Manchester City Council
Report for Information

Report to: Environment and Climate Change Scrutiny Committee – 9 December 2021

Subject: Grounds Maintenance Update: The Use of Pesticides

Report of: Strategic Director (Neighbourhoods)

Summary

To receive an update on the approach to the use of pesticides when delivering Grounds Maintenance.

Recommendations

That Members note and comment on the report.

Wards Affected: All

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city
The city's green spaces contribute to the mitigation of carbon across the City, new ways of managing these spaces can actively contribute to lowering or offsetting carbon emissions and increasing biodiversity. The highways infrastructure is fundamental to supporting active travel.

Manchester Strategy outcomes	**Summary of how this report aligns to the OMS**
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	Whilst green spaces naturally contribute to the low carbon city agenda, new ways of managing these spaces can actively contribute to lowering or offsetting carbon emissions and increasing biodiversity.
A highly skilled city: world class and home grown talent sustaining the city's economic success	The support provided to businesses enables businesses to grow and thrive in Manchester.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Green spaces are at the heart of our communities, offering opportunities for community cohesion through volunteering, and activation in a setting that is open and accessible to all.
A liveable and low carbon city: a destination of choice to live, visit, work	The city's green estate forms an essential part of our neighbourhoods and enhance positive outcomes for residents and businesses.

A connected city: world class infrastructure and connectivity to drive growth	Maintenance of the highway infrastructure is fundamental to supporting active travel.

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Background documents (available for public inspection):

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

Alternate methods of weed control being introduced into the grounds management system and the comparative cost of reducing the dependency of Glyphosate within Manchester Parks, Neighbourhoods and Environment Scrutiny Committee, 31st January 2018

1.0 Introduction

1.1 This report considers the usage of herbicides as part of a citywide grounds' maintenance weed control programme.

1.2 Weeds are defined as plants that grow in places where they are not wanted and have been traditionally controlled in human settings such as gardens and urban areas. Weeds multiply quickly and can crowd out other species, they are perceived to look unsightly and can cause damage to hard landscaping. A number of options are available for weed control including manual removal, covering areas, the use of herbicides, thermal treatment and other non-chemical methods.

1.3 Herbicides are a type of pesticide that specifically targets weeds and other unwanted plants and can be divided into two main categories:

- Selective herbicides which will only kill one specific type of plant; and
- Non-selective herbicides which kills all plants in the area where it is applied.

1.4 The use of pesticides has come under significant scrutiny over recent years and campaigning groups such as Pesticide Action Network (https://www.pan-uk.org/) have highlighted the health risks to humans and some of the ways in which they can impact on soil, plants and animals. Glyphosate is one of the most used pesticides as it has one of the broadest spectrums of control, killing many different weed species effectively and systemically. It is absorbed by leaves and moves inside the plant to growing points, roots, and other propagating structures. This systemic effect increases the ability to kill annual and perennial weeds as well as relatively large and woody plants. Although the European Union Member States voted to relicense glyphosate for 5 years in 2017, many countries remain concerned about its use.

1.5 The Pesticide Action Network (PAN) provide guidance tools to users of Glyphosate to support the reduction of use and eradication where possible. This report will update the Committee on further works to reduce the City's dependency on herbicides and in particular Glyphosate as the primary weed control method.

2.0 Background

2.1 Manchester City Council traditionally used herbicides as a primary source of weed control within its public estate. Historically the street cleansing service and grounds maintenance service having the largest area of responsibility and subsequently were the main volume users of herbicides.

2.2 To reduce dependency on Glyphosate as the primary method for managing weeds, several alternate management trials have been undertaken within the city. The results of these trials were reported to Neighbourhood & Environment Scrutiny Committee on the 31st January 2018. Since 2018 the traditional approach to managing weeds through the use of herbicides has continued to

evolve within the Grounds Maintenance Service. The use of Glyphosate as a standard weed treatment having ceased altogether in parks and gardens, and the use of alternate herbicides significantly reduced to spot and targeted treatments. In other parts of the public estate the approach has been to reduce use of glyphosate.

2.3 Services currently responsible for weed control on different land types include: parks, playgrounds, gardens and incidental green space (Grounds Maintenance); highways and pavements (Biffa); cemeteries (Bereavement Services); and housing estates managed by Registered Providers (various). The general approaches in these areas are summarised below.

3.0 Grounds Maintenance

3.1 The Grounds Maintenance Service undertake the maintenance of parks and gardens, grass verges, Northwards communal spaces and other incidental green spaces.

3.2 The Grounds Team have continually reviewed the industry to identify opportunities to adjust the ways of working. APSE, and AGMA authorities have been consulted. Articles investigated and regular discussions with suppliers undertaken, in particular Rigby Taylor Ltd. a leading Turf Care Company. The ongoing research led to a number of alternate methods of control being explored. Including organic herbicides, vinegar solutions, mechanical clearance, hot water, and hot foam.

3.3 As a consequence of the trials some maintenance approaches have completely changed. An example would be the maintenance of children's playground areas in parks. A trial was undertaken to manage the weeds growing around safety surfaces and equipment using hot water and foam treatments. The trial while more labour intensive and slower to complete was successful in managing the weeds. Manchester now manages the weeds within playgrounds exclusively using hot foam and hot water with manual labour support.

3.4 During the period 2019 to 2021 Grounds Maintenance has used two herbicide treatments for the general but limited control of weeds, these are the organic herbicide Khartoun Gold and Chikira. These herbicides were used minimally at selected locations in fifty of Manchester Parks and Gardens. Whilst neither of these treatments offered the same standard of result as a Glyphosate based product, they were useful in reducing weed growth for a period of time.

3.5 No general Glyphosate based treatments have been used by the Grounds Teams to manage weeds in either Manchester Parks and Gardens, Street Scene, or Northwards communal areas and incidental green space since 2019.

3.6 The treatment of Japanese Knott Weed (JKW) and to a much lesser volume Giant Hogweed by specialist contractors are the only areas subject to treatment by Glyphosate based products when outcrops occur. In 2014 a

Citywide programme of JKW treatment began across the city, initially 700 outcrops were identified across all areas, this rose to 1,200 outcrops at its peak with a surface area of approximately 124,000sqm. The number of outcrops successfully treated has continued to increase, resulting in a reduction in the areas being treated. At present some 500 outcrops are still being treated with an approximate surface area of 9,000sqm.

Impact

3.7 The use of mechanical, manual and other herbicides as a replacement to the traditional treatment with Glyphosate requires a significant labour resource increase to continue to be able to maintain sites to their previous standard. Additional resources have not always been available, and this has meant that resources and work targets have had to be more been selectively prioritised and the frequency of weed reduction altered dependant on the location. Areas where weeds grow that may not significantly impact visual amenity or health and safety, but if left to grow will be particularly beneficial to biodiversity have had the number of cuts reduced or in some cases there has purposely been no intervention undertaken.

3.8 Where treatments have been reduced or stopped in larger green areas this has been without incident. Examples would be stopping the regular treatment of weeds around the base of mature trees within a field, or the treatment to the base of a hedgerow. In both these examples allowing nature to develop supported by additional planting has started to enable a more varied and richer habitat creation to be developed.

3.9 In areas that are highly visible a reduction in herbicide use and in particular Glyphosate use has proved much more challenging. In 2021 the two hundred and three Northwards communal gardens managed by MCC were not treated with herbicide and were subject to manual maintenance programme mechanically. During the early part of the growing season resources was unable to satisfactorily complete the programme of works required, resulting in a number of complaints. Additional resources were employed to complete the works. Due to the complexity of the gardens fence lines and hard standing areas the resource requirement to replace herbicide use was considerable. The impact of the COVID pandemic on resources and deployment have made it difficult to accurately measure the additional resource requirement to reduce weeds without the use of Glyphosates.

A new way of thinking

3.10 The pandemic has had a profound impact on the lives of the people in the city and has brought many of them closer to nature with an increased awareness of their local green spaces. There are many more volunteers supporting these spaces and more questions are being asked about the City’s approach to weed control. As part of the city’s wider Climate Change Programme an examination is ongoing of the existing service standards and their suitability for the future.

3.11 The traditional view of an urban green space is a maintained weed free grass, encompassing manicured lawns and flower beds. Whilst there should always be a place for public spaces which meet this standard, other drivers are emerging which include increasing biodiversity; protection against plant morbidity; protecting pollinators, especially early pollinators; improving carbon sequestration; climate change and water run off control. Whilst at the same time continuing to deliver the recreational and commercial needs of the city.

3.12 In 2020 and 2021 working with residents the City embarked on a number of trial service changes focused on contribute to the health and the rewilding of the City. Works include an extensive tree planting programme which will see 2,200 large trees planted; alongside an extensive spring bulb planting programme of circa 200,000 bulbs undertaken in partnership with groups throughout the city. An increased differential mowing programme aimed at supporting wildflower and natural habitat development; and mowing frequencies that support the needs of pollinators especially early pollinators. Over 36,000sqm of wildflowers both native and none-native annual and perennial have been grown this year, which will be increased year on year, and the continued planting of hedges and wildlife banks.

3.13 It is planned where practical to continue to explore how weeds and other planting, in the right location, can best support the ongoing development of a rewilding and biodiversity improvement programme, whilst at the same time reducing the dependency in green space on the use of herbicides.

4.0 Cemeteries

4.1 Bereavement Services manage five cemeteries and one crematorium. These are Southern, Gorton, Philips Park, Manchester General and Blackley Cemeteries along with Blackley Crematorium.

4.2 In the region of 3,000 funerals take place each year within the 140-hectare cemetery infrastructure, which also attracts a high volume of visitors each day. The four operational cemeteries have held Green Flag Award status continually for in excess of 10 years.

4.3 Whilst progress has been made over recent years in reducing herbicide use the impact has to be balanced with the expectations of bereaved families and cemetery visitors in relation to the quality of the infrastructure. Within newer grave plots and the memorial gardens, expectations are that we will maintain these to very high standards. Failure to do so in the past has led to complaints.

4.4 Weed control products are used in cemeteries around the memorials on graves. Across the service this is currently a combination of mainly Glyphosate and some limited Icade and Chikara.

4.5 In 2021 a trial was undertaken to test the impact of treating with herbicides at different times of the year. Gorton, Blackley and Southern Cemeteries were treated early in April. Treating early meant that there was very little weed

growth to start with and these cemeteries held for the first 2-3 months, however by mid-summer there was regrowth in most areas. A second treatment was undertaken where needed using Icade, and this was supported by an extensive strimming programme.

4.6 Philips Park and Manchester General Cemeteries were treated with herbicides later in the season (June-Aug) using combinations of Glyphosate, Chikara & Icade depending on weed types in each area. Treating later meant that the weeds had started to grow in the spring so were visible around the graves, however once treated they died back and there was very little further regrowth for the rest of the season. The early spring growth was more acceptable than the later summer regrowth experienced at Southern Cemetery.

4.7 This trial has demonstrated that treating later in the season seems most effective. Although this means there is some growth present in the spring before treatment is carried out, a single treatment in the summer will reduce the weed growth for most of the season. Adopting this approach at all the City's cemeteries will reduce the need for a second treatment and subsequently the quantity of herbicides deployed and will reduce the pressure on labour resources.

4.8 The use of herbicides has been further reduced through differing treatments of areas of the cemeteries, older areas that don't receive many visitors have been subject to alternative maintenance measures, such as converting them to wildflower meadows and 'natural' wild areas. Twenty percent (20%) of the burial plots at Southern Cemetery are managed in this way as the cemetery age, size and layout lends itself to this approach.

4.9 Strimming, due to labour intensity, fuel usage and the volume of personal tributes placed around headstones is also not an appropriate solution in large scale areas. Other alternatives reviewed such as vinegar & foam were not feasible due to the being either ineffective on porous ground or inappropriate within a cemetery environment. We have also been able to use bark mulch on some plots to suppress weed growth, although this was not particularly effective.

4.10 The service will continue to identify other areas as part of an ongoing program, that can be managed as wild and natural plots to reduce the need for the use of herbicides.

5.0 Highways and Pavements

5.1 The management of weed control on the public estate as part of the street cleansing contract presents a very different challenge from that of the Grounds Maintenance Service and Bereavement Services. Weed control on the highway and public estate by its nature is focussed on managing embedded weed banks along kerb and flagstone edges, within bit-mac, grids and the edges of buildings and obstructions.

5.2 Historically three cycles of weed treatment were planned to be undertaken on highways and pavements. The current Service Standard has reduced this to two cycles of weed treatment across the City on an annual basis. This includes all highways for which the City has maintenance responsibilities. The service is flexible to respond to requests for areas to opt out of the programme where alternative weed control measures can be supported by volunteers.

5.3 Since 2019, an increasing number of requests have been received from resident groups and members for certain streets and passageways to be removed from the weed control programme. In these areas' residents have pledged to take responsibility for removing weed growth via manual removal. The Neighbourhood Teams support the co-ordination of these requests and assist residents' groups, as appropriate, to apply for funding for equipment. The 'opt out' list is reviewed on an annual basis to ensure the methodology is still appropriate.

5.4 The current approach to weed control uses contact weed suppressant, Biffa use Barclay Amenity (containing glyphosate) on hard surface highways/street scene. Previously 'residual' herbicides were used to prohibit weed growth – these chemicals can no longer be used. This means the herbicide used needs some weed growth to be effective and this is limited to the plant only. Using contact spray means re-germination on sprayed areas is possible and will not be effective on seeded weeds which have not yet started to show green growth. Weed spraying is only effective at temperatures above 4 degrees centigrade and in dry conditions. Weed spraying cannot take place when it is raining as the weed killer will simply be washed away; windy conditions also affect application. Quad bikes apply the treatment supported by back up teams with knapsacks. Manual removal methods are used during inclement weather when spraying cannot occur.

5.5 Alternative methods have previously been trialled including hot foam and vinegar, however results were not effective. Manual treatment on the highways is extremely labour intensive, often extremely difficult to action and will only reduce the growth of the weed whilst leaving the weed intact. The current approach provides the most effective approach to weed control at scale, with the resources available. Biffa and the Waste Team regularly review developments within the industry and sector practices to identify opportunities to adjust ways of working.

5.6 The highly visible nature of the highway would deteriorate quickly without the use of herbicides and create litter traps. The service area continues to review how the use of herbicides can be reduced further in-line with the guidelines outlined for Local Authorities by PAN.

6.0 Registered Providers

6.1 PAN recommend that Local Authorities should engage with landowners and those responsible for maintenance of land to understand the current approach to weed control. This process has begun, registered housing providers are an important stakeholder in this regard and are responsible for managing the

city's social housing estates which includes grass verges. Mapping of their approaches to weed control has revealed that the majority currently control weeds on grass verges and use glyphosate. Most are already looking at alternative solutions including manual weeding, strimming and thermal treatment.

7.0 Conclusions and Next Steps

7.1 In-line with the guidance issued by PAN, the operational services function with the Neighbourhood Directorate, will continue to engage with internal and external stakeholders who have responsibility for managing land to understand and influence the approach to weed control.

7.2 It is clear there is no single favoured approach to weed control, there are different factors which need to be considered on different land types. The approach being taken is to strike a balance between environmental, economic and societal factors. An internal working group has been established to develop a set of common principles, as recommended by PAN, to support the reduction and elimination where possible of the use of glyphosate. The working group will be expanded to include registered providers, with an aim to try and align practices.

7.3 Each of the Councils service areas responsible for weed control outline their intended next steps within this report to reduce or further eliminate the use of glyphosate and other herbicides.

7.4 Recommendations are outlined at the beginning of this report.