



Waverley Borough Council
**Pesticides Policy & Action
Plan**

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Introduction

The growing concern around pesticides and trends in reduction

Throughout the UK, Europe and the rest of the World there is a growing movement to phase out the use of pesticides; which have traditionally been used as a cost effective way to control fungi, bacteria, insects, plant diseases and weeds amongst others.

This movement has been triggered by the growing public concern over the possible health effects on humans through exposure to pesticides, with particular concern over the impacts on children.

Equally there are also concerns over the effects that pesticide use is having on our environment and wildlife. The decline of bees and other pollinators, bird species, mammals, fish and freshwater invertebrates have all been linked to pesticide use.

Another major concern is the contamination of water sources, including potable water used for human consumption.

Pesticides are used widely throughout the world and in the UK, and agriculture is by far the biggest user. However it is not just the agricultural use of pesticides that is causing concern.

Hundreds of tonnes of pesticides are being used annually in rural areas, towns and cities, roads and footways by local authorities and this is potentially presenting an unacceptable risk of exposure to the public and is also possibly having a negative effect on local biodiversity in these areas throughout the UK.

It is clear that throughout the UK that people are concerned about the use of pesticides and are keen to see changes made. A recent poll carried out for the Pesticide Action Network UK (PAN UK)¹ showed that 68% of the public want their schools, parks, playgrounds and other open spaces in the their local area to be pesticide-free.

This level of public attention has increased significantly in recent years, since the debate over safety of the most widely used amenity herbicide, Glyphosate and the ongoing discussions about its use in public spaces². In April 2015, the International Agency for Research on Cancer (IARC), part of the World Health Organisation, concluded that Glyphosate based weed killer was “probably carcinogenic to humans”.

There are however counter claims regarding Glyphosate and its use, with some organisations stating that the evidence is currently inconclusive with regard to its apparent carcinogenic effects.

Despite there being no clear outcome on the Glyphosate debate yet, public awareness has hugely increased as a result and many people are calling for a more precautionary approach to be taken and for its use to be phased out.

The Council itself has received a petition calling for the end of the spraying of Pesticides in the Farnham area of the borough. It is realistic to expect further petitions to be submitted in due course calling for similar action.

The Council has also received several individual representations from concerned local residents over the spraying of pesticides on land or near to their homes.

Across Europe there are now many areas that have been moving away from the use of pesticides in towns and cities. In France as a result of national legislation that came into force in 2017, the use of almost all non-agricultural pesticides has been banned, resulting in public spaces being managed without pesticides.

Paris itself has been pesticide free for over a decade and other big cities such as Barcelona and Hamburg have stopped using Glyphosate.

In Belgium, towns and cities in the region of Flanders and Wallonia have stopped the use of pesticides completely and the city of Ghent has been pesticide free for over twenty years.

This trend to take a more precautionary approach is growing all the time; in Canada and the USA the momentum is building to reduce and ban pesticides.

In the UK, there are several Councils who are leading the way in regards to the reduction and pledging the banning of use of Glyphosate and pesticides. For example, Lewes, Eastbourne, Brighton & Hove Councils and Glastonbury Town Council.

There are other Councils that are planning similar motions with regard to pesticides and eliminating the use of Glyphosate. This presents the Council with an opportunity to take stock and review what its approach should be over the use of pesticides and whether a precautionary approach should be adopted.

The council's use of pesticides

The council owns a large land holding in the borough and in the main is directly responsible for its maintenance, except where this is leased to third parties.

The land holding is made up of many varied sites, which includes; parks, recreation grounds, open spaces, cemeteries and churchyards, play areas, sports pitches, nature reserves, common land, highway verges and roads, housing areas, car parks, woodlands, properties and leased in areas.

Additionally the Council is also involved in arranging works on land that is not in the ownership of the Council, such as delivering pest control services for residents on privately owned land.

The Council has always aimed to provide a high standard of maintenance for all of its sites and also for those sites that it maintains for third parties such as Surrey County Council, sports clubs, Guildford Diocese or areas leased to other organisations.

In order to maintain this land and to assist our residents with their needs the council delivers its services through contractors, however in the management of the countryside it also employs its own Ranger service along with contractors as well.

In order to achieve these high standards and to provide a cost effective control; in the past the Council has relied on the use of pesticides in order to control weeds, pests and diseases.

For the purposes of this document, pesticides is the collective term used to describe; herbicides, fungicides, lumbricides, insecticides, acaricides and rodenticides.

Please see the table in Appendix 1 for the details of where the Council has used pesticides in the last year, what they have been used for and the quantities that they have been used in.

The phasing out and use of alternatives to pesticides

With the ever-increasing awareness of the environmental and undesirable effects of pesticides; both to the staff concerned with applying them, the general public and the environment as a whole, consideration must now be given to the use of alternative methods to replace and phase out pesticides.

Alternatives products and techniques are currently being identified and researched within the industry to replace pesticides, the development of these has progressed significantly in recent years as more end users are seeking alternatives.

At the same time strict controls are being applied by those organisations involved in the authorising and licencing of pesticides. Progressively over time, fewer pesticide products are now available on the market as they are phased out, due to the health concerns and scientific evidence over the impacts they pose to human health and the environment in general.

It is the aim of the council to stop using pesticides. The approach taken will be to phase out their use as quickly as is practical, recognising that at present it may not always be possible to eliminate their use altogether.

It will take time to explore all the alternatives and in some cases it may cost the council more to use alternatives methods to provide the same level of control.

Where chemicals are to be used, they are considered based on current knowledge, as those that will have least effect on the environment.

Policy Aim

Aim

The aim of this policy is to start the process of reducing pesticide usage wherever possible, with an ultimate goal of phasing out pesticide use completely other than in exceptional circumstances.

This aim may be difficult to achieve, due to the limited range of suitable alternatives to pesticides for certain tasks or management practices. Additionally alternative methods that provide the same level of control may present a significant cost increase to the council, or, may pose issues in their delivery e.g. fencing of commons to retain livestock to graze sites.

An alternative to high cost alternatives could be the acceptance that in some instances the same level of control is just not needed. This could present a challenge to the council where the increase in weeds visible around the Borough leads to a rise in the number of complaints received. However the council is currently receiving an increasing number of complaints about the use of pesticides, particularly where there is a high likelihood of human exposure.

This policy for the use of pesticides identifies how we propose to reduce, monitor and control the use of pesticides, using alternative methods wherever possible, or suggesting in some areas where control is no longer required.

This policy relates to pesticides used by the various services of the council; Parks & Countryside, Environment Health, Environmental Services, Housing and Property Services.

Wherever possible we will encourage pesticide free/reduced pesticide use across the Borough, including advice to third parties, such as; external organisations, sports clubs and planning comments regarding new developments and in discussions with our partners such as Town & Parish Councils.

It is intended that the policy aim cited above will be delivered by the key policy statements set out in this document.

Summary of policy statements supporting the Pesticides Policy

Below in table 1, is a summary of the seven policy statements that provide the council's approach to the council's Pesticides Policy.

These policy statements will inform council officers' decision making when pest, disease or vegetation control is being considered.

Table 1. Summary of policy statements

<i>Policy Statement 1</i>	Non pesticide control will always be considered as a 'first choice'. Approval will be given for pesticide application on our land under our management, only in specific and defined circumstances as defined in section 4 of this policy
<i>Policy Statement 2</i>	We will continuously review new methods of non pesticide control as they become available, with a view to adopting these as soon as possible, where they offer a viable alternative to pesticide use
<i>Policy Statement 3</i>	We will create pesticide free greenspaces across the borough in accordance with the timescales identified in the action plan. We will promote such areas to the public
<i>Policy Statement 4</i>	We will eliminate the use of Glyphosate based weed killers wherever possible in accordance with the timescales identified in the action plan and we will continue to monitor the legality of its use in the UK.
<i>Policy Statement 5</i>	Where there is no alternative but to use pesticides, the council will ensure full compliance with all legal requirements, maintain detailed and accurate records of pesticide applications and ensure staff and appointed contractors are fully trained and competent.
<i>Policy Statement 6</i>	We will ensure all future contracts and, where possible, existing contracts, are consistent with the council's policy on pesticides.
<i>Policy Statement 7</i>	We will use whatever mechanisms are available to us, to ensure that third parties maintaining council owned land, comply with the council's policy. Where the council maintains land on behalf of a third party, will ensure that, as far as possible, the principles of this policy are delivered.

The use of pesticides

Although every effort will be made to use non-chemical control, there will still be some instances where alternative methods are not currently available, practical, acceptable or effective.

Wherever this is the case, integrated control will be practised wherever possible, i.e., a combination of cultural and pesticide use, to resolve a problem with the least impact on the environment.

Some examples of where pesticides will still be likely to be used in the immediate future are stated below. The list is not exhaustive however.

Sports pitch surfaces.

These areas are maintained to a high standard to allow the games to be played to a good standard. However, their use will be minimised and alternative methods used as a first choice where possible.

Fungicides, to prevent and treat fungal diseases of grass, will be permitted where necessary. However, grounds maintenance cultural improvements such as aeration and brushing will be increased in our grounds maintenance specifications to reduce the occurrence of fungal attacks and therefore reduce the requirement for fungicide applications.

The use of lumbricides (worm killer) will not be approved at any of our sites, due to its detrimental effect on the environment, unless future “environmentally friendly” control methods are developed. The use of worm irritants to discourage worm casting activity will be permitted.

Selective herbicides will be permitted for use on fine turf and sports pitches to control broadleaf weeds where they impact the playing pitch quality. Selective weed killing will only take place where there is weed growth affecting the use of the area for sports, and will not be applied when there is not a sports pitch. However hand weeding where possible will always be encouraged in our grounds maintenance contracts.

Mole infestations

The use of gas pellets and other pesticides to control moles on sports pitches and other sites has not been used by the council since 2010. Alternative humane mechanical traps will be used where control is absolutely essential for the health and safety of sports and other users of our sites.

Scrub clearance and control of regrowth

The control of tree stump regrowth and self set saplings, to restore and maintain valuable ecological grassland and heathland habitats and to also stop the spread of invasive non-native trees is currently delivered by the use of pesticides.

The traditional methods of control for these areas; such as grazing, may not be viable due to high incidences of dog walking or difficulties in implementing fencing schemes on common land. Other alternatives are to increase the use of volunteers to clear such areas or to employ external contractors to deliver the same level of control.

The pesticide method of control will usually be in the form of pesticide plugs inserted into the stump, or by targeted spraying or painting. Such treatments may also be carried out for stump treatments on down land following scrub clearance and for areas where stump grinding is not a viable option.

Hard surfaces in certain areas

The maintenance of hard surfaces such as paths, garage blocks, highway weeds etc., on a large scale, may still require the use of herbicide where other methods cannot be used i.e. areas inaccessible to a hot foam machine.

However, when this operation is carried out, weeds will be individually targeted (reduced volume spraying) by the applicator, therefore considerably reducing the amount of herbicide used, and preventing any excess herbicide being lost into the environment. In the past, paths etc. were often “blanket treated” i.e., spray was applied to cover the path, whether weeds were present or not. This practice will not be carried out on our sites.

Invasive and pernicious weeds

This may include sites where there is a particular weed problem with a shrub bed or where an area of land has to be cleared of perennial weeds. This will also include areas where the control of invasive or injurious weeds is needed, such as Japanese knotweed, Parrots Feather, Giant Hogweed, Hemlock Water Dropwort, Ragwort etc.

Oak Processionary Moth (OPM) Control

There are very few natural predators that are capable of tackling this pest. Council officers have carried out a risk assessment to identify the most sensitive areas where OPM infestation is likely to cause significant problems and at present, there may be a need to use a biological control called *Bacillus thuringiensis*, a naturally occurring bacterium, in spray form where the insect pressure is serious. Due to the life cycle of the caterpillars there is a restricted window, when such a spray can be applied and be effective. This biological control is preferable to other pesticide based applications, however it is not specific and can kill desirable species. OPM has gradually but consistently been increasing in significance and moving outward from London area in particular, is affecting several neighbouring Boroughs and Districts and has been identified in a number of locations within Waverley.

Pest control in residential and commercial areas

Pests spread disease and cause unhealthy living conditions. Local authorities have a legal obligation to keep their districts free from pests. The presence of pests in any food handling premises is unacceptable. The presence of pests in dwellings has considerable impact on the lives of the inhabitants, particularly the more vulnerable members of the community who are more susceptible to disease.

The risks posed by pests include:

- The spread of disease (pathogens are transferred from the gut or external surface of the pest)
- Damage to property (e.g. gnawing of electric cables with the potential to cause fires)
- Contamination of work surfaces and food stuffs (physical contamination such as faeces, hair, body parts, as well as contamination by microorganisms)
- Some pests such as bedbugs, lice, fleas all feed on humans, often there is a distinctive bite pattern on the skin from the body's reaction to the bite
- There is an association between pest infested premises and people suffering depression, migraines, allergies and asthma.
- Embarrassment of people living with pests or adverse public opinion/loss of reputation for commercial premises

Typical pests include: rats, mice, wasps, cockroaches, birds, flies, fleas, bedbugs, ticks, mosquitoes, house dust mites, ants etc. Proper identification of a pest is needed to develop a pest control management programme. The objective is to maintain a pest free environment. This will include:

- Exclusion – Methods adopted in preventing pests entering a building
- Restriction – Methods used to create unfavourable conditions for pests to harbour and breed
- Destruction – Physical and chemical methods to control and eradicate pests

Chemical control methods are an effective means to eradicate an infestation as part of a pest control management programme. Pesticides typical used to control pests in residential and commercial areas are rodenticides and insecticides. Commercial food premises will often have a contract with a pest control company to proactively check premises and take action when needed. Residents are encouraged to employ a competent pest control company at a competitive rate (via Environmental Health's pest control contractor) to ensure appropriate interventions and controls are adopted for their specific pest control problem.

Environmental Considerations

The use of pesticides can potentially have negative effects on our environment and the associated biodiversity if used inconsiderately and inappropriately.

When used on hard surfaces, such as pavements, there is a possibility that run off or residues could contaminate water courses and therefore contaminate aquatic wildlife. They may also kill plants which are beneficial and relied upon by birds, insects and other wildlife. When used on soft surfaces, such as vegetation or grass swards, there is a possibility of spray drift and contamination of adjacent areas. Some pesticides are highly persistent, meaning that they stay around in the soil for a long time, raising the likelihood that they could enter watercourses or aquifers.

Due to large scale habitat loss in the countryside, and large scale pesticide use in agriculture, wildlife such as birds, insects and bees are seeking refuge in our towns, properties and parks & countryside sites. This makes it very important that within areas under council control, that we create safe, pesticide reduced, or, ideally pesticide free areas.

This Pesticides Policy should be read alongside the council's "Biodiversity policy and action plan".

On all these occasions, a pesticide will only be used if no alternative non pesticide option is suitable

Policy Statement 1

Non pesticide weed and pest control will always be considered as 'first choice'. Approval will be given for pesticide application on our land under our management, only in specific and defined circumstances as defined in section 4.

Note: special and defined circumstances are clarified below:

- Consider if action is required, i.e., do we need to control the weed or pest etc.?
- Ensure that the pest, weed, fungus has been correctly identified
- Identify non-pesticide control options and use as a first choice if viable
- Consider whether integrated control measures are available as a second choice
- Use an approved pesticide ONLY if the above options are not suitable
- Look at what alternative pesticides are available
- Employ the most "environmentally friendly" way to apply the pesticide
- Consider whether it is an appropriate time of year to apply the pesticide/control the problem
- Look at whether the risks of using a pesticide are greater than the problem itself?
- Consult the product data to ensure there is no specific environmental risk? e.g., risk to bees, water courses

- Ensure that there are no other environmental considerations? i.e., adjacent water course, wildlife
- Consider whether, after any one-off application of a pesticide, there are there any other long-term non-pesticide solutions for the problem
- Obtain any higher level permission required such as that from the Environment Agency or Natural England

Only after all of the above points have been considered, would approval be given for the use of a pesticide.

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Alternatives to Pesticide use

Non chemical methods of pest and vegetation control will be used as a first choice wherever possible.

The number of alternatives are currently limited. However with a growing trend towards reduced pesticide use; such as the current concerns over the use of Glyphosate based products as a herbicide, it is likely that the number of alternatives will increase significantly in the future due to product and technological developments. Additionally as more and more organisations seek to phase out pesticide usage there will be increasing demand and pressure for new products to be developed.

Many of the alternatives require increased applications to control weeds increasing the costs, or are simply just more expensive per treatment. It is hoped that the costs will reduce in time, once more organisations switch from using the traditionally available pesticides.

A more radical approach to reducing pesticides, is an acceptance that there will simply be more pests or weeds in our environment. Increased incidences of both, may have beneficial impacts for the environment, but conversely they may potentially have a negative impact on the environment and public perception.

A current selection of alternative weed control methods is shown below in Table 1:

Table 1. Alternative weed control methods

Method	Use	Advantages	Disadvantages
No Control	Everywhere	No cost, provides wildlife benefits	Public perceptions of untidy, pest ridden and non maintained areas
Manual Weeding	Weeds in general	Very effective if done well. Low set up costs (excluding labour)	Time consuming. Requires large amount of labour which adds to the cost
Mulching	Weed control within shrub, hedge borders and under trees etc.	Improves appearance of area, retains moisture in soil	Requires regular tops ups. Can be labour intensive. Maybe expensive depending on supply of material
Mowing and Hand Pulling	Undesirable weeds in sensitive natural habitats	No licence required and no damage to the environment	Can be expensive
Steel Brushing	Hard surfaces such as pavements and roads	Brushing can be very effective when used with acetic acid	Could be expensive implementing extra machinery or increase in road sweeping rounds

Hot Foam	Weeds and moss on hard surfaces and play safety surfacing. Grass growth around trees, non chemical graffiti removal.	Foam holds hot water against plant. Pesticide free. Can be used in all weather. Kills 95% of targeted weeds.	Technology still being refined. Expensive to purchase. Additional cost of plant oil extract, diesel consumption (unless alternative power source is used). Does not kill root
Hot Water/Steam	Weeds in hard surfaces, play area surfacing, non chemical graffiti removal.	Lower initial purchase cost.	Requires more treatments as heat is not held onto the plant. Diesel consumption and pollution. Does not kill root
Propane/Flame gun	Weeds on hard surfaces	Relatively cheap to purchase	Health & Safety risks. Not particularly effective. Produces carbon emissions
Electrocution	Knotweed Control	No chemicals, very suited to invasive species	Very new technology not fully proven yet
Intensive Grazing	Undesirable weeds and saplings in sensitive natural habitats and on farmland	Wildlife friendly with sufficient control	Not suitable for all ground conditions and can damage sensitive soils. Often requires fencing which can be contentious
Acetic Acid	Weeds on hard surfaces	No licence required for application	Has been trialled but has not been effective. Strong smell, can give operator headaches
Pelargonic Acid	Weeds on hard surfaces and soil. Moss and Algae	Chemical substance is found in almost all species of animals and plants, also known as Nonanoic acid. Readily broken down in the environment. In USA it is an approved substance for use in food. Only affects green parts of a plant, it cannot penetrate woody bark of a plant, so can be used under trees, bushes and hedges.	Expensive, non residual

With regard to alternative methods to control pests, insecticides etc. there are limited options available presently to replace the currently licensed pesticides. There are options for biological control methods and mechanical trapping in certain circumstances

Further work will be required in due course by officers to identify and evaluate alternative control methods for the control of pest and insects, as and when, they become available.

Policy Statement 2

We will continuously review new methods of non pesticide weed and pest control as they become available, with a view to adopting these as soon as possible, where they offer a viable alternative to pesticide use.

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Phasing out of pesticides and the creation of pesticide free greenspaces

The reasons for wishing to go pesticide free are numerous, but include:

- Contamination of local water supplies
- The potential impact of pesticides on human health, notably the health of children
- The potential impact on the environment, biodiversity and bee populations
- General public concern

The aim of creating pesticide free greenspaces for children, adults and also wildlife is to create areas that provide certainty that there will be no direct contact with the chemicals contained within pesticides. These areas will be sign posted as “Pesticide Free” so that everyone knows that they can use the sites and expect to not come into contact with pesticides. When weed or pest control is needed, only environmentally friendly solutions will be used.

As these parks will become safe havens for wildlife, wherever possible we will also promote the creation of wildlife friendly habitats and pollinator plants, further detail on these areas will be described in the Council’s forthcoming biodiversity policy and action plan.

Appendix 2 details a proposed action plan and associated timescales for the phasing out of pesticides, using alternatives methods of control and the development of “Pesticide Free” areas.

Keeping the residents of the borough informed about the Council’s intentions is an important element to be able to successfully deliver this Pesticides Policy. Communicating with the public will be key in order to gain support and help meet the objectives of this policy.

The Council will need to develop a detailed communications plan to communicate to the residents of the borough, what the Council is looking to achieve, why, how and when.

Appendix 3 outlines an example of proposed signage used by other local authorities that could be used to highlight the changes to inform users of our sites.

Policy Statement 3

We will create pesticide free greenspaces across the borough in accordance with the timescales identified in the action plan. We will promote such areas to the public.

Glyphosate

Glyphosate is the active ingredient in many weed killers; used in farming, agriculture, horticulture and public spaces like parks, streets and schools and also by the public in their gardens. It is the world's most widely sold weedkiller³. Its health and environmental impact is surrounded in controversy and debate at the present time.

There is particular concern regarding Glyphosate weed killers, which are widely used on hard surfaces and to clear vegetative sites. Glyphosate is a broad spectrum (non selective) weed killer that is an organophosphorus compound. It is supplied in many different forms, usually with other chemicals (adjuvants), such as spreaders, drift reducers, wetting agents etc. added. Glyphosate is absorbed through the plants leaves, and is absorbed into plant roots.

In April 2015, the International Agency for Research on Cancer (IARC), part of the World Health Organisation, concluded that Glyphosate based weed killer was “probably carcinogenic to humans”. Independent scientific studies have also begun to reveal numerous acute and chronic effects of Glyphosate based herbicides.

In addition, the ingredients (adjuvants) added to Glyphosate products may be toxic. Some research has shown that Glyphosate with adjuvants may be many times more toxic than Glyphosate alone⁴. Many of these chemicals are trade secrets and we rely on the manufacturers to ensure the products have been tested to be safe⁵. Furthermore, whilst these adjuvants are considered ‘inert’, research has shown that some are, themselves, toxic. However, as they are not names by the chemical company as the main ingredient, they are not subject to the same safety testing.

Studies have found that Glyphosate based herbicides can interfere with various organs and biochemical pathways in mammals. Genotoxicity and endocrine disruption also lead to chronic health and developmental effects. It causes imbalances in gut bacteria and some studies have found that Glyphosate appears to accumulate in human cells. At low concentrations it damages liver, kidney and skin cells and long terms effects include cancer, infertility, pregnancy problems, birth defects and respiratory diseases⁵.

Glyphosate has been recorded as having both direct and indirect impacts on our environment.

By removing vegetation so effectively, the herbicide indirectly affects biodiversity through changes to ecosystems and food sources. Where Glyphosate, and other pesticides, are used, there are fewer food sources for insects, birds and animals in the urban environment.

Due to its water solubility Glyphosate has had direct impacts on species that underpin the aquatic food chain with amphibians being particularly vulnerable. Glyphosate has also been found to have adverse effects on earthworms, beneficial insects and bees, this then creates secondary impacts on pollination of plants.

There are however counter claims regarding Glyphosate and its use, with some organisations stating that the evidence is currently inconclusive in regards to its apparent carcinogenic effects. The Crop Protection Association (CPA) has stated, “No regulatory agency in the world classifies Glyphosate as a carcinogen. Indeed 800 scientific studies have found no connection between Glyphosate and cancer, as did the recently published Agricultural Health Study – the largest study ever conducted on the use of formulated pesticide products in the real world”⁶.

The CPA has stated that claims that Glyphosate is carcinogenic are solely based in the IARC’s classification in 2015 and that the IARC is not a regulatory body and has not undertaken any independent studies of the weed killer.

All products containing Glyphosate have to be registered and approved by the European Pesticides Commission. Glyphosate was re-registered and approved in June 2016, but for a limited period of 18 months (until the end of 2017). It has since had a further 5 year extension. As part of this approval extension, the European Pesticides Commission also presented some recommendations to be considered by member states. One of these recommendations was to “*minimise the use of the substance (Glyphosate) in public parks, public playgrounds and gardens*”.

The UK will have exited and left the EU by 2022 and will then have the power to make its own decision on the future of Glyphosate.

In August 2018, a land mark case in the USA agreed with a groundsman’s claim that his rare form of cancer was caused by exposure to a Glyphosate based weed killer², and the company was fined a significant sum of money. This may well lead to future claims, and potentially, an increased effort in finding more environmentally friendly products to market.

The Pesticide Action Network (PAN) UK have a “precautionary principle” that states that “*When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some of the cause and effect relationships are not fully established scientifically*”. In other words, although some evidence against the use of pesticides appears inconclusive, it is far better to work towards not using pesticides.

It is very likely that it is the beginning of the end for Glyphosate and is perhaps only a matter of time until its use is either banned in certain circumstances or completely banned altogether. It would appear to be a good time for the Council to take decisive positive action and pledge to eliminate its use and seek to use alternatives.

Policy Statement 4

We will eliminate the use of Glyphosate based weed killers wherever possible in accordance with the timescales identified in the action plan and we will continue to monitor the legality of its use in the UK.

How will we monitor the use and application of pesticides

All those involved in approving, applying and monitoring pesticides will be made aware of this Pesticide Policy.

Any person applying a pesticide to the council's land will hold a Certificate of Competence (irrespective of age), as issued by the National Proficiency Tests Council (NPTC), appropriate to the type of equipment/spraying technique to be used.

Copies of these certificates will be made available to the council as evidence of competence.

Pesticide applications, subject to approval, may be made by the following council appointed contractors:

- Directly employed staff
- Grounds Maintenance Contractors
- Arboricultural and Forestry Contractors
- Specialist Pest Control Contractors

Detailed and accurate spraying records will be kept.

These records will describe the type of pesticide to be used, active ingredient, trade name, area where the pesticide is to be applied, rate of application, calibration, safety considerations, date of application, operative who will be applying the pesticide etc., and include additional information such as weather conditions.

The following records will also be kept and retained as required:

- Environmental Impact Assessments.
- Local Environment Risk Assessment for Pesticides (LERAP).
- COSHH Assessments
- Risk Assessments
- Stock Control Records
- Disposal records.
- Copies of certificates of Competence

When using pesticides where there is no other suitable alternative is available, we will:

- Use a method that uses/applies the least amount of chemical, i.e. CDA (controlled droplet application), painting, plugs, targeted spraying.
- Where possible, not apply a blanket cover of chemical.
- Ensure that spare pesticides/containers are disposed of safely in an approved manner.
- Ensure that spray equipment is washed out in a safe manner according to the approved method, to safeguard the environment.
- Ensure that the application method is approved for the product used.

- Leave a “pesticide free” buffer zone around environmentally sensitive areas where appropriate

Where it is necessary for pesticides to be applied on council land, we will ensure fully conformity with the latest Health and Safety Legislation (primarily the Health and Safety at Work etc. Act 1974 (HSWA) and Pesticide Legislation (The Plant Protection Products (Sustainable Use) Regulations 2012 & Control of Pesticides (Amended) Regulations 1997).

Policy Statement 5

Where there is no alternative but to use pesticides, the council will ensure full compliance with all legal requirements, maintain detailed and accurate records of pesticide applications and ensure staff and appointed contractors are fully trained and competent.

Maintenance and Pest Control Specifications

To ensure that our contractors comply fully with our council's requirements, all future maintenance and pest control specifications will include detailed information of the council's Pesticides Policy, the requirements for pesticide free and pesticide reduced areas and for the conditions for the use of pesticides where essential.

The use of pesticides will not be permitted in any contract unless no other suitable alternative is available.

Future contract arrangements and specifications will also always make reference to our Pesticide Policy and action plan and the Biodiversity policy and action plan where applicable.

Policy Statement 6

We will ensure all future contracts and where possible existing contracts are consistent with the council's policy on pesticides and they incorporate flexibility for future developments in technology and methods. They will be monitored accordingly.

Third party owners

Where land is transferred to Town and Parish councils through devolution, leased out to sports clubs or other community organisations or where we carry out work on behalf of third parties; we will ensure our expectations with regard to the elimination and phasing out of pesticide use are communicated to these bodies. We will encourage the adoption of this Pesticide Policy and the creation of pesticide free areas.

Where weed control is carried out on behalf of a Highway Authority, we will continue to offer pesticide application services according to the client's requirements, but we will also propose alternative methods or specifications. This will allow us to:

- Ensure that the minimum amount of pesticide is used
- Ensure that the application is carried out by competent and trained staff
- Discuss alternative options with the client with the aim of agreeing ways to reduce pesticide application where possible, or to change the methods of weed control as new research /options become available.
- Monitor pesticide usage across the area.

Policy Statement 7

We will use whatever mechanisms are available to us, to ensure that third parties maintaining council owned land, comply with the council's pesticide policy. Where the council maintains land on behalf of a third party, will ensure that, as far as possible, the principles of this policy are delivered.

Note: It is recognised that existing lease arrangements may be difficult and also financially costly to alter, in order to fully implement the council's Pesticides Policy, in these cases; we would seek to educate and influence third parties wherever possible

References

1. Polling commissioned by PAN UK and SumOfUs and conducted by GQR Research, September 2017, <https://qrr.app.box.com/s/0ddbifc853j9k1t1sbjvuc1crvxw8zbc>
2. Pesticides: Parliament to set up special committee
<http://www.europarl.europa.eu/news/en/pressroom/20180118IPR92014/pesticides-parliament-to-set-up-special-committee>
3. Soil Association – What is Glyphosate <https://www.soilassociation.org/our-campaigns/not-in-our-bread/what-is-Glyphosate/>
4. Major Pesticides Are More Toxic to Human Cells Than Their Declared Active Principles', (Biomed research International, Feb 2014; 2014(2014) Article ID 179691
<http://www.hindawi.com/journals/bmri/2014/179691/abs/>
5. Pesticide Action Network UK – Glyphosate <https://www.pan-uk.org/Glyphosate/>
6. Crop Protection Association
7. Pesticide Policy (Grounds Maintenance) - Lewes District Council and Eastbourne Borough Council

Appendix 1 – Table of pesticide use by the Council and its Contractors 2019/20.

Product	Active Ingredient(s)	Type	Application areas	Quantity	Unit
Gallup Biograde Amenity	Glyphosate	Herbicide	Hard surfaces	740	Litres
Gallup Hi Aktiv	Glyphosate	Herbicide	Scrub treatment	150	Litres
Roundup Pro Biactive 450	Glyphosate	Herbicide	Japanese knotweed control. Stump treatment of cut trees. Spot spraying of regrowth and saplings.	0.8	Litres
Roundup bioactive GL	Glyphosate	Herbicide	Stump treatment of cut scrub	1.7	Litres
Roundup Proactive 360	Glyphosate	Herbicide	Foliar spray of bamboo and birch regrowth	11.5	Litres
Roundup	Glyphosate	Herbicide	Scrub treatment, birch saplings	7.5	Litres
Trustee Amenity	Glyphosate	Herbicide	Ponds (invasive weeds)	0.25	Litres
Roundup EcoPlug MAX	Glyphosate (in granular form)	Herbicide	Stump treatment of cut trees.	0.45	Litres
Roundup ProBiactive 450	Glyphosate	Herbicide	Stump treatment of cut trees.	1	Litres
Chikara Tough Weed	Flazasulfron	Herbicide	Gravel areas	150	Grams
Icade	Aminopyralid	Selective Herbicide	Grass areas/Japanese knotweed	1	Litres
Qualgex	Dialkyldimethyl ammonium chloride & Citric Acid	Moss/Algae killer	Hard Surfaces	20	Litres
Clear cast	Amino nitrogen & Organic sulphur	Worm cast suppression	Sports Pitches/Bowls /Cricket	100	Litres
Crossbar	Fluroxpyr & Dicamba	Selective Herbicide	Sports Pitches/Bowls /Cricket	30	Litres

Eland Stobilurin	Pyraclostrobin	Fungicide (Broad Spectrum)	Bowls Greens/Cricket Wickets	1	Litres
Grazon Pro	Triclopyr and Aminopyralid	Selective Herbicide	Spot treatment of woody weed	8.64	Litres
Asulox	Asulam	Selective Herbicide	Bracken Control	35	Litres
Cimetrol	Cypermethrin, Tetramethrin, Piperonyl Butoxide, Pyriproxyfen	Insecticide	Houses, beds	1150	Millilitres
Rat killers	Difenacoum	Rodenticide	Houses, Outside areas	20,088	Grams
Vulcan	Chlorpyrifos	Insecticide	Wasp nests	3,750	Grams

Appendix 2 – Proposed action plan and timescales for the phasing out of pesticides

Cost impact Key

Low	£0 - £5,000
Medium	£5,000 - £50,000
High	£50,000 - £250,000

Item	Proposal	Timescale years	Delivery Option	Cost impact PA	Proposal advantages	Delivery disadvantages
Pesticide Policy	Production of an overall Pesticides Policy for the Council that seeks to reduce and phase out pesticides wherever possible	<ul style="list-style-type: none"> 0-1 	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> The Council can formally show its support to the reduction and phasing out of pesticide use in relation to its services through out the borough. The policy will help provide biodiversity increases within the borough 	<ul style="list-style-type: none"> There will clearly be some areas where pesticides will still have to be used in certain scenarios where alternatives are not yet available, or the financial viability of alternatives is very costly
Development of Communications plan and public notifications	Development of an ongoing communications plan to inform the public of the councils intentions in regard to pesticide usage	<ul style="list-style-type: none"> 0–3 	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Puts the Council on the front foot and makes the public are aware of what the Council wishes to do and why it is doing this. Allows the Council to further promote biodiversity gains in the borough 	<ul style="list-style-type: none"> Will require extra resources to deliver.
Pesticide free playgrounds*	To introduce playgrounds, skate parks and MUGA's that are completely free from pesticides	<ul style="list-style-type: none"> 0–1 	<ul style="list-style-type: none"> Manual removal of vegetation 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> These areas are a relatively quick win for the Council, as these should be relatively easy to deliver in a short timescale. The Council will benefit from the good publicity of pesticide free playgrounds. There could be appropriate signage installed at each site promoting this 	<ul style="list-style-type: none"> Will require extra staff and machinery resource to deliver same level of weed control. Potential extra cost.
			<ul style="list-style-type: none"> Use of foam stream machine 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Will require extra staff and machinery resource to deliver same level of weed control. Potential extra cost
Pesticide free parks*	To stop using pesticides completely in parks and recreation grounds	<ul style="list-style-type: none"> 0-2 	<ul style="list-style-type: none"> Combination of manual removal and use of foam stream machine 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> This would be a progressive phased rolling out of pesticide free parks and recreation grounds. Initial priority on Green Flag parks. Then expand to other sites. Biodiversity gains 	<ul style="list-style-type: none"> Will require extra staff and machinery resource to deliver same level of weed control. Potential extra costs. There would need to be allowances made for sites that have sports pitches on them, or invasive weeds.
Pesticide free housing areas (paths around properties, carparks in estate areas and senior living areas)*	To stop using pesticides completely in housing estate areas and senior living areas	<ul style="list-style-type: none"> 0-3 	<ul style="list-style-type: none"> Combination of manual removal, acetic acid and use of foam stream machine 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> This would be a progressive phased rolling out of pesticide free parks and recreation grounds No use of Glyphosate ultimately Biodiversity gains 	<ul style="list-style-type: none"> Will require extra staff and machinery resource to deliver same level of weed control. Potential extra costs
Sports Turf areas for the control of fungal attacks on sports turf	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Non pesticide alternatives will be used when and if they become available Cultural methods could be increased, should pesticides be phased to help provide limited protection 	<ul style="list-style-type: none"> Pesticides will still need to be used until alternatives are available
			<ul style="list-style-type: none"> Alternative chemical not yet available 	<ul style="list-style-type: none"> Alternative costs not yet known 		<ul style="list-style-type: none"> Non pesticide chemical options not presently available
			<ul style="list-style-type: none"> Extra aeration, swishing 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Cultural methods will cost more and will not provide complete protection
			<ul style="list-style-type: none"> Don't treat 	<ul style="list-style-type: none"> Small saving 		<ul style="list-style-type: none"> Not treating fungal attacks will lead to poorer quality sports pitches and

Item	Proposal	Timescale years	Delivery Option	Cost impact PA	Proposal advantages	complaints Delivery disadvantages
Sports Turf areas for the selective removal of weeds from sports turf	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Non pesticide alternatives will be used when and if they become available Cultural methods could be increased, should pesticides be phased out to help provide limited protection Some limited biodiversity gains 	<ul style="list-style-type: none"> Pesticides will still need to be used until alternatives are available
			<ul style="list-style-type: none"> Use of alternative pesticide 	<ul style="list-style-type: none"> None 		<ul style="list-style-type: none"> Alternative product is still a pesticide
			<ul style="list-style-type: none"> Alternative chemical not yet available 	<ul style="list-style-type: none"> Future alternative costs not yet known 		<ul style="list-style-type: none"> Non pesticide chemical options not presently available
			<ul style="list-style-type: none"> Manual removal 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Cultural method increase will cost more due to its time consuming nature
			<ul style="list-style-type: none"> Don't treat 	<ul style="list-style-type: none"> Small saving 		<ul style="list-style-type: none"> Not treating for selective weed removal will lead to poorer quality sports pitches and complaints
Weed spraying of hard surfaces using Glyphosate in carparks	Completely phase out the use of Glyphosate on Council owned carparks	<ul style="list-style-type: none"> 1-3 	<ul style="list-style-type: none"> Use of acetic acid to provide same level of control (4 apps) 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> No Glyphosate use. Limited biodiversity gains 	<ul style="list-style-type: none"> Alternative product used to replace Glyphosate is expensive to provide same level of control Vinegar smell
			<ul style="list-style-type: none"> Use of acetic acid to provide reduced level of control (2 apps) 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Vinegar smell Reduced level of control of weeds Complaints rise
			<ul style="list-style-type: none"> Increase mechanical sweeping 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Mechanical sweeping rounds would need to be increased to combat weed growth There would be costs associated to this
Weed spraying of roads and footpaths on behalf of SCC highways	Reduce spraying of roads and footways with Glyphosate to once per year from twice per year	<ul style="list-style-type: none"> 0-1 	<ul style="list-style-type: none"> Current method with reduced frequency 	<ul style="list-style-type: none"> Small saving 	<ul style="list-style-type: none"> Reduced quantity of Glyphosate used. Some biodiversity gains due to more opportunity for weeds to flower 	<ul style="list-style-type: none"> More weeds will be evident through out the year on the highway. Complaints may rise Still using Glyphosate
Weed spraying of roads and footpaths on behalf of SCC highways	Completely phase out the use of Glyphosate on the road network	<ul style="list-style-type: none"> 1-3 	<ul style="list-style-type: none"> Use of acetic acid to provide same level of control (4 apps) 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> No Glyphosate use. 	<ul style="list-style-type: none"> Alternative product used to replace Glyphosate is expensive to provide same level of control. Vinegar smell
			<ul style="list-style-type: none"> Use of acetic acid to provide reduced level of control (2 apps) 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Vinegar smell Reduced level of control of weeds Complaints rise
			<ul style="list-style-type: none"> Increase mechanical sweeping of roads and pathways 	<ul style="list-style-type: none"> High 		<ul style="list-style-type: none"> Mechanical sweeping rounds would need to be increased to combat weed growth There would be significant costs associated to this

Item	Proposal	Timescale years	Delivery Option	Cost impact PA	Proposal advantages	Delivery disadvantages
Invasive weeds* Control of the specific problems of Japanese Knotweed etc.	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Limited advantages on offer currently. The Council has an obligation to treat invasive weeds such as Japanese Knotweed in certain areas. Viable control methods at the moment is the use of Glyphosate mainly by stem injection to get the most effective control rather than spraying. 	<ul style="list-style-type: none"> Pesticides will have to be used until suitable alternatives are developed and available.
			<ul style="list-style-type: none"> No viable alternatives to Glyphosate available 	<ul style="list-style-type: none"> Alternative costs not known 		<ul style="list-style-type: none"> Alternatives not yet ready for commercial use
Scrub treatments, Control of self set saplings, Rhododendron stumps and re-growths on managed grassland and heathland areas etc.	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Limited advantages on offer currently. In order to deliver the requirements of good grassland and heathland management, there will be a need to use Glyphosate to provide effective control where it is not possible to graze these areas. Application will either be by; leaf swiping or targeted spraying. 	<ul style="list-style-type: none"> Still using chemicals to provide effective control. Public perception and complaints
			<ul style="list-style-type: none"> Use of alternative pesticide 	<ul style="list-style-type: none"> Alternative costs not known 		<ul style="list-style-type: none"> Alternative Chemical Control - No current alternative currently available
			<ul style="list-style-type: none"> Grazing of the land by livestock 	<ul style="list-style-type: none"> High initially, then reducing to medium 		<ul style="list-style-type: none"> Problematic due to high incidences of dog walking, putting off graziers Public opposition to fencing off of land Takes time to implement, consultations and no guaranteed success Livestock management carries costs and also issues with Vet Meds/antibiotics Water supply required Fence repairs/maintenance required
			<ul style="list-style-type: none"> Use contractors to control vegetation 	<ul style="list-style-type: none"> Medium - High 		<ul style="list-style-type: none"> Use of contractors to regularly cut back regrowth and to remove new saplings, costly Not as effective as pesticides
			<ul style="list-style-type: none"> Use volunteers to control vegetation 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Increase volunteer workforce to control vegetation, resource intensive and may be unachievable due to lack of volunteers Volunteer workforce may be put off by the repetitive and heavy nature of work Not as effective as pesticides
Stump treatments, For the control of stump re-growth etc.	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Limited advantages on offer currently. The application of the pesticide will be very specific; in the form of leaf application, injection or plugs placed directly into the stump. Pesticides will have to be used until suitable alternatives are developed and available 	<ul style="list-style-type: none"> Still using chemicals to provide effective control. Public perception and complaints
			<ul style="list-style-type: none"> Use of alternative pesticide 	<ul style="list-style-type: none"> Alternative costs not known 		<ul style="list-style-type: none"> Alternative Chemical Control - No current alternative currently available
			<ul style="list-style-type: none"> Use contractors to control vegetation 	<ul style="list-style-type: none"> Medium - High 		<ul style="list-style-type: none"> Use of contractors to regularly cut back regrowth and to remove new saplings, costly. Not as effective as pesticides
			<ul style="list-style-type: none"> Use volunteers to control vegetation 	<ul style="list-style-type: none"> Medium 		<ul style="list-style-type: none"> Increase volunteer workforce to control vegetation, resource intensive and may be unachievable Volunteer workforce may be put off by

Item	Proposal	Timescale years	Delivery Option	Cost impact PA	Proposal advantages	Delivery disadvantages
Use of insecticides, For the control of problem insects by Environmental health services	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No change to approach. Pesticides will have to be used until suitable alternatives are developed and available.
			<ul style="list-style-type: none"> No viable alternatives to current pesticides available 	<ul style="list-style-type: none"> Future alternative costs not known 		<ul style="list-style-type: none"> No alternatives ready for commercial use
Use of rodenticides, For the control of rodents by Environmental health & Parks & Countryside services	Consider alternatives to use of pesticides	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No change to approach.
			<ul style="list-style-type: none"> No viable alternatives to current pesticides available 	<ul style="list-style-type: none"> Future alternative costs not known 		<ul style="list-style-type: none"> No alternatives ready for commercial use
Oak Processionary Moth – Treatment of infected trees with pesticide	Consider alternatives to use of pesticides and, when no alternative is available and human impact is high, only use in high use/sensitive areas	<ul style="list-style-type: none"> Review annually 	<ul style="list-style-type: none"> Use current method 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No change to approach. Pesticides use will affect a wide variety of other beneficial organisms not just Lepidoptera
			<ul style="list-style-type: none"> Use of biological control 	<ul style="list-style-type: none"> None 		<ul style="list-style-type: none"> Still sprayed on for applications and affect Lepidoptera
			<ul style="list-style-type: none"> No control 	<ul style="list-style-type: none"> None 		<ul style="list-style-type: none"> Public Health Risks (perceived or otherwise)
Mole infestation control	To not use pesticides to control Moles	0-1	<ul style="list-style-type: none"> Use of gas pellets 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> No use of pesticides 	<ul style="list-style-type: none"> Uses a chemical gas
			<ul style="list-style-type: none"> Use of humane traps 	<ul style="list-style-type: none"> Low 		<ul style="list-style-type: none"> More time consuming

*Pesticides may have to be used for specific problems where there is no viable alternative, i.e. if a Japanese Knotweed infestation becomes a problem, Oak Processionary Moth treatments, or, for very specific uses involved with sports turf maintenance or controlling regrowth.

Appendix 3: Example of Pesticide Free Parks Sign⁷

