Protection Products usage on crops in Malta survey, carried out by the National Statistics Office (NSO), the area treated with

¹ Census of Agriculture. National Statistics Office, 2010.

² Plant Protection Products Usage on Crops in Malta. National Statistics Office, 2007

plant protection products amounted to 5,077.6 hectares or 62.7 per cent of the area surveyed.

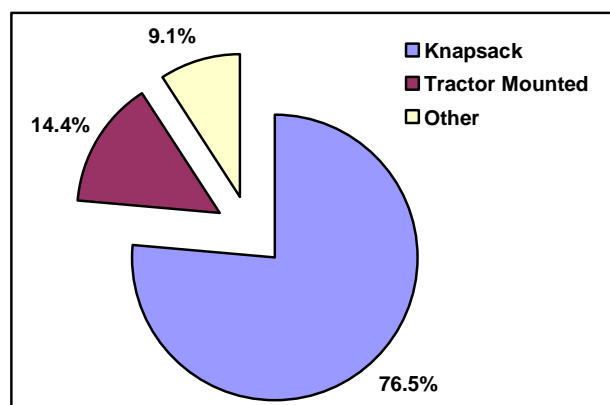
The following table represents percentage of treatments applied to different cultivations.

Cultivations	Percent
Forages	45.6 per cent
Under glass	100per cent
Vegetable open areas	86.6per cent
Potatoes	96.4per cent
Vines	91.6per cent
Stone Fruit	87.1per cent
Citrus	45.5per cent

Fungicides dominated in the use of plant protection products, in weight applied and area treated. 72.4 per cent of the area was treated with at least one fungicide. Similarly, fungicide applications amounted to 96.7 per cent in terms of weight. The area of herbicides and insecticides amounted to 11.8 per cent and 14.0 per cent respectively.

1.2.2 *Application methods*

Since land fragmentation is a common feature of Maltese agriculture, the knapsack (76.5 per cent) was the most common method of pesticide application in Malta. The following chart shows the pesticide application methods used in Malta.



1.2.3 Active substances

On average 5.6 kg of active substance per hectare was sprayed. The following table shows the average kilograms of active substance per hectare spraying for the different types of plant protection products.

Acaricides	< 0.1 kg/ha
Fungicides	Vegetables (open field): 28.7 kg/ha
	Potatoes: 0.7 kg/ha
	Vines: 2.1 kg/ha
Herbicides	1.2 kg / ha
Insecticides	0.3 kg/ha

In total, 87 different active substances were recorded in the pesticide survey. Their combined use amounted to just over 120 tonnes. More than 95 per cent in terms of weight of active substances was dominated by three active substances, namely sulphur, mancozeb and MCPA. Fungicide use was dominated by sulphur (92.5 per cent in terms of weight of active substance) while MCPA dominated herbicide use (92.1 per cent of herbicides). On the other hand, 4 active substances namely Carbaryl (24.9 per cent), Malathion (23.0 per cent), Chlorpyrifos (20.2 per cent) and Dimethoate (19.2 per cent) dominated insecticide use.

Pesticide usage in Malta follows the typical pattern of the Mediterranean climate. Herbicide applications are mainly used at the beginning of the agricultural season while fungicide use occurs throughout the agricultural year, with the main period of application occurring from April to July. Insecticide use is at its peak during the summer period.

1.3 Background information on Sustainable Use of Pesticides Directive

Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides entered into force in November 2011. The aim of this directive is to protect human and environmental health through the establishment of various provisions including:

- Development of National Action Plans;
- Training, Sales of Pesticides, Information and Awareness Raising;
- Pesticide Application Equipment;
- Specific Practices and Uses of Pesticides;
- Specific measures to protect the aquatic environment;
- Reduction of pesticide use or risks in specific areas;
- Handling and storage of pesticides and treatment of their packaging and remnants;
- Integrated Pest Management.

1.4 Other national legislation related to Pesticides

Plant Protection Products are mainly regulated in Malta through:

- Pesticides Control Act, Cap. 430: This Act is the mother Act of all local legislations which regulate pesticides. In the same Act the Malta Competition and Consumer Affairs Authority (MCCAA) is officially recognised in Malta as the competent authority for the regulation of

pesticides. In addition reference to penalties for any contraventions or failure of complying with any of the provisions of this Act or of any regulation or order are stipulated.

- Maximum Residue Levels of Pesticides in Produce of Plant and Animal Origin (Implementation of EC Regulation) Regulations, 2009 (LN 14/2009). This Legal Notice implements Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC into the local legislation. Its main aim is to harmonise and simplify EU rules on pesticide Maximum Residue Levels, and set a common EU assessment scheme for all agricultural products for food or animal feed.
- Plant Protection Products (Implementation) Regulations, 2011 (LN 284/2011). As from June 2011, this Legal Notice implemented Regulation (EC) 1107/2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC into the local legislation. Its main aim is to replace Directive 91/414/EEC whereby main changes included:
 - Evaluation of safeners and synergists;
 - Introduction of low risk substances, basic substances and candidates for substitution;
 - Comparative assessment of plant protection products containing 'candidates for substitution';
 - Division of EU into 3 zones;
 - Examination of authorisations by one Member State on behalf of the other Member States in a zone;
 - Deadlines in all steps of evaluation;
 - Simplified data protection system.
 - Not only active substances will be evaluated but also:
 - Safeners and synergists;
 - Co-formulants;
 - Adjuvants.

- Regulation of Mutual Recognition Procedure as opposed to voluntary mutual recognition under Directive 91/414/EEC
- Regulation of Parallel Importation

1.5 Revision of National Action Plan on Sustainable Use of Pesticides.

The National Action Plan will be reviewed at least every five years and any substantial changes to National Action Plan will be reported to the Commission.

Chapter Two: National Action Plan for Sustainable Use of Pesticides

2.1 Information and Awareness Raising

2.1.1 *Professional Users*

The MCCAAs offers a number of courses to professional users of Plant Protection Products. The syllabus for such recognised courses includes topics related to:

- Legislations related to Plant Protection Products;
- Types of Plant Protection Products;
- Pesticides Machinery;
- Risks related to handheld application equipment or knapsack sprayers and risk mitigation measures;
- Health and Safety issues;
- Integrated Pest Management;
- Health and Environmental Risks related to use of Plant Protection Products;
- Environmental Fate of Pesticides and protected areas under Directive 2000/60/EC;
- Responsible Use, Disposal, Record Keeping and Disposal of Plant Protection Products;
- Classification & Labeling.

To ensure further effectiveness and availability of this course, the MCCAAs has also organised two courses as 'train the trainers' whereby a number of persons were trained and informed on the subject matters and were also subject to an exam at the end of the course. Successful attendees were officially recognised as trainers for the recognition of professional users and courses are ongoing throughout the year. The list is publicly available on the MCCAAs website.

To date approximately 30per cent of farmers have been recognised as professional users of Plant Protection Products. It is the MCCAAs aim that by 2013 all users are recognised as professional users, after which appropriate

action will be taken against users who are not yet recognised as professional users by end of 2013, at the latest. Users of Plant Protection Products will be informed of this way forward in 2012.

Professional users of Plant Protection Products classified as Toxic or Highly Toxic according to the Dangerous Preparations Directive 1999/45/EC as transposed in Malta through Dangerous Substances and Preparations Regulations, 2007 (LN 10/2007) and as Acute Toxicity Categories 1, 2 and 3 according to Regulation on Classification, Labelling and Packaging of substances and mixtures (CLP) (EC) 1907/2006 as implemented in Malta through the Classification, Labelling and Packaging of Substances and Mixtures (CLP) (Implementation) Regulations, 2009 (LN 214/2009) will attend a specialised course on Plant Protection Products which are classified as such. The organisation of such courses is scheduled for mid-2014.

2.1.2 Sales of Pesticides

Following appropriate training, distributors of Plant Protection Products need to be certified by the MCCA. The MCCA has organised training courses for distributors and aims to organize 'train the trainers' course to establish competent recognised bodies to offer such courses for distributors by mid-2013. This will ensure that more training courses will be made available for distributors. The syllabus for such courses includes topics related to:

- Legislations related to Plant Protection Products;
- Types of Plant Protection Products;
- Responsible Use, Storage, Spread, Record Keeping and Disposal of Plant Protection Products;
- Danger, Risks, Poisonings and First Aid related to Plant Protection Products;
- Transportation of Plant Protection Products;

- Disposal of Plant Protection Products;
- Pesticides Machinery;
- Risks related to handheld application equipment or knapsack sprayers and risk mitigation measures;
- Personal Protective Equipment and Health and Safety issues;
- Integrated Pest Management;
- Health and Environmental Risks related to use of Plant Protection Products;
- Environmental Fate of Pesticides and protected areas under Directive 2000/60/EC;
- Classification and Labeling.

It is targeted that by mid-2014 retailers should have attended a recognised course, after which date, sale of pesticides will be restricted to authorized retailers. Distributors will then have sufficient staff in their employment holding a certificate issued following successful completion of the above mentioned course. Certificates issued to successful distributors will be displayed at the point of sale. Authorized staff will be available at the time of sale to provide adequate information to customers as regards pesticide use, health and environmental risks and safety instructions.

Micro distributors selling only products for non-professional use may be exempted, if they do not offer for sale pesticide formulations classified as toxic, very toxic, carcinogenic, mutagenic or toxic for reproduction pursuant to the Dangerous Substances Regulations. Such distributors of pesticides will provide general information in writing regarding the risks for human health and the environment of pesticide by mid-2014. This information will be reviewed and authorized by the MCCA prior to their distribution.

Retailers are already being informed of this legal obligation and will be also reminded and informed of these deadlines during market surveillance inspections.

Distributors of Plant Protection Products classified as Toxic or Highly Toxic according to Dangerous Preparations Directive 1999/45/EC as transposed in Malta through the Dangerous Substances and Preparations Regulations, 2007 (LN 10/2007) and as Acute Toxicity Categories 1, 2 and 3 according to Regulation on Classification, Labelling and Packaging of substances and mixtures (CLP) (EC) 1907/2006 as implemented in Malta through the Classification, Labelling and Packaging of Substances and Mixtures (CLP) (Implementation) Regulations, 2009 (LN 214/2009) will attend a specialized course on Plant Protection Products which are classified as such. The organization of such courses is scheduled for mid-2014.

2.1.3 General Public

The general public, with special reference to vulnerable groups, should be kept informed at all times with accurate and balanced information relating to pesticides for the general public, in particular with regard to the risks and the potential acute and chronic effects for human health, non-target organisms and the environment arising from their use, and the use of non-chemical alternatives.

MCCAA will liaise with research institutes on the possibility of carrying out researches on the risks and the potential acute and chronic effects for human health, non-target organisms and the environment arising from the use of Plant Protection Products.

MCCAA will liaise with Government entities such as Local Councils and schools to promote awareness for the general public and will also participate in fairs, campaigns and media programmes to provide the public with such information. The latter will also include understanding of signs to be placed in areas treated

with pesticides and competitions for children. Special focus will be given to the safe handling of pesticides with particular reference to vulnerable groups.

2.2 Pesticide application equipment.

Pesticide application equipment in professional use will be inspected as a minimum every 3 years until 2020 and every 2 years thereafter. By 26 November 2016, pesticide application equipment will have been inspected at least once. After this date only pesticide application equipment having successfully passed inspection will be allowed in professional use. New equipment will be inspected at least once within a period of five years after purchase.

The following pesticides machinery will be exempted from the above mentioned inspections:

- (a) manually operated hand held pesticide application equipment.
- (b) manually operated knapsack sprayers with a tank capacity up to a maximum of 20 liters.

Powered knapsack sprayers with a tank capacity up to 7 liters and an engine power rating up to 2Hp will be inspected as a minimum every 5 years. Other powered knapsack sprayers will be inspected as a minimum every 4 years until 2020 and every 3 years thereafter.

The inspections will verify that pesticide application equipment satisfies the relevant requirements listed in Schedule II of the Sustainable Use of Pesticides Regulations (LN 489/2011), in order to achieve a high level of protection for human health and the environment.

Pesticide application equipment complying with harmonised standards developed in accordance with Regulation 8(2) of the Machinery Regulations will be

presumed to comply with the essential health and safety and environmental requirements.

Professional users will conduct regular calibrations and technical checks of the pesticide application equipment in accordance with the manufacturer's recommendation and with the appropriate training.

MCCAA will designate bodies responsible for implementing the inspection systems. An expression of interest is to be published by MCCAA by the end of 2012 whereby interested entities which comply with the specifications established in the same expression of interest will be recognised as designated bodies. This information will be made publicly available.

A certificate system will be established and designed to allow the verification of inspections. Certificates granted in other EU Members States where the time period since the last inspection carried out in another Member State is equal to or shorter than the time period of the inspection interval applicable in Malta, will also be recognised in the territory of Malta.

2.3 Specific practices and uses – aerial spraying.

Aerial spraying will be prohibited in Malta. On the advice of the Pesticides Control Board aerial spraying may only be allowed in special cases, provided the following conditions are met:

- (a) there must be no viable alternatives, or there must be clear advantages in terms of reduced impacts on human health and the environment as compared with land-based application of pesticides;
- (b) the pesticides used must be explicitly approved for aerial spraying by the MCCAA following a specific assessment addressing risks from aerial spraying;

- (c) the operator carrying out the aerial spraying must hold a certificate as a competent professional user.
- (d) the enterprise responsible for providing aerial spray applications has been approved by the MCAA. If the area to be sprayed is in close proximity to areas open to the public, specific risk management measures to ensure that there are no adverse effects on the health of bystanders has to be included in the approval. The area to be sprayed can not be in close proximity to residential areas;
- (e) as from 2013, the aircraft has to be equipped with accessories that constitute the best available technology to reduce spray drift.

Necessary measures for warning residents and bystanders in due time and to protect the environment in the vicinity of the area sprayed have to be taken accordingly.

2.4 Specific measures to protect the aquatic environment and drinking water.

Appropriate risk measures will be taken to protect the aquatic environment and drinking water supplies from the impact of pesticides through the adoption of risk mitigation measures. These measures will support and be compatible with relevant provisions of the Water Policy Framework Regulations (LN 194/2004) and Regulation (EC) No 1107/2009 as implemented by the Plant Protection Products Regulations (LN 284/2011).

Preference should be given to pesticides that are not classified as dangerous for the aquatic environment according to the Dangerous Substances and Preparations Regulations (LN 10/2007), as well as to those which do not contain priority hazardous substances as set out in the Water Policy Framework Regulations (LN194/2004). MCAA will make available information to stakeholders on the different classifications of different Plant Protection Products. Such information will provide the necessary information to enable users to make

a more careful decision and minimize risks on aquatic environment and drinking water.

The most efficient application techniques such as the use of low-drift pesticide application equipment should be used especially when these are applied on vertical crops such as hops, orchards and vineyards. Off-site pollution caused by spray drift, drain-flow and runoff should be minimized through use of mitigation measures which include the use of the underneath mentioned buffer zones for the protection of non-target aquatic organisms and safeguard zones for surface and groundwater used for the abstraction of drinking water. In addition applications along roads and very permeable surfaces or other infrastructure close to surface water or groundwater or on sealed surfaces with a high risk of run-off into surface water or sewage systems should be drastically minimized or eliminated.

Plant Protection Products applications should respect the following:

- Should not be applied on any type of freshwater path;
- A minimum distance of 5 meters from passages of natural waters;
- A minimum distance of 5 meters from streams, boreholes, and cracks in rocks;
- A minimum distance of 30 meters from boreholes used for the provision of water to the public;
- A minimum distance of 30 meters from the coast and bathing waters. Special attention should be paid to bystanders, Pesticides should be applied at times of lowest human activity wherever possible.

Plant Protection Products should be stored according to the Good Plant Protection Practice namely:

- Storage of plant protection products should be limited to the necessary minimum in time and amount;

- Plant Protection Products should be stored in original containers with labels attached (both Maltese and English);
- Plant Protection Products on site should still be authorised for placing on the market in accordance with Regulation (EC) 1107/2009;
- Plant Protection Products on site should not be expired;
- Stored Plant Protection Products should be kept under lock and key;
- Warning Signs should be clear and visible;
- Emergency Number should be clear and visible;
- Storage areas, such as cabinets, should be so designed so as to contain any possible spillages.

Unless otherwise stated on the label of the plant protection products, the following distances are recommended when storing plant protection products:

- Less than 20 meters away from water courses.
- Less than 30 meters from streams, boreholes or well
- Less than 100 meters from boreholes used for the provision of water to the public.
- Less than 30 meters away from the coast and bathing waters.

Extra attention should be given when PPPs are stored in the vicinity of open boreholes thus resulting in a greater risk of contamination.

2.5 Reduction of pesticide use or risks in specific areas.

The use of pesticides should be minimised or prohibited in certain specific areas. Pesticides should be applied during periods of low human activity such as during night time, as deemed most appropriate and as may be laid down in guidance document provided by MCCA. Appropriate risk management measures are to be taken and the use of low-risk plant protection products, and biological control measures should be considered in the first place.

The specific areas in question are:

- areas used by the general public or by vulnerable groups such as public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds and in the close vicinity of healthcare facilities;
- protected areas as defined in the Water Policy Framework Regulations (LN 194/2004), or other areas identified for the purposes of establishing the necessary conservation measures in accordance with the provisions of the Conservation of Wild Birds Regulations and the Flora, Fauna and Natural Habitats Protection Regulations (LN 311/2006);
- recently treated areas used by or accessible to agricultural workers.

The Technical Regulations Division is to liaise with the Standards and Metrology Institute within MCCA to ensure that standards which relate to playgrounds also include risk mitigation measures to minimise effects of pesticides on persons visiting the ground with special focus on the vulnerable groups such as children.

Mitigation measures for areas used by the general public or by vulnerable groups such as public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds and in the close vicinity of healthcare facilities will include, but are not exhaustive:

- the use of non-chemical means including cultural and mechanical methods at all times to prevent pests and diseases and consequently reduce use of pesticides.
- the prohibition of herbicides from such areas except in very urgent cases where there are no other alternatives.
- the prohibition of use of pesticides formulations classified as toxic, very toxic, carcinogenic, mutagenic or toxic for reproduction pursuant to the Dangerous Substances Regulations (LN 10/2007).

- the placing of clearly visible signage at times when pesticides are being applied and up till a minimum of two hours after pesticides are applied or until no residues are present on the vegetation, whichever is the longer period.
- the application of pesticides will be applied during times with low human activity, such as during weekdays at very early hours of the day in case of parks and grounds, and in case of schools and educational institutions during times when students are not in the premises.
- pesticide users in the close proximity to areas used by the general public or by vulnerable groups will inform concerned persons beforehand in the most appropriate and effective manner.

A derogation may apply to the above risk mitigation measures in case of plant health emergency cases. Such a derogation may be provided when a request is lodged by the Plant Health Directorate within the Ministry for Resources and Rural Affairs, as the competent authority responsible to manage emergency cases related to plant health, at least two days before any action is taken, so as to evaluate any mitigation measures to be imposed by MCCA. In cases of extreme emergency the Plant Health Directorate may take immediate action, which should be followed by a notification to MCCA. In such a case the Plant Health Directorate will be responsible to ensure all necessary risk mitigation measures are taken to ensure minimal impacts on human and environmental health.

2.6 Handling and storage of pesticides and treatment of their packaging and remnants.

MCCA will ensure that the following operations by professional users and where applicable by distributors do not endanger human health or the environment:

- a. storage, handling, dilution and mixing of pesticides before application;
- b. handling of packaging and remnants of pesticides;
- c. disposal of tank mixtures remaining after application;
- d. cleaning of the equipment used after application;
- e. recovery or disposal of pesticide remnants and their packaging.

To avoid dangerous handling operations, pesticides sold to non-professional users will be restricted to ready-to-use formulations and to pesticide formulations which are not classified as toxic, very toxic, carcinogenic, mutagenic or toxic for reproduction pursuant to the Dangerous Substances Regulations.

When mixing the spray liquid the instructions on the product label with regard to product application rates, miscibility and necessary precautions and measure of operator protection must be followed. For measuring and filling chemicals into the sprayer tank or into the chemical introduction bowl, only suitable calibrated measuring containers and appropriate methods reserved for that purpose must be used. Attention must be paid to the filling of sprayers. Tanks must not be over-filled above the indicated level and must not foam over. It must be ensured that no spray liquid can return when the tank is filled with water from a water pipe.

To avoid having any spray liquid leftover at the end of treatment, the spray liquid consumption is to be estimated from the rate of application, and the size of the area to be treated. The number of tank fillings is calculated from the spray liquid consumption and the tank size. The last filling must be metered correctly or even so as to fall a bit short of the needed amount.

To achieve even horizontal distribution the walking speed should be uniform and not more than one km/h since the case of tractor operated spraying, the driving speed should be six km/h. A higher speed distribution causes many problems. Spraying during strong wind spells, very hot temperatures or relatively low

humidity under 30per cent will cause high losses through drift and volatilisation and should therefore be avoided. If objects neighbouring the treatment area might be endangered, the current wind direction must be considered. When treating the nearest lengths along a body of water (for example a stream valley), in addition to following the label instructions, drift reducing measures, namely slowing down the speed, and applying coarser drops should be taken. The same measures should be taken when spraying in the vicinity of residential areas, gardens, amenity and sports grounds and tourist areas.

The outside of the sprayer should be cleaned somewhere in the field that is treated. Sprayers should be carefully cleaned and maintained on a regular basis. Storage of plant protection products requires particular precautions to preclude dangers to humans, animals and the environment. Storage of Plant Protection Products should be kept to a minimum and must be kept in their original containers together with the labels in the Maltese and English languages. Stored Plant Protection Products should still be authorized and should not be expired. Storage facilities should be under lock and key, and should contain any spillage. Warning signs and emergency telephone number should be clearly visible on the storage facilities.

Empty pesticide containers and other packages must be disposed of in one of the Civic Amenity Sites or in one of the appropriate sites operated by Wasteserv Malta Ltd.

2.7 Integrated Pest Management

MCCAA will take all the necessary measures to promote low pesticide-input pest management, with special priority, where possible to non-chemical methods, through awareness programmes and campaigns. Switching to available practices and approved products with the lowest risk to human health and the environment for the same pest problem will be promoted.

2.7.1 Identification of risk levels

Currently there is no consolidated information available to farmers which can serve as a guidance to differentiate products according to their risk levels. The development of a database will give the opportunity to farmers to have access to complete information on different authorised products available for the particular pest/disease on different crops. Upon enquiry the database will rank their relative human, animal and environmental risks according to the particular conditions which would be specific to a particular site, taking into consideration issues such as water courses in the vicinities, soil type and crop. Based on this information farmers will be able to opt for the product which will have the least environmental and health impact.

The availability of this information and the possibility of differentiating between different risk levels of different products is expected to result in a reduction of pesticide emissions into the environment and in minimising risks of contamination through the use of pesticides which may otherwise be hazardous for the region. The development of such a system provides a proactive mechanism whereby sources of pesticides within our waters are eliminated at source.

MCCAA in collaboration with the Agriculture Directorate within the Ministry for Resources and Rural Affairs will set up a system whereby professional users are notified of any expected climate conditions which may favour pests and diseases. Such a system would act as a proactive mechanism whereby by preventing certain diseases and infestations the use of plant protection products will be eventually reduced.

MCCAA will liaise with MRRA on the development of the new Rural Development Programme (2014-2020) for the possibility to include funding for the implementation of Integrated Pest Management. It is being proposed that the programme will comprise measures that provide financial assistance to farmers

in order to be able to implement the NAP, while offering the possibility of obtaining advice and training, preferably on a personal basis.

MCCAA will organise general and public awareness through media, workshops and/or seminars on Integrated Pest Management. This will further increase understanding on the importance of the implementation of Integrated Pest Management and possibly increase consumer demand for products grown through Integrated Pest Management Systems, consequently giving greater incentives for grower to resort to such systems.

2.8 Promotion of Organic Farming

Under the Rural Development Plan for Malta farmers have the possibility to apply for Agri-environmental Measures, which encourages the use of simple environmental practices via the promotion of Organic farming.

2.9 Farm Advisory Services

Farm Advisory Services play a very important role in attaining a Sustainable Use of Pesticides. Advisors holding a tertiary level of education in a subject relevant to agronomy or who have proven experience of a minimum of ten years in a relevant area should be considered as recognised advisors as defined by the Sustainable Use of Pesticides Regulations, 2011 (LN 489/2011). These should also be in line with the requirements of Farm Advisory Services Regulations, 2010 (LN 113/2010).

The Rural Development Plan for Malta already provides financial aid to farmers to make use of consultancy services on how to adopt sustainable agricultural practices in line with Cross Compliance Directives.

A number of Farm Advisory Services, including one set up by the Ministry for Resources and Rural Affairs (MRRA), are available for farmers in Malta. The use

of financial aid through the Rural Development Programme should provide a further incentive to farmers to make use of this service.

2.10 Risk Indicators

To reduce the risks and impacts of pesticide use on human health and the environment, Malta will be following up testing and research which are currently being carried out on water, biodiversity index (including effects on bees), and soils. MCCA will liaise with research institutes to determine the possibility to develop risk indicators of pesticides on human health. This may also be developed through surveys being carried out directly with farmers to determine the level of information and knowledge which they may have on the subject and consequently, based on the level of information and knowledge, determine risk levels through the use of pesticides.

Risk indicators may also be calculated by using statistical data collected in accordance with Regulation (EC) No. 1185/2009 concerning statistics on plant protection products together with other relevant data. The NSO as the competent authority responsible for the collection of statistical data of pesticides in Malta will be collecting statistics on the use of Plant Protection Products in agricultural use every five years. The next data collection on such use is foreseen for 2014. In addition the NSO will also be collecting data on Plant Protection Products placed on the market in Malta on an annual basis. Such data will help in the identification of trends related to Plant Protection Products and possibly identify any related risks that may arise.

2.10.1 *Coastal and Inland Surface Waters*

Monitoring on priority substances which have been carried out by the Malta Environment and Planning Authority (MEPA), as the competent authority responsible for coastal and inland surface waters under the Water Framework Directive, revealed that pesticides do not seem to be a problem in the water

column of coastal or inland surface waters. Results show that less than the detection limit of 0.1 µg/l for substances used as plant protection products were present in such waters.

MEPA is undertaking extensive monthly water monitoring in Maltese coastal waters during January to December 2012. Such monitoring includes pesticides active ingredients, such as alachlor, chlorfenvinphos, chlorpyrifos, diuron, simazine and trifluralin. Such monitoring will indicate if any of these pesticides are present in Maltese coastal waters. The results from this study should be available in mid 2013.

Recent monitoring for pesticides in inland surface waters has also been carried out for three months (December 2011 – February 2012). The results are currently being reviewed.

Once all the results of the analysis in coastal and inland surface waters will be available any improvements or degradation in the water quality will be analysed. In case of the former situation, Malta will ensure that such good quality will be maintained on coastal and inland waters, while in case of the latter situation specific action and mitigation measures to re-establish the good quality of water will be taken.

2.10.2 Ground water

Analysis of pesticide residues on groundwater have been carried out by the Malta Resources Authority (MRA) as the competent authority responsible for ground water, at sampling locations which are located in all groundwater bodies in the Maltese Islands. A full analysis of pesticides is carried out once every six years while indicative analysis for the total pesticides are carried out once every six months. The latest full analysis has been carried out during May – August 2009 while indicative analysis have been carried out in March and October 2010,

April and December 2011 and May 2012. The next batch of indicative analysis is scheduled for November 2012. To date the results from these monitoring networks have been negative, that is they do not indicate the presence of pesticides in groundwater.

Malta will ensure that such good quality will be maintained for ground water, and will keep monitoring the results of ongoing analysis to ensure there is no degradation of water vis-a-vis pesticide residues.

2.10.3 *Drinking water*

Analysis of pesticide residues on drinking water are being carried out by the Water Services Corporation, as the body responsible for the quality of drinking water in Malta as per Directive 98/83/EC on the quality of water intended for human consumption as transposed by the Water Intended for Human Consumption Regulations, 2009 (LN 17/2009) and amended by LN 242/2009. Such analysis have been ongoing annually since at least 2002, whereby samples are collected from different domestic water taps. An average of 50 samples were collected annually. To date all analysis have shown a good quality of domestic water vis-à-vis pesticide residues since none of these have resulted in pesticide residues higher than 0.1 µg/l.

Malta will ensure that such good quality will be maintained for drinking water, and will keep monitoring the results of ongoing analysis to ensure there is no degradation of drinking water vis-a-vis pesticide residues.

2.10.4 *Biodiversity Index*

Data on the current status of the biodiversity index in Malta and any possible correlation to it with regard to the use of pesticides is being collected. This section will be updated as soon as this information will be made available.

2.10.5 *Soil*

To date there is no available data on the contamination of soils through pesticide use in Malta. The MCCA will liaise with research institutes on the possibility of carrying out research on the current status of contamination of soils vis-a-vis pesticide use in Malta. This will offer a possibility of developing a risk indicator and set up the quantitative objectives, targets, measures and timetables to reduce such risks and impacts of pesticide use.

2.10.6 *Development of risk indicators for human health*

Malta aims at developing risk indicators for human health. Such risk indicators may be developed through exchange of information collected from Mater Dei Hospital and the Poison Centre, once this is set up in Malta or through any research carried out in one of the research institutes in Malta.

The drawing up and carrying out of surveys directly with professional users so as to determine the levels of information and / or knowledge on the risks involved with the use of plant protection products may be carried out so as to evaluate the risks involved in the use of plant protection products which are related to lack of awareness on the subject matter.

2.11 Poison Centre

Malta currently does not have a poison centre. The Medicines and Poisons Information Service, at Mater Dei Hospital (MDH), is providing a similar service to that offered by a poison centre, however, various important factors that enable the proper functioning of a poison centre are missing. One of these factors is the availability and accessibility to the right information. To be able to answer enquiries, the poisons information service needs to maintain a comprehensive collection of information about chemicals, pharmaceuticals, products, plants and

venomous animals. It also needs to develop treatment protocols and guidelines in order to ensure that the information and advice given is consistent. Lacking a readily available source would mean losing precious time in trying to identify the contents of the product and this can have fatal consequences.

Moreover, when taking into consideration clinical toxicology, according to a report³ related to poisoning of general chemicals, which was published as a result of the recommendations proposed by means of the United Nations Institute for Training and Research (UNITAR) project, for years 2003 to 2007 an average of 174 patients, with an admission related to toxicology, were registered in the Hospital Activity Analysis Database of St. Luke's and Mater Dei Hospitals. It is estimated that the real figure is 250 patients a year, considering that it is estimated that data used captured 70 per cent of the admissions only. For years 2002 to 2007 an average of 13 patients died a death related to toxicology. With this in mind it is of great importance to develop a system whereby data concerning chemical products is made readily accessible so that local hospitals can be a step ahead when dealing with chemical incidents.

Being the competent authority for the regulations concerning chemicals, detergents, and pesticides, the MCCA proposed to introduce a notification system of the products that are made available, including chemicals, detergents, fertilizers, plant protection products and biocides. Information on these products will be submitted to the MCCA and the latter will keep this data at its disposal. This notification mechanism is similar to the data collection system employed in several other Member States, such as Italy, Germany, Belgium and France where they all have established national databases on products and composition.

The manufacturer, importer, and/or trader, responsible for placing the product on the market will be obliged to send to the MCCA information related to the full

³ A report on the “*Establishment of a National Poison Information Centre in Malta*” compiled by Mark L. Zammit (November 2009)

chemical composition, intended uses, type of use and general characteristics of the product. The submission of the data will be made electronically so as to facilitate the process both for the notifier and the MCCA. The responsible person will also upload a copy of the label of the product and its safety data sheet, where available. Since the safety data sheets are only for professional use and not for domestic use mixtures, the information therein on non-dangerous components is often lacking. Indeed in the database the chemical name for the dangerous components and the chemical family name for the non-dangerous components are required. This notification system will also apply to the products found already on the market. The notification of products is to be staggered over a period of time.

By having this data bank the MCCA can contribute to the Medicines and Poisons Information Section, at MDH, by allowing access to the information for health prevention purposes and for toxicological emergencies. MCCA will guarantee the industry the necessary confidentiality of the information stored in the archive, hence the Medicines and Poisons Information at MDH, who will have access to the archive, will ensure an acceptable level of confidentiality as well.

2.12 Development of Guidelines

2.12.1 *Crop or Sector Specific Guidelines*

MCCA in consultation with Government entities, organizations representing professional users and Farm Advisory Services will develop appropriate guidelines to encourage professional users to attain harmonized sustainable use of pesticides in the best way possible. Guidelines will include crop or sector-specific guidelines for integrated pest management. Guidelines for major crops in Malta which include vines, olives, potatoes and tomatoes will be made available to professional users as from 2013. Further guidelines will be developed for annual crops, field vegetables, greenhouse crops, and fruit trees (pome fruit, stone fruit and citrus). MCCA in collaboration with the Plant Health Directorate

and the Agriculture Directorate will set up guidelines which are specific to local pests.

Such guidelines will also include low pesticide input or alternative methods of plant protection such as the use of pruning, irrigation, fertilization, use of resistant plant varieties, crop rotation, soil management (including mulching). Specific methods to be used in green houses (including solarization) will also be included in the relevant guidelines referring to greenhouse crops. During the drawing up of these guidelines special attention will also be given to the protection of bees.

2.12.2 Guidelines on Safe Application of Pesticides

Guidelines on the safe application of pesticides including the use of plant protection products will also be developed during 2013. These will include:

- The safe use of plant protection products in areas used by the general public or by vulnerable groups such as public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds and in the close vicinity of healthcare facilities
- The safe use of plant protection products with specific references to the protection of the environment, including soil, water and biodiversity

This will ensure maximum protection to bystanders with special focus on vulnerable groups.

2.12.3 Guidelines on classification of PPPs and MSDSs.

Simple to use guidelines which can be easily understood by professional users on the ranking of Plant Protection Products vis-à-vis toxicity through information available on the label and based on the classification of the Plant Protection Product will be developed. This will enable professional users to make decisions on the most suitable and the lesser toxic option when different products for the same pest or disease are available on the market. Information of Safety Data

Sheets which can be used also to further differentiate between different products will also be included in the guidelines.

2.12.4 Guidelines to non-professional users on Ready to Use Plant Protection Products

Non-professional users who still make use of Plant Protection Products also need to be adequately informed on the importance of the good management of these products. Such guidelines will be developed and made available to the general public to minimize risks of toxicities through the use of plant protection products for domestic use. Given that such users are many times not very familiar with the use of these products this may represent a further increase in the risk arising from the misuse of such products. The guidelines will be targeted at supplying general information in writing regarding the risks for human health and the environment arising from pesticide use, in particular on hazards, exposure, proper storage, handling, application and safe disposal in accordance with current legislation in force on waste, as well as regarding low-risk alternatives

Chapter Three: Record Keeping

3.1 Records

Producers, suppliers, distributors, importers, and exporters of plant protection products will be obliged, for at least 5 years, to keep records of:

- Any plant protection products produced,
- Any plant protection products imported,
- Any plant protection products exported,
- Any plant protection product stored,
- Any plant protection product placed on the market.

Professional users of plant protection products will be obliged to, for at least 3 years, keep records of the plant protection products they use. These records will include the:

- name of the plant protection product,
- time and the dose of application,
- area and the crop where the plant protection product was used.

The relevant information contained in these records will be made available to MCCA upon request. Third parties such as the drinking water industry, retailers or residents may, upon justified request make in writing to MCCA request access to this information. MCCA will provide access to such information in accordance with applicable national or Community law.

Chapter Four: Occupational Health and Safety

Many pesticides are dangerous to health. This danger is explained in terms of the 'hazard' and the 'risk'. A substance is hazardous if it could harm people, plants and creatures not being treated, or the environment. The risk from a substance is the chance of it causing harm, depending on the way in which it is, or will be, used.

4.1 Risk Assessment

When necessary, an assessment will be considered suitable and sufficient if a well-thought-out approach is used to identifying risks by:

- considering the dangers posed by the pesticide intended to be used;
- deciding who could be harmed and how;
- identifying what action needs to be taken to prevent or control exposure;
- recording the results of the assessment; and
- revising the assessment when necessary.

The danger a product poses depends on the nature and concentration of the product's active ingredients, the other ingredients (co-fomulants), and its form (liquid, granules, powder, gas or other).

Most information on the dangers associated with a pesticide is on the product label, which will show:

- the hazard classification;
- the risk and safety phrases;
- any restrictions relating to who should use the product;
- other safety-related restrictions and conditions.

Other information on dangers is given in:

- information provided by the pesticide's authorisation holder, for example, material safety data sheet (MSDS)
- other relevant guidance material on using pesticides published by MCCA, OSHA and other authorities; and
- technical, scientific or legal information in relevant trade and professional publications.

Employers or self-employed people need to consider whether any person may be at risk from being exposed to pesticides. Due consideration should be given on how and where the product will be applied, how long it will be used for, how containers will be handled, and the possibility of an accident. In such cases the following should be included:

- all employees (even those not using the pesticide);
- other people on the premises;
- any other bystanders in the vicinity of the treated area;
- any other person who could possibly enter treated areas or be in contact with treated materials after the pesticide has been applied.

The information available on the product label should be used as part of the assessment on how employees and other bystanders could be affected. Due consideration should be given to:

- Exposure route (skin / breathing / swallowing);
- Absorption through the skin from handling the concentrate or contaminated equipment, and from exposure to spray drift;
- Breathing in a pesticide, especially those products with volatile active ingredients;
- Swallowing a pesticide (possibly from hand-to-mouth or object-to-mouth);
- Whether the above mentioned contamination types may also affect people entering treated areas or handling treated material;

- The extent of the exposure and possible risks in case of failure in the control measures;
- Any harmful effects of the pesticide through the most likely routes into the body.

4.2 Control Measures

Following the assessment, identification of appropriate control measures should be recognised. These may include:

- Only suitably and sufficiently trained professional users may make use of plant protection products using appropriate Personal Protection Equipment (PPE);
- Manage the risks associated with the hazards;
- Understand the information on the product label and on any relevant data sheets;
- Have suitable equipment to handle, mix, load and apply the pesticides safely;
- Have systems or equipment (including PPE) which will prevent or, where this is not reasonably practical, adequately control, exposure;
- Take effective action if equipment fails or breaks down; and
- Be aware of the negative health effects which could be linked to pesticides exposure and any possible related signs or symptoms.

4.3 Prevention of exposure

Prevention of exposure may be attained through:

- Use of another method of pest control;

- Use of a pesticide that is less dangerous, or using a less dangerous form of the same pesticide. Example, use of a product supplied in water-soluble bags to avoid handling and measuring the product;
- Organisations of the work to ensure non-essential people are kept away from the areas that are being treated. For example, the use of remote-controlled equipment to apply pesticides in glasshouses.

4.4 Control of Exposure

Controlling exposure during the preparation of pesticide such as when opening containers and transferring, diluting, mixing or loading the product, the following practices should be followed:

- Use of pesticides in a pack size to suit the area to be treated at one time or to suit the volume of spray solution being prepared.
- Use of products supplied in water-soluble bags;
- When viable, use of closed-transfer systems (equipment designed and manufactured to be used to move agricultural chemicals from their original container into a sprayer tank, and to accurately measure the volume of chemical being transferred) with compatible packaging;
- Use of pressure-rinsing devices to avoid rinsing containers by hand.

To control exposure to pesticides during use, handling equipment, dealing with spillages or disposing of any pesticide wastes, the following practices should be followed:

- Reduce the dose of the product whenever appropriate;
- Choose the right certified application equipment to minimize exposure. If the application method is likely to increase the risks to

users, another method of applying the product or controlling the pest should be considered;

- New equipment should meet appropriate standards and should be designed to keep the risk of contamination during use or maintenance as low as possible;
- Nozzles should be kept in good condition and should not drip when the sprayer is switched off;
- Valves and associated pressure-relief systems should be regularly checked and maintained;
- Where possible, cover nozzles, other atomisers and powder dispensers, especially for hand-held equipment and equipment used near workers;
- Keep equipment that applies pesticides clean, both inside and out, using appropriate cleaning methods. When cleaning dusty or dry deposits, do not use air lines or dry brushing as these methods can lead to contamination getting into the air;
- Keep all equipment well maintained and do not use faulty equipment.

4.5 Personal Protective Equipment

PPE must be worn. The product label will include the type of PPE and any specific controls which must be used when handling or applying the pesticide.

In certain cases, PPE or controls stated on the product label may need to be increased. This may be necessary in any of the following cases:

- Application of PPPs in a mixture with another PPP or an adjuvant;
- Use of PPP in a confined space;
- Work with a pesticide for more than eight hours during any day;

- Application of the pesticide at a reduced-volume spray (applying a pesticide in a lower volume of water than the minimum volume recommended on the label for that dose);
- Application of the pesticide in a way not recommended on the label (For example, using hand-held equipment in situations where vehicle mounted or equipment on a trailer would normally be used.);
- Perform tasks not mentioned on the label or on the relevant notice of approval. (For example, when entering a newly treated area or checking, repairing or cleaning contaminated equipment);
- In all situations, even when the product label does not refer to PPE, it is good practice to wear basic PPE (such as coveralls, suitable protective gloves and boots) at all times when handling and applying pesticides;
- The use of PPEs should also be considered by gardeners using ready to use products, especially in case of using a product in large quantities, more often or for a longer period of time than would be the case for the domestic users.

It is important to:

- remove any contaminated PPE as soon as possible to avoid an increased risk of exposure;
- thoroughly wash protective gloves inside and out at the end of each day's use, avoiding contamination to the user or the environment, especially water;
- dispose of protective gloves safely and legally after use if the product label states as such or if the gloves are not in a good condition;
- dispose of other contaminated PPE safely and legally in any one of the Civic Amenity Sites or in one of the appropriate sites operated by Wasteserv Malta Ltd. and, clean PPEs in line with the

manufacturer's instructions and in a way which is safe for people and the environment;

- take appropriate precautions if contaminated PPE or other contaminated items need to be handled;
- make sure that contaminated protective clothing is never washed with domestic or personal items.

PPEs should be kept clean, dry, well ventilated and secure in suitable storage facilities. Separate storage will be needed for personal clothing, such as coats and other items which are removed while work is being carried out with pesticides.

4.6 Surveillance Monitoring.

Professional users of Plant Protection Products classified as Toxic or Highly Toxic according to Dangerous Preparations Directive 1999/45/EC as transposed in Malta through the Dangerous Substances and Preparations Regulations, 2007 (LN 10/2007) and as Acute Toxicity Categories 1, 2 and 3 according to Regulation on Classification, Labelling and Packaging of substances and mixtures (CLP) (EC) 1907/2006 as implemented in Malta through the Classification, Labelling and Packaging of Substances and Mixtures (CLP) (Implementation) Regulations, 2009, (LN 214/2009) especially when organophosphate or carbamate pesticides are used are encouraged to undergo health surveillance.

Chapter Five: Enforcement of National Action Plan on Sustainable Use of Pesticides

5.1 Functions, powers and duties of the Competent Authority

The MCCA is the Competent Authority responsible for the implementation, monitoring and enforcement of this National Action Programme (NAP). The Authority is also responsible for the dissemination of the obligations arising from the NAP to the relevant stakeholders and on reporting the implementation of the NAP.

The MCCA will enhance the national knowledge by:

- Collaborating with the competent authorities responsible for water quality monitoring in order to synergize findings;
- Collaborating with research entities on any new possible research related to the effects of the use of pesticides;
- Collaborating with the Ministry for Resources and Rural Affairs for any initiatives to encourage farmers to resort to IPM or Organic Agriculture;
- Collaborating with the Plant Health Directorate on any emergency cases related to plant health which may arise.
- Maintaining an electronically available database to the public on plant protection products authorised or withdrawn in Malta, containing at least:
 - the name or business name of the holder of the authorisation and the authorisation number;
 - the trade name of the product;
 - the type of preparation;
 - the name and amount of each active substance, safener or synergist which it contains;
 - the classification, risk and safety phrases in accordance to Directive 1999/45/EC and to the CLP Regulation;
 - the use or uses for which it is authorised;

- the reasons for withdrawal of an authorisation if they are related to safety concerns;
- the list of minor uses referred to in Article 51(8) of Regulation 1107/2009.

5.2 National Database of Plant Protection Products

The Competent Authority will maintain a national pesticide database containing the following data:

- Information about the holdings pertaining to the land users (link with the agricultural land register);
- Information about land management practices;
- Information about the landscape, soil types, water sources and water courses;
- Information about the sales and movements of pesticides;
- Data about authorised plant protection products and their classification.

The database will provide an integrated collection of data consolidated into a common pool, for the organization, storage, management and retrieval of information. The National Database will play an important role in the management of the National Action Programme. The system will provide for an effective monitoring and control and will be used to attain the following results:

- Ranking of products according to site specific and classification data;
- Risk mitigation measure which may need to be taken;
- Consistency of farm records;
- Respecting pest management practices;

5.3 Enforcement

The Technical Regulations Division within the MCCA or any other entity authorised by the Division will be the Authority responsible for the enforcement to ensure compliance with the National Action Programme. The Paying Agency, as the competent authority responsible for the verification of compliance with the cross-compliance checks will also be taken into consideration.

Field controls will be carried out on the basis of random and risk-based sample. Farms with higher environmental risks will be monitored more intensively. The classification into risk groups will be based in part on the location of the field and agricultural practices.

5.4 Penalties

Where the MCCA has reasonable cause to believe that –

- (a) an offence against this Plan has been committed by any person; and
- (b) having regard to the previous conduct of the person concerned, it would be appropriate to impose a penalty. MCCA may issue a notice in writing in accordance with the appropriate form to be served on that person.

The above mentioned notice will specify –

- (a) the date and nature of the offence;
- (b) a summary of the facts upon which the allegation that an offence has been committed is based (being a sufficient summary fully and fairly to inform the person of the allegation against him);
- (c) any other matters (not being previous convictions) that MCCA considers relevant to the imposition of a penalty; and

(d) the amount of the penalty due, and where the penalty due depends on a previous conviction, the date of such conviction will be included.

Any person on whom a notice is served may, within thirty days after such service by notice in writing in the appropriate form served on the MCCA, require that proceedings in respect of the alleged offence be dealt with by the Court, in which case the following provisions apply:

- (a) no further proceedings will be taken by MCCA; and
- (b) nothing in this section will be construed to prevent the institution of any proceedings in respect of the alleged offence or the conviction of the person for the offence by the Court or the imposition of any penalty or forfeiture under the Pesticides Control Act upon such conviction.

Any person on whom a notice is served who does not wish that proceedings in respect of the alleged offence be dealt with by the Court may by notice in writing served on the MCCA –

- (a) admit the offence, and
- (b) pay the amount of the penalty to the MCCA within thirty days after the notice of the penalty is served or after such subsequent period as the MCCA may determine.

Where a person admits an offence, MCCA will impose a monetary penalty on that person in respect of the offence amounting to one third of the maximum penalty to which the person would be liable if he were convicted of the offence by the Court.

The penalty imposed under the previous paragraph will be due as a civil debt enforceable by the competent Court of civil jurisdiction in favour of the Government and the declaration by the person on whom the penalty is imposed

that he admits the charge constitutes an executive title for the purposes of article 253 of the Code of Organization and Civil Procedure in the same manner as if it were a judgement of the competent Court of civil jurisdiction.

Notwithstanding any other provisions of the Pesticides Control Act or of any other enactment, where an offence has been admitted no charge may be laid in respect of the offence against any person by whom it has been admitted.

Where a person on whom a notice is served does not, within thirty days after the notice is served on him, admit the offence, the MCAA will institute proceedings or cause proceedings to be instituted before the Court in respect of the alleged offence.

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