

Report

Report to:	Climate Change and Sustainability Committee
Date of Meeting:	10 February 2021
Report by:	Executive Director (Community and Enterprise Resources)

Subject:	Pesticide Free Council: Update
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1. Purpose of Report

1.1. The purpose of the report is to:

- ◆ update Members on work undertaken, to date, in respect of the motion approved by the Council on 16 December 2020 in relation to a 'Pesticide free Council'.

2. Recommendations

2.1. The Committee is asked to approve the following recommendation(s):

- (1) that the report be noted; and
- (2) that the next steps, as outlined in section 7 of the report, be approved.

3. Background

3.1. On 16 December 2020, the Council considered a motion regarding a proposal for South Lanarkshire to become a Pesticide free Council.

3.2. Following a full discussion, the Council agreed:-

- ◆ to note the increasing public concern about the use of pesticides and herbicides, particularly those containing glyphosate, in weed control and the alleged potential damage to health and to biodiversity;
- ◆ to note the potential expiry in December 2022 of the licence to use glyphosate;
- ◆ that a report be brought to the Climate Change and Sustainability Committee to:-
 - ◆ identify and audit the extent of the Council's spending on pesticides and herbicides (Task 1)
 - ◆ explain the current pesticide and herbicide policy stating, for public information, the uses made of pesticides and herbicides by the Council and where they were currently used (Task 2)
 - ◆ consider both the costs and efficacy of alternative weed control methods and to consider the use of pesticide and herbicide along with the feasibility of free zones in partnership with local groups, where appropriate (Task 3)
 - ◆ consider the implications of being a pesticide-free Council and whether to set a timetable for the phased elimination of pesticide and herbicide use by Council resources and their contractors (Task 4)

4. Weed Control - Background

4.1. The Council's Grounds Services is currently responsible for weed control on a range of hard and soft landscaped areas on behalf of all Council Resources. The preferred option is the application of a glyphosate-based weed herbicide.

- 4.2. There are, and continue to be, a range of views on the status of glyphosate and the potential risk it poses to humans. In March 2015 the World Health Organisation's (WHO) International Agency for Research on Cancer (IARC) classified glyphosate as 'probably' carcinogenic to humans. To provide context, this was presented as being a similar risk as indoor emissions from burning wood or the consumption of red meat.
- 4.3. In March 2017 the Risk Assessment Committee of the European Chemical Agency concluded by consensus:
- there is no evidence to link glyphosate to cancer in humans based on the available information
 - Glyphosate should not be classified as a substance that causes genetic damage or disrupts reproduction
- 4.4. The same conclusion as that of the Risk Assessment Committee was reached by the following organisations:
- European Food Safety Agency supported by experts from 27 EU Member States
 - National Authorities outside the EU (i.e. Canada, Japan, Australia and New Zealand)
- 4.5. The IARC remains the only agency to express concerns regarding a link to cancer in humans.
- 4.6. Following discussions and an initial extension of license, the European Union re-approved the license to manufacture and to use Glyphosate as a weed control herbicide. This approval commenced on 16 December 2017 for a period of 5 years and has been agreed at a UK level.
- 4.7. Glyphosate is the active ingredient in the world's most commonly used herbicide to control weeds. It is used by the majority of Council's in the UK in order to control weeds on hard landscaped features such as roads, pavements, footpaths and a variety of soft landscape areas.
- 4.8. Glyphosate works by absorption through plant leaves and being transferred to the plant's roots. It is therefore effective at killing the weed, preventing its regrowth and is effective against both annual and perennial weeds, including Japanese Knotweed over a planned and prolonged period of time. There is no residual effect and it therefore does not affect the soil or build up any resistance to future growth.
- 4.9. Glyphosate is generally immobile in soil and does not migrate through soil to ground water or run off in surface water to water courses. Glyphosate is considered low in toxicity to flora and fauna.
- 4.10. There continues to be interest at a Scottish level with regard to the use of herbicides with Grounds Services having recently responded to a Scottish Government led weed control survey on Integrated and Herbicide Control measures. This was received and responded to in advance of the 31 January 2021 deadline.
- 4.11. Included within the survey was an invitation to take advantage of an initial one-year free membership of the Amenity Forum. This is a UK voluntary forum promoting best practise within the amenity sector in all aspects of weed control with the overarching aim of ensuring an approach that provide safe and healthy amenity open space. It has been recognised by the Scottish Government as a way for industry in general to

demonstrate best practise and drive-up standards in this sector and Ground Services has joined.

5. Use of Glyphosate (Tasks 1 & 2)

- 5.1. Glyphosate is applied selectively throughout the Council area by using pressurised spraying equipment and in accordance with all manufacturers recommended controls. Areas of treatment typically receive 2 applications of glyphosate during the growing season each year.
- 5.2. Glyphosate is the active ingredient in a number of products used by the Council for the weed control. Grounds Services currently supply all weed control services in house on all relevant council land. This generally includes:

Areas	Size	Frequency of Operation
Road channel, pavements, kerb lines	5,240 km	2
Shrub Beds – spot treatment	1,400,000 m2	2
Care of Gardens – hard standing	2,600 properties	2
Grass Edging	1,963,000 linear metres	2
Non-Native Invasive Species	6,500 m2	2
Hard Standing areas (paths etc)	2,500,000 m2	2
Base of Obstacles	21,000	2

- 5.3. Glyphosate based products are the only herbicide treatment currently used by the Council to control weeds. During 2019, the Council spent circa £26,000

Product	Usage	Cost
Glyde	260 litres	£1,200
Round Up Pro Biactive	1,360 litres	£9,200
Trustee Amenity	2,217 litres	£10,000
Nomix	625 litres	£5,600

- 5.4. The total estimated cost to manage weeds across the Council is circa £400,000. These costs cover staffing, transport, and consumables.
- 5.5. Identified in the Council's Biodiversity Duty Implementation Plan is a commitment to reduce the use of glyphosate and in recent years this has seen:
- the reduction of applications of weedkiller on all land from 3 applications to 2
 - the reduction in application around the base of trees and in shrub beds (mainly perimeter edges)
 - reduction in applying to grass edges particularly where there is no obvious obstacle to the grass cutting operation such as raised kerbs or fence lines
 - the review of when applied e.g. application within school estates programmed when schools are closed for holiday
- 5.6. The service continues to look at options to reduce or eliminate the use of pesticides and herbicides while still ensuring that weeds are managed effectively. It should be noted that, in addition to the appearance of the maintained areas being affected if weed killing is not managed correctly, there is the likelihood of damage to hardstanding areas and for an increase in claims from slips and trips.

- 5.7. Standard training for handheld application is to PA1 and PA 6 level and where tractor mounted or mobile sprayers are required the training is to PA2a level. The training also covers safe use, storage and handling with appropriate PPE based on the product data sheet provided and worn.

6. Alternative Methods (Task 3)

- 6.1. Grounds Services has in the past trialled alternative methods and continues to investigate other options to Glyphosate and, as a key participant of the APSE Grounds and Streets Advisory Group, is provided information on trials carried out by neighbouring authorities. The outcome of the Council's previous trials and the findings from other trials is provided below.
- 6.2. The following alternatives have been trialled by South Lanarkshire

Natural Pelargonic Acids

This is a relatively new product being offered as an alternative to Glyphosate but also a product which requires to be enhanced by adding a residual weed killer to increase its effectiveness. The product was trialled in East Kilbride, as per manufacturer's recommendation and was mixed with a residual herbicide. to provide a more effective level of treatment and control of weeds. Use of this product and the need for a secondary product results in more chemical used than with a single glyphosate-based product.

The trial was not effective as the kill rate was very sporadic with a number of repeat treatments (4 or 5) required to give the same level of treatment as current Glyphosate methods (2 applications).

It should be noted the product is substantially more expensive (up to 20 times more expensive) additional costs in relation to labour due to an increase in applications and increased material costs would see a substantial increase in overall costs.

Based on the findings it is estimated that the current costs of circa £400,000 would increase to circa £2m to provide the same level of weed control.

Foam Based Product

This is a low-pressure process combining heat with biodegradable foam. This product was trialled and despite a relatively quick kill, within 3 to 4 weeks, new growth was evident which would result in at least 5 applications being required to achieve a similar result as that at present. The equipment was not as mobile as the current method and access to more remote areas would be problematic.

Increased CO2 emissions would be a side effect given the constant heat required to deliver the foam onto the weed growth.

There would be a substantial increase in labour costs as a result of the number of treatments required.

Based on the findings it is estimated that the current costs of circa £400,000 would increase to circa £2m to provide the same level of weed control and would require a one-off investment in new equipment.

- 6.3. The following alternatives have been trialled by Neighbouring Authorities:

- Renfrewshire Council: conducted a trial using an alternative contact herbicide. The result of a trial which involved comparing the impact of this product to a

glyphosate-based weed killer showed both were effective against annual weeds and surface growth. However, regrowth was more severe on the area treated with the alternative, resulting in the potential for 5 applications to be carried out against the 2 application of glyphosate, increasing product and labour costs.

The product is approximately 6 times more expensive than glyphosate-based products and, including the additional treatments identified, potential purchase costs increasing from the current £10,000 for glyphosate products to circa £100,000 per annum for the alternative product. No information was provided with regard to potential increases in staffing costs.

- West Lothian Council have trialled thermal treatment and although there was an immediate effect this was found to be short lived with regrowth apparent more quickly resulting in the need for 4 – 5 treatments.

The equipment required to heat the water in this process identified the need for 13 treatment machines and a further 13 vehicles to transport. This raised concern on the level of investment in terms of machinery required and also the increase in CO2 emissions.

- New technology using high pressure steam was investigated by Renfrewshire Council. This breaks down the cellular structure of the plant and results in the death of most annual weeds and some perennial weeds.

It was found to take up to 10 times longer than traditional methods and was not found to be suitable at all locations particularly around public areas and where damage was evident on some treated surfaces.

Renfrewshire Council were of the view that this alternative could have limited use but the increase labour costs were considered prohibitive in the long term.

There is also the additional factor of increased CO2 emissions.

- Flame Treatment was trialled by Renfrewshire and West Lothian Councils and similar to High Pressure Steam it worked by burning off the cellular structure of the plant.

Due to the method being found to be ineffective, West Lothian Council halted the trial before full completion.

Renfrewshire Council found the process to be laboured and the use of propane gas burners in public areas was not considered safe. In addition, the method was not appropriate for soft landscaped areas given the reduction of the level of control afforded to glyphosate application when using a low nozzle applicator.

- West Lothian Council trialled the use of Acetic acid however it did not appear to kill any vegetation only discolouring the weed for a short period.

- 6.4. Glyphosate continues to be an approved product until December 2022 following the EU renewing the license to manufacture and use in December 2017 and there is no current information to suggest this will change.
- 6.5. The various alternative trials demonstrate that the use of glyphosate continues to be the most effective and efficient method of weed control posing the least risk to soil, ground water and water courses and also being the most cost effective.

7. Next Steps (Task 4)

- 7.1. Based on the current lack of viable and affordable alternatives at this time and, given the potential costs both in terms of product cost and increased labour, it is recommended that the Council continues to use glyphosate-based products to deal with weed growth.
- 7.2. Nonetheless, and in terms of the Council motion, the following actions will be taken, and an updated report provided to the Committee for consideration:
 - the Service will continue to pilot and assess other alternative weed control methods in conjunction with our partners in the APSE Grounds and Streets Advisory Group whilst looking at any options to further reduce the level of use
 - the Service will review the findings of the Scottish Government's weed control survey and consider any recommendations
 - the Service will also actively participate in the Amenity Forum as well as considering any examples of best practise in relation to future weed control operations.

8. Employee Implications

- 8.1. There are no employee implications based on this report and all staff engaged in applying any form of weedkiller are fully accredited by the National Proficiency Test Council.

9. Financial Implications

- 9.1. Investigations to date indicate that any reduction in the use of glyphosate-based chemicals will lead to a significant increase in costs should the existing standard continue to be required.
- 9.2. It is estimated that current costs for the control of weeds using Glyphosate is circa £400,000 which could increase to circa £2m using the alternative products, however, further pilots will be undertaken during 2021 to identify financial implications of any change.

10. Climate Change, Sustainability and Environmental implications

- 10.1. Action 12 in the Council's Biodiversity Duty Implementation Plan commits to the review of herbicide application and subsequent reduction in use.
- 10.2. A number of the alternative options identified either use heat in controlling the weed will increase the level of carbon emissions beyond those currently in place. This will need to be factored into any future decision on how the service proceeds.

11 Other Implications

- 11.1. There are no implications for risk in terms of the information contained within this report.

12. Equality Impact Assessment and Consultation Arrangements

- 12.1. This report does not introduce a new policy, function or strategy or recommend a change to existing policy, function or strategy and, therefore, no impact assessment is required.
- 12.2. Consultation on the content of this report has been undertaken with members of APSE Grounds and Streets Advisory Group.

Michael McGlynn
Executive Director (Community and Enterprise Resources)

20 January 2021

Links to Council Values/Ambitions/Objectives

- Work with communities and partners to promote high quality, thriving and sustainable communities;
- Improve the quality of life of everyone in South Lanarkshire

Previous References

- ♦ South Lanarkshire Council Committee 16 December 2020 – Pesticide Free Council Motion

List of Background Papers

None

Contact for Further Information

If you would like to inspect the background papers or want further information, please contact:

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