

REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE

SERVICES COMMITTEE ON 7 FEBRUARY 2023

SUBJECT: USE OF GLYPHOSATE TO CONTROL WEEDS IN OPEN

SPACES

BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND

FINANCE

1. REASON FOR REPORT

1.1 To inform the Committee of the legally approved use of Glyphosate and advise on the Council's use of Glyphosate to control weeds in open spaces;

1.2 This report is submitted to Committee in terms of Section III (F) (11) of the Council's Scheme of Administration relating to exercising functions in relation to parks, open spaces and woodland management and maintenance.

2. RECOMMENDATION

- 2.1 It is recommended that the Committee:-
 - (i) note that although there are public concerns, Glyphosate is legally approved for use in Great Britain until December 2025 and that it continues to be the most cost effective and efficient method of managing weeds;
 - (ii) approves the proposals to reduce the use of Glyphosate through a managed approach in certain settings as outlined in paragraph 6.3, and note that whilst these can be introduced without additional cost a greater presence of weeds and longer vegetation would need to be accepted and tolerated within the environment;
 - (iii) note that Officers will continue to monitor the cost and effectiveness of alternative approaches of weed control.

3. BACKGROUND

3.1 Glyphosate is the active substance in many herbicides (weed killers) and is widely used to control most weed species including perennials and grasses. First used in Great Britain (GB) in 1979, Glyphosate is a translocated, systemic herbicide which on contact moves through the plant to kill the shoots

- and roots. It is used to kill actively growing plants but does not stop new weeds from growing.
- 3.2 As well as its widespread use in agricultural, forestry and amenity environments it is commonly used by local authorities to control weeds as it provides a cost effective and efficient means of control.
- 3.3 Glyphosate is currently approved for use in the EU until December 2023 and in GB until December 2025. Further information can be found here.
- 3.4 Glyphosate's EU approval was due to expire in December 2022 however on 2 December 2022, the European Commission extended its approval for one year until 15 December 2023. This <u>decision</u> was taken to allow the EFSA sufficient time to conclude its peer review which is due to be completed in July 2023.
- 3.5 Information sourced from the Health & Safety Executive (HSE) advises that the UK has a rigorous approval process for pesticides. The main aim of this process is to protect the health of people, creatures and plants, and to safeguard the environment. This process has been applied to glyphosate which has been approved as safe and efficacious. The risks associated with the use of pesticides in amenity situations such as parks and open spaces are specifically considered as part of the authorisation process. Legally enforceable conditions of use are imposed on the way products can be applied to ensure the public are not exposed to levels of pesticides that would harm health or have unacceptable effects on the environment. Further guidance provided by the Health & Safety Executive can be found here.
- 3.6 There are however, increasing concerns about the potential harmful effects of glyphosate on human health, wildlife and the environment. In response to such concerns a growing number of local authorities are reviewing or have stopped or reduced its use of Glyphosate and are adopting alternative methods of weed control.
- 3.7 The HSE also notes that following the publication of a report from the International Agency for Research on Cancer (IARC) in 2015 which found that glyphosate was 'a probable human carcinogen', there has been a lot of debate across the world as whether herbicides which contain glyphosate are safe to use.
- 3.8 The Association of Public Service Excellence (APSE) recently provided a briefing to its members on glyphosate and advised that:
 - there is no right or wrong answer to the question is it safe to use glyphosate products.
 - national agencies across the world have declared glyphosate to be safe to use; however, some countries have now decided to ban glyphosate or severely curtail its use; the UK continues to say glyphosate based products are safe to use.
 - the use of glyphosate-based products is still legal in the UK so local authorities cannot be prosecuted for using these products.

- there are few alternatives to glyphosate and those which are seen as alternatives are often still in a pilot phase and much more expensive to use.
- some local authorities have taken to ban glyphosate and glyphosatebased herbicide use totally, or at least in specific areas such as schools, playgrounds, parks and pavements.
- the Health and Safety Executive enforce regulations relating to the advertisement, sale, storage, supply and use of pesticides.
- there may be a need for the public to accept higher levels of weeds if the use of glyphosate is banned or reduced.
- 3.9 New alternative approaches are being introduced and trialled by a number of local authorities but as stated in the APSE report, these are more expensive and sometimes not as effective. In addition, APSE have also advised that 'local authorities should take the opportunity whilst the use of glyphosate remains lawful to identify an appropriate cost effective solution and potential alternative products'.
- 3.10 The Council's Open Space Operations team recognise that herbicides containing glyphosate continue to provide the most cost effective and efficient method of weed control across the Council's estate. Measures have however been taken to reduce the use of glyphosate where possible. This includes reducing treatments around amenity grass plots where grass cutting machinery can easily access to control vegetation, and mulching of some shrub beds and other amenity plantings to supress weeds. In addition, the team has introduced areas of less frequent grass cutting to allow wildflowers to thrive to support biodiversity and to reduce the need for herbicides in these areas.
- 3.11 The Scottish Government carried out a detailed <u>survey</u> of local authority pesticide usage in Scotland in 2019. The survey found that all responding local authorities adopt a combination of herbicide and non-chemical weed control strategies. The most commonly used non chemical methods were mechanical control: cutting, strimming, mowing, flailing and supressing weed growth with mulches. Where herbicides were applied, all respondents stated that they took steps to reduce their use, primarily by evaluating whether there were alternative non-chemical control measures and by minimising and targeting herbicide use. The main reasons stated for choosing to use herbicides over alternative controls were for control of invasive weeds, maintenance of acceptable visual appearance and protection of infrastructure. Where herbicides were used, they were reported to be more effective over a longer period, with a lower associated cost, than alternatives. Some local authorities also reported that there was limited availability of alternative control methods.
- 3.12 Some Scottish local authorities have taken measures to reduce or limit their use of glyphosate. For example, Highland Council operates a partial ban on the use of products containing glyphosate with the ban preventing use at sports and recreation facilities, play areas and schools. Aberdeen City Council continue to use glyphosate having not yet found a cost effective alternative but continue to review techniques to try to reduce its use. They have also trialled flame treatments and foam/hot water controls in the city

centre but have found these very labour intensive and not cost effective to use elsewhere. Similarly, Aberdeenshire Council continue to use glyphosate and have trialled alternatives but with limited success so far, therefore they continue to look for alternative options. Midlothian Council introduced a complete ban in 2019 but then approved officer recommendations in 2021 to permit its continued but limited use whilst committing to reduce average annual use. Glyphosate based herbicides offers the most effective control for non-native invasive species like Giant Hogweed and therefore other organisations, e.g. the Scottish Invasive Species Initiative led by NatureScot work to control non-native species along riversides in Northern Scotland, continue to treat these plants with herbicide as it provides the most effective control.

4. Current Use of Glyphosate

- 4.1 Weed control is an important task within the Council's grounds maintenance programme for the following reasons:
 - weed growth can cause damage to infrastructure, e.g. paths, kerbs, walls, fences, headstones, roads.
 - ineffective weed control can be perceived by some as a poorly maintained or a neglected environment due to the appearance of the environment where weeds are present and vegetation is not controlled.
 - uncontrolled weeds can generate complaints from residents (although there is a growing interest in accepting weeds and uncontrolled vegetation within our environment, in particular to support and promote biodiversity. This includes species such as dandelions, daisies, thistles, groundsel, willowherb).
 - to control non-native invasive plant species like Giant Hogweed and Japanese Knotweed which can present issues with public safety and structural damage respectively if not treated. Glyphosate is also an important tool to prevent the spread of invasive species such as Rhododendron ponticum and Himalayan balsam.
- 4.2 The Operations team uses Glyphosate as part of its grounds maintenance programme to control weeds in open spaces including:
 - within shrub and rose beds
 - around cemetery headstones
 - around obstacles inaccessible to grass cutting equipment across green spaces (e.g. benches, road signs, lamp posts, fence lines, drain covers, tree bases etc.)
 - in play areas and around bark safety surfacing pits
 - in cemetery car parks
 - on path surfaces in parks, cemeteries and open spaces to reduce trip hazards, protect infrastructure and manage the appearance of these spaces
 - to control non-native invasive plants (Giant Hogweed and Japanese Knotweed)
 - within schools grounds shrub beds, play areas, obstacles, paths and fence lines (applied during school holidays)
 - around war memorials

- housing property gardens
- harbour hard surfaces/paths
- Industrial Estates
- highways along kerb edges and back lines of pavements and housing lanes to remove potential trip hazards and protect pavement infrastructure
- 4.3 Herbicides are applied using pressurised sprayers (knapsacks) and Controlled Droplet Applicators (CDAs). Operatives are trained in the safe use and application of herbicides and comply with the Code for the Safe Use of Pesticides and Control of Pesticide Regulations. Product labels guide operatives on approved use and application rates alongside product Safety Data Sheets and our own operational risk assessments and COSHH (Control of Substances Hazardous to Health) assessments.

5. Weed Control Costs

- 5.1 The cost of purchasing Glyphosate based herbicides is approximately £20,500 per annum.
- 5.2 Limited resources has not allowed for the Open Space grounds maintenance asset management database to be updated in recent years and therefore our mapping and asset data is no longer accurate. It is however estimated that the cost of applying herbicides as part of programmed work in open spaces is £58k per annum. A range of adhoc weed control works is also carried out each year for other services including Housing, Education, Property and Roads with labour costs to deliver this estimated at £26k per annum.
- 5.3 The annual weed control programme using herbicides is therefore estimated to cost £104,500.
- 5.4 Glyphosate has continued to be used by the Council as it provides a cost effective and efficient means of weed control when compared to alternatives. Whilst not eliminating weeds in the environment entirely our current programme of treatments provides reasonably effective control.
- 5.5 This effective and efficient control is important particularly given our limited operational resources for grounds maintenance operations. The service currently operates with limited staff numbers and is already stretched to deliver the annual programme of grounds maintenance services across Moray, and where the work of grounds maintenance staff is also prioritised for burials over grounds maintenance works to meet service demands. The team's focus has therefore been on carrying out operational tasks in the most efficient and cost effective manner given there is no available staff capacity to increase manual methods of weed control or for trialling alternatives which are costly and more labour intensive.

6. Alternatives to Glyphosate

6.1 There are a number of alternatives to the use of herbicides containing glyphosate including: thermal controls (flame, hot water and/or foam), acetic

acid (active ingredient in vinegar), manual controls (hand, tool or machinery removal), fatty acids (pelargonic acid) and electricity. Appendix 1 provides a summary of these alternatives - each have their pros and cons with none considered suitable as a direct cost effective or efficacious replacement for glyphosate based herbicides.

- 6.2 Further officer time and resources would be required to more fully research these alternatives beyond the summary contained within this report.
- 6.3 APSE advice is that the use of alternatives to Glyphosate will add to revenue costs for weed control (including labour, materials, vehicles, and fuel), with many requiring capital investment. Officers continue to monitor experiences of other local authorities through the APSE member network and trade journals and have noted to date that in general others have found alternatives to be less effective, more costly and labour intensive, and that alternative methods of control could increase labour and costs manifold.
- 6.4 Given the increased costs associated with alternative controls, including the additional staff needed to resource more frequent treatments than currently required through the use of glyphosate, the following approach could be introduced without cost to reduce the use of Glyphosate, providing a greater presence of weeds and longer vegetation is accepted and tolerated within the environment.
 - <u>Tree bases</u>: cease application of herbicides to control weeds at the base
 of trees in streets and green spaces and tolerate / accept longer grass in
 these locations (excluding cemeteries given the sensitive nature of
 cemeteries and gardens of remembrance and the perceived link between
 visual appearance and dignity of the deceased).
 - Play areas: cease application of herbicides to control weeds in 58 play areas with fixed play equipment and where there is grass matting safety surfacing installed and accept the presence of weeds and longer grass within and around these assets; and similarly cease application of herbicides in 16 play areas where rubber crumb surfacing is installed and where the opportunity for weeds is low (this approach excludes 44 play areas across our estate where safety surfacing is formed from bark pits and where targeted herbicide control will continue to be required to prevent weed growth from establishing and for the safety surfacing to perform its function effectively).
 - Obstacles: cease application of herbicides to control weeds at the base of
 obstacles to grass cutting in open spaces (e.g. benches, signs, street
 name signs, lamp posts, litter/dog bins, drain covers etc.) and
 tolerate/accept weeds and longer grass/vegetation at these locations
 (excluding fence lines or base of walls where treatment is recommended
 to continue to protect infrastructure, and excluding cemeteries and war
 memorials were control is also recommended to continue).
 - <u>Grass Edges</u>: reduce use of herbicide around grass plots and limit use only to where grass cutting equipment cannot access.

and continue to reduce the use of Glyphosate by:

- <u>Shrub Beds</u>: continuing to mulch shrub beds with bark chippings from tree related works to supress weeds where and when resources allow (this practice is currently used to limit our use of Glyphosate).
- Wildflower areas / areas of relaxed grass cutting: avoiding applications of herbicide in the vicinity of these areas to allow native flowers, grasses and 'weeds' to thrive to support pollinators, and tolerate/accept weeds and longer grass/vegetation in the surrounding areas.
- <u>Limiting use</u>: through continued targeted treatment
- <u>Strimming</u>: to continue to carry out strimming operations in open spaces
 to manage weeds and longer vegetation, including around grass cutting
 obstacles, noting that resources for strimming are limited as previous
 budget savings have reduced staffing resources for strimming works and
 that the frequency of this task is now on average bi-monthly.

7. **SUMMARY OF IMPLICATIONS**

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Enhancing biodiversity delivers a wide range of social and environmental benefits that will support corporate and community planning objectives.

Environment – looking after the world we live in to protect it for the future. We want to encourage everyone to take small steps to preserve and protect our environment as we go about our daily activities.

(b) Policy and Legal

The Council's Open Space Strategy aims to ensure public open spaces in Moray are of sufficient quality and distribution to meet the needs of local communities and local biodiversity.

There are no direct legal implications. Glyphosate is currently legally approved for use in Great Britain.

(c) Financial implications

The use of Glyphosate to control weeds in open spaces is currently considered to be the most cost effective and efficient means of control. Alternatives methods are currently more expensive and would require additional revenue and capital expenditure. However, the approach contained within this report and outlined at paragraph 6.3 does not require any additional revenue or capital investments.

(d) Risk Implications

Given increasing public concerns over the use of Glyphosate to control weeds in open spaces there is a potential reputational risk to not considering an approach to reducing its use.

There is a risk that a reduction in environmental standards results in an increase in customer dissatisfaction and complaints about a reduced standard of grounds maintenance, including at locations where communities are actively involved in looking after the appearance of their local environment.

There is a risk that the Council cannot identify a viable or affordable alternative to Glyphosate in the next few years but Officers will continue to monitor the cost and effectiveness of alternative approaches.

There is a risk of damage to infrastructure and public safety through tripping hazards or irritation without an effective weed control programme in place.

(e) Staffing Implications

The recommendations contained within this report can be contained within existing staffing resources.

There is no available staff capacity or budgets to adopt alternative methods of control which are more costly and labour intensive to provide which require an increase in the number of treatments or controls.

(f) Property

The approach is likely to affect the visual appearance of our open spaces due to a greater presence of weeds and longer vegetation in the environment however controls around fixed infrastructure and buildings would continue at current service standards to avoid help reduce damage to infrastructure.

(g) Equalities/Socio Economic Impact

The proposals could support increasing biodiversity and contribute to community health and wellbeing by reducing inequalities of access to nature.

(h) Climate Change and Biodiversity Impacts

The proposals will support mitigation of, and adaptation to, the climate and biodiversity crisis. The Council has recognised the biodiversity crisis through the Climate Change Strategy and its support of the Edinburgh Declaration on Biodiversity. The negative impact of glyphosate is particularly relevant to pollinators, especially bees, which are under a number of growing pressures and the resulting pollinator decline will have risks to human food systems. Therefore, attempts to reduce the use of glyphosate should be supported.

(i) Consultations

Depute Chief Executive (Economy, Environment and Finance), Head of Economic Growth and Development, Legal Services Manager, Head of Environmental and Commercial Services, Head of Financial Services, Head of Housing and Property, Open Space Operations Officer, Roads Maintenance Manager, Sport & Culture Service Manager, Principal Climate Change Strategy Officer, Strategic Planning & Development Manager, L Rowan (Committee Services Officer) and Equal

Opportunities Officer have been consulted and comments received have been incorporated into the report.

8. CONCLUSION

- 8.1 Glyphosate is a legally approved effective herbicide used to manage and control a range of weeds in open spaces. Unlike many other herbicides. Glyphosate's systemic action kills the roots of weeds making it one of the most widely used, cost effective tools for managing weeds in the environment
- 8.2 Many local authorities in Scotland continue to use Glyphosate for weed control with some having reduced use and trialled alternative control methods.
- 8.3 Alternative methods of control are not currently as effective as Glyphosate and would require an increase in both revenue and capital expenditure to meet the increased costs of materials, labour, fleet and fuel to maintain current levels of weed control, each with their own positive and negative features.
- 8.4 An approach to reduce the Council's use of glyphosate is set out in paragraph 6.3 and could be introduced without the need for additional capital or revenue resources but given the reduction in grounds maintenance standards this would require a greater presence of weeds / longer vegetation to be accepted in our environment.
- 8.5 Given the lack of a cost effective or efficacious alternative there is a need to continue to monitor trials of alternative approaches being undertaken by others.

Author of Report: James Hunter, Open Spaces Manager

Background Papers: Minute of the Meeting of the Economic Development and

Infrastructure Services Committee, Tuesday 21st June

2022 (Item 6 - Written Questions and Response).

Ref: SPMAN-524642768-838