GREEN FLAG AWARD PESTICIDE REDUCTION GOOD PRACTICE GUIDE

compiled by the Pesticide Action Network UK (www.pan-uk.org) May 2016

INTRODUCTION

Pesticides should not be used, or their use should at least be reduced to a minimum as part of an integrated pest management approach, on any Green Flag Award sites.

'Pesticides' is a general term that describes a variety of chemical and biological products used to kill or control living organisms such as rodents, insects, fungi and plants. For the purposes of Green Flag Award, this includes herbicides which are effectively weed killers. If this operation is carried out by external contractors, their contract must be governed by the same robust controls to ensure that the principles of Green Flag Award are maintained. If pesticides and fertilisers continue to be used on site there must be a justification for doing so. Relevant national and international legislation must be adhered to.

The use of chemical pesticides has been shown to reduce biodiversity, to cause adverse health effects and to contaminate the environment. Children, elderly and the infirm make up a significant proportion of visitors, and they are also most vulnerable. Pesticide exposure is likely to be involuntary - members of the public do not know where and when they have been applied and can not choose to avoid them. Even small quantities of weedkiller sprayed on paths and other hard surfaces are easily washed down drains and contaminate groundwater.

LEGISLATION

From a legislative perspective, the Control of Substances Hazardous to Health (COSHH 1988) states that: "pesticides should only be used when necessary and if the benefits from using them significantly outweigh the risk to human health and the environment".

Green space managers often feel that they do not make excessive use of pesticides. However, detailed audits reveal that pesticides are often used out of habit and unnecessarily. Also, some make the mistake of thinking that whilst insecticides and fungicides should be avoided, herbicides are OK. This is not the case. Herbicide use should also be very circumspect and fully justified. In light of recent World Health Organisation classification of two of the most widely used amenity herbicides, glyphosate and 2,4-D, as probable human carcinogens, then alternatives to their use should be sought as a matter of priority.

For the purposes of Green Flag Award, the term 'pesticides' includes herbicides which are effectively weed killers and thus included in the definition given above. Changes to the way in which the European Union (EU) authorises pesticides, including herbicides, are now in place and

the new EU Regulation 1107/2009, the Placing of Plant Protection Products on the Market, is now in force. To find out the current status of active substances in the EU, users should visit http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN. For information on the status of pesticide products permissible for use in the UK users should check the Chemical Regulation Directorates database: https://secure.pesticides.gov.uk/pestreg/

Along with the new Regulation, the EU Directive on the Sustainable Use of Pesticides also came into force; http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/index_en.htm. One of the key recommendations contained within the Directive is that Member States must "ensure that the use of pesticides is minimised or prohibited in certain specific areas", (Article 12 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0128)

GOOD PRACTICE STRATEGY FOR PEST MANAGEMENT

Set an overall aim to eliminate or at least reduce to a minimum all types of pesticide.

Opportunities exist for the elimination of pesticide use in certain situations, and their replacement with less hazardous control methods in others. The following list suggests steps that could be taken to achieve acceptable and less hazardous pest management:

- Audit current practices to determine where pesticides are being used, for what purposes and which chemicals are used. Particular attention should be paid to fine turf areas, rose gardens and hard surfaces.
- Adopt a strategy which aims to reduce chemical pesticide use by predetermined targets and maximises safeguards where chemical pesticides are used.
- Implement organic cultural methods or Integrated Pest Management (IPM) strategies in parks, and seek alternatives to chemical pesticides where possible.
- Ensure that anyone specifying, storing and using pesticides is appropriately trained.
- Ensure that storage, transportation, application and disposal of pesticides is in accordance with the law and with best practice.

Provide evidence of elimination or replacement of pesticides

A strategy to reduce pesticide use should be devised which addresses the questions below:

- Where are pesticides used?
- What would happen if there was no treatment i.e. is there a pest problem?
- Is there a way of altering the environment to prevent the problem?
- What physical or mechanical control methods are available?
- What biological control methods are available that can supplement the environmental, physical and mechanical methods in use?

- What are the least toxic chemical controls available that can supplement the environmental, physical, mechanical and biological methods in use?

If pesticides continue to be used on the site then there must be justification for doing so.

The types and quantities of pesticides used within a green space should have been recorded. Clearly there will be an expectation of a substantial reduction compared to past use.

Integrated Pest Management (IPM) is the careful consideration and integration of all available pest control techniques and appropriate measures that discourage the development of pest populations, keep pesticides and other interventions to a minimum, and reduce risk to human health and the environment.

Some examples of alternatives to pesticides:

Design out pests – choose plant varieties less susceptible to pest and disease attack. Create natural environments where 'pests' are accepted as part of the environment and natural means of control are encouraged. Green space environments are very good for encouraging the natural pest predators such as birds, bats, beetles and ladybirds. Avoid features that encourage pest problems.

Build in barriers - use bark mulches to suppress weed growth. Lay weed suppressing cloth below new pathways. Use environmental controls - ensure amenity turf is well drained to avoid moss growth. Manage organic waste and litter to minimise problems of animal pests. Use grease bands around tree-trunks which prevent pests crawling up and damaging the tree or introducing viral disease.

Use physical controls - use tools, flamers and traps.

The Soil Association (www.soilassociation.org) publishes good practice examples.

Dealing with invasive species

There are legal obligations for dealing with certain species of invasive plant species such as giant hogweed and Japanese knotweed. Herbicides are usually the most effective method for dealing with such problems but care should be taken to minimise the use of herbicides. This can be achieved by opting to use techniques such as stem injection which will remove the need for foliar application and reduce the overall amount of herbicide used. Other mechanical removal options should be explored prior to commencing a program of herbicidal treatment.

STORAGE OF PESTICIDES

Much of the following is derived from The Code of Practice for the Use of Approved Pesticides in Amenity and Industrial Areas, National Association of Agricultural Contractors and the National Turfgrass Council, 1991.

- Ensure that there is a dedicated pesticide store that is:
  - suitably sited;
  - of adequate storage capacity;
  - soundly constructed of fire-resistant materials;
  - provided with suitable entrances and exits;
  - capable of containing spillage and leakage;
  - dry and frost-free;
  - suitably lit and ventilated;
  - marked with appropriate warning signs and secure against theft and vandalism; and
  - equipped, organised and staffed to accommodate the intended contents.

- Stores should be approved by the Health and Safety Executive, fire authorities, Environment Agency and local authority Health and Safety Officer as appropriate.

- Relatively small amounts of pesticide can be stored in chests, bins, vaults and cabinets.

- Ensure that stock is used on a first-in first-out basis, stacked safely and kept separate from other commodities.

- Keep a Pesticide Book that records data on pesticide use including time, type, amounts, purpose and user.

- Application equipment must be appropriate and well maintained.

- Protective clothing must be provided and emergency plans should be in place.

- Staff applying pesticides must receive training on the various aspects of pesticide use including the relevant legislation, the hazards and risks posed by pesticides, safe working practices, emergency action, health surveillance and record keeping. They must hold relevant Certificates of Competence from the National Proficiency Tests Council.

- Damaged or leaking containers should be disposed of.

- When transporting chemicals make sure they are secure and all necessary HSWA 1974 and COSHH 1988 requirements are followed.

See also:

National Association of Agricultural Contractors www.naac.co.uk

Turfgrass Growers' Association www.turfgrass.co.uk

LEAST HAZARDOUS PESTICIDES AND MATERIALS

The preferred option is to use no pesticides at all but if, in the final analysis, they prove necessary, the least hazardous should be chosen. The following approach is recommended by the Health and Safety Commission (HSC 1995): "In selecting a pesticide the product must be selected which poses the least risk to beings, animals and the environment yet gives the appropriate or desired pest control."

Whilst in theory there is no such thing as a safe pesticide due to them being poisons designed to kill living organisms, there are some least hazardous options available. The least hazardous options would be those approved for use under current UK organic standards (information available from the Soil Association), or those that do not fall under the Highly Hazardous Pesticide (HHP) category as defined by PAN UK. More information and a full list of pesticides classified as HHPs can be found at http://www.pan-germany.org/download/PAN_HHP_List_150602_F.pdf

For further information consult the Pesticide Action Network UK (www.pan-uk.org).

AN EXAMPLE OF AN INTEGRATED PEST MANAGEMENT STRATEGY

[The organisation] will manage vegetation and pests in a manner that:

• utilises an ecological approach;

• minimises the use of pesticides; and

• minimises risk to human health and the environment.

Strategy

• Monitor pest populations, size occurrence and any natural pest enemies. Identify decisions and practices that could affect pest populations.

• Consider how much aesthetic or economic damage can be tolerated.

• Consider a range of potential treatments - employ the least-toxic management tactics and use chemicals as a last resort.

• Ban the use of the most hazardous pesticides and reduce overall pesticide use.

• Conduct educational programmes for staff and the public, and inform of pesticide use using signs and other means.

• Keep records including those of:

- target pest;
- type and quantity of pesticide;
- site of pesticide application;
- date used; and
- name of applicator.

• Evaluate and report back to the relevant committee