



Land Use, Sustainability, and Resilience Committee

City of Arts & Innovation

TO: LAND USE, SUSTAINABILITY, AND RESILIENCE COMMITTEE MEMBERS **DATE: MAY 8, 2023**

FROM: PUBLIC WORKS DEPARTMENT **WARDS: ALL**

SUBJECT: USE OF GLYPHOSATE-BASED PRODUCTS FOR WEED ABATEMENT - UPDATE

ISSUE:

Receive an update from the Public Works Department on the use of glyphosate-based products for weed abatement purposes.

RECOMMENDATION:

That the Land Use, Sustainability, and Resilience Committee receive and file an update from the Public Works Department regarding the use of glyphosate.

BACKGROUND:

Glyphosate is commonly referred to interchangeably with the commercial label name Roundup. Glyphosate is considered a systemic herbicide, which acts by killing the entirety of a weed, including its root system, to minimize regrowth and recurrence of the weed issue. Controlling weed growth not only helps to maintain the aesthetics of our community, but also helps to maintain accessibility along pedestrian paths and bicycle lanes, reduces potential damage to infrastructure, and keep vehicle sight distances clear.

In April 2019, the City Manager implemented a temporary glyphosate moratorium in response to public concern regarding the City's use of this herbicide. The City Council received an update on the temporary moratorium in January 2020 (Attachment 1), and in February 2021 the City Council ultimately approved rescinding the temporary moratorium (Attachment 2), allowing the resumption of glyphosate use on City-maintained properties and facilities.

In March 2023, the Public Works Department was requested to bring an update to the Land Use, Sustainability and Resilience Committee detailing its use of glyphosate and current industry practices.

DISCUSSION:

The U.S. Environmental Protection Agency (EPA) reviews and assesses the safety and usage of

glyphosate and other herbicides/pesticides on a recurring basis, generally on a 15-year cycle. In California, use of glyphosate is further reviewed by the California Department of Pesticide Regulation (CDPR).

While the EPA continues to review safety information related to glyphosate, the EPA posting regarding human health and glyphosate states, “following an independent evaluation of available data for glyphosate” EPA scientists found:

- No risks of concern to human health from current uses of glyphosate
- No indication that children are more sensitive to glyphosate
- No evidence that glyphosate causes cancer in humans

The City of Riverside Public Works Department and its contractors make use of glyphosate, under the label of Roundup, for weed control in its parkways, medians and other City maintained areas. City personnel are certified through the California Department of Pesticide Regulation in the application of herbicides, including Roundup, and are recertified on an annual basis. City contractors are also required to maintain current certification and licensure through the CDPR, which assures the City that its contractors are well-versed on current safe application techniques. Other City Departments and their contractors, as outlined in the February 16, 2021 City Council Staff Report (attached), also use Roundup for weed management and adhere to best practices in its application.

The City and its contractors’ use of Roundup is additionally monitored through the Riverside County Agricultural Commission. The County conducts storage location and field inspections during the application of Roundup. A map of the Public Works Departments’ landscape maintenance areas is attached as Attachment 3. The County Agricultural Commission helps to ensure that glyphosate is sprayed correctly in the field and that it is stored properly when not in active use.

The City makes use of several best practices when applying Roundup, including:

- Roundup is typically applied by hand within the City, either using a backpack or a hose connected to a slow-moving vehicle. Hand application helps to avoid the potential for over-spraying.
- In large areas, Roundup may be applied using a truck-mounted sprayer. This application method complies with regulations related to glyphosate and is consistent with how other agencies apply Roundup.
- The City notifies daycares and schools prior to the application of Roundup in the vicinity of these facilities, and coordinates spraying times with the faculty.
- On days with sufficiently high wind speeds (generally in excess of 5 MPH), application of Roundup is limited near potentially sensitive locations.
- The City uses a 1% solution of Roundup, meaning that for every 100 gallons of mix sprayed, only 1 gallon is Roundup.
- Roundup is applied on an as-needed basis.
- A dye is added to hand-applied Roundup to serve as a visual marker of its location of application.

These, amongst other requirements as stipulated by the aforementioned regulatory agencies, help to reduce the general public’s exposure to glyphosate. While the CDPR does not restrict the use of glyphosate, it carries the following label warning within the State of California:

“CALIFORNIA PROPOSITION 65 WARNING: Using this product can expose you to glyphosate.

The International Agency for Research on Cancer classified glyphosate as probably carcinogenic to humans. **US EPA has determined that glyphosate is not likely to be carcinogenic to humans; other authorities have made similar determinations.** A wide variety of factors affect your potential risk, including the level and duration of exposure to the chemical. For more information, including ways to reduce your exposure, go to www.P65Warnings.ca.gov/glyphosate.”

Importantly, this warning acknowledges that the EPA, among other authorities, has determined that “glyphosate is not likely to be carcinogenic to humans.”

Other Agency Practices

The City of Irvine has implemented an Integrated Pest Management Program which primarily relies on alternative means of weed control. Their program sites the use of steam, layering mulch, biological control (use of other species) and mechanical removal, including Fraze mowing operations, noting, “the process is expensive and labor intensive.” (Attachment 4) While Irvine relies primarily on organic pesticides, their program does note that the “ability to operate solely with organic products has not been possible to maintain the same high-quality landscape and athletic fields prior to the policy implementation.”

The City of Riverside experienced an increase of more than 7% in contract costs during the temporary moratorium on Roundup, and the effectiveness of its weed abatement programs suffered significantly. It is anticipated that if the Public Works Department were to transition to enact another glyphosate moratorium, that costs for weed abatement would drastically increase in order to maintain an effective program. In the January 14, 2020 City Council Report (Attachment 1) the following cost analysis was provided:

Material	Material Cost per Acre	Number of Treatments Annually(generalized across the city)	Total Material Costs per Acre (annual, not including labor)
Glyphosate-based herbicides	\$25.06	2-3 times	\$50.12 - \$75.18
Non-glyphosate based herbicides	\$32.48	7-8 times	\$227.36 - \$259.84
		Material cost difference per acre	\$177.24 - \$184.66

If a spray must be applied to the weed, the City of Irvine requires that the chemical be organic. Identifying an inexpensive and effective organic herbicide is a challenge. Notably, one of the primary Roundup alternatives used within community and neighborhood parks during Irvine’s 2021 reporting period was “Whack Out Weeds.” The CDPR later warned that this product is known to contain glyphosate and that it was incorrectly labeled as organic. (Attachment 5)

The Public Works Department was requested to examine weed abatement in the City of Menifee. Menifee has a similar program which utilizes a contractor to conduct weed abatement and charges non-compliant property owners who are not responsive to a notice to abate. As part of their abatement notice (Attachment 6), the City of Menifee states that abatement “shall be satisfied by disking, mowing, brush-cutting, and/or handwork and removal of cut material of the dangerous vegetation.” The City of Menifee does not appear to have a general restriction on the use of glyphosate for maintenance, but rather requires hand removal for the immediate abatement of vegetation determined as dangerous to the public. The City of Riverside Municipal Code similarly provides the Code Enforcement Manager with the authority to require abatement of nuisance or dangerous property conditions and allows for recovery of the City’s costs should City action be

required to abate, although the RMC does not prescribe the method for weed abatement; however, the use of discing requires special consideration and that the appropriate steps are taken to minimize fugitive dust produced by discing operations.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 2 – Community Well-Being and Goal 2.3:** Strengthen neighborhood identities and improve community health and the physical environment through amenities and programs that foster an increased sense of community and enhanced feelings of pride and belonging citywide.

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – The City complies with County and State regulations related to the use of glyphosate to ensure the safety of the community.
2. **Equity** – The City applies glyphosate on an as-needed basis across our various medians, parkways, and properties to maintain the physical environment and aesthetic beauty of our neighborhoods.
3. **Fiscal Responsibility** – The City applies glyphosate prudently and only in areas where abatement is needed. Roundup is a more economical alternative to costly hand removal and alternative herbicides as it can be applied with reduced labor and material cost.
4. **Innovation** – The City continues to apply industry best practices in its use of glyphosate.
5. **Sustainability & Resiliency** – Clean and accessible walkways encourage active transportation within the City of Riverside.

FISCAL IMPACT:

There is no fiscal impact associated with this update.

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Attachments:

1. January 2020 City Council Update on Moratorium
2. February 2021 City Council Rescinds Moratorium
3. Public Works Landscape Maintenance Maps
4. City of Irvine Integrated Pest Management Program Report
5. CDPR Whack Out Weeds Warning
6. City of Menifee Standard Abatement Notice
7. Presentation