Pesticide Use Justification Form – Stormwater Utility Infrastructure

Applicant Information:

Tony Landrum, Stormwater Supervisor

Public Works

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Pesticide:

Proposed Dates of Use: As conditions and time permit from January 1, 2021 – December 31, 2021.

Products (with active ingredients): Capstone (Triclopyr Triethylamine Salt, Aminopyralid Triisopropanolamine Salt), Garlon 3 (Triclopyr Triethylamine Salt) Transline (Clopyralid monoethanolamine salt), Telar (Chlorsulfuron2-Chloro-N-[(4-methoxy-6-methyl1,3,5-triazin-2-yl)aminocarbonyl]), Round Up Custom (Isopropylamine salt of glyphosate),

EPA Reg #: 62719-572, 62719-37, 62719-259, 432-1561, 524-343

Pesticide Type: Herbicide

City Use Type/ Hazard Tier: Tier 2, Limited-use, more restrictive –Transline, Telar, Capstone, Garlon 3. Tier 1, most restricted, may not be used in areas with high public use – Round Up Custom

Use Location:

Street Address/Site Name: Various Stormwater Utility Sites, as listed below

Detailed Location of Application Site: Driveways, fence lines and infrastructure in the following areas:

- SDS #1
- SDS #2
- SDS #3 at H St
- SDS #4
- SDS #5 1 mile south of I80 in bypass, north and south side of station
- SDS #6 SE side of Richards BLVD underpass
- SDS #7 at Sutter Davis
- SDS #8 at Evergreen Pond
- SDS#9 on Cannery Loop

Posting and Notification: E-notifications will go out 48 hours before application. "Chemical application in progress" signs posted during application in areas with public access.

Justification:

Target Pests: annual grasses, pepperweed, short-pod mustard, black mustard, Italian thistle, yellow star thistle, milk thistle, fluvellein, other broad-leaf annual weeds

Justification for Use: All application areas are closed to the public and herbicide use will be limited to areas that do not allow for other methods. This herbicide use is justified due to the need for safe access to these critical infrastructure facilities year –round. These weeds pose a critical infrastructure risk to the pump stations because vegetation will root on edges and in cracks, and eventually undermine the integrity of the facility. PW staff also need to be able to safely access stations throughout the year to perform maintenance and react to changing conditions during the rainy season. Fire is a significant management concern, especially in areas near train tracks or where illegal camping takes place. This proposed application will keep the inside of these facilities free from vegetation, significantly reducing the risk of damage in the event of a fire.

Pepperweed is of particular concern because there is no reliable way to control it without herbicide. Mechanical cultivation or hand hoeing are not options because the plant can reproduce from vegetative material and these methods will actually increase the infestation. The plant can cause damage to stations and well sites because it's large, tuberous roots can undermine pipes, foundations and other facilities. Other weeds, including yellow star thistle, provide significant fuel for fire, burning hotter than grasses due to a high oil content. There is no reliable way to kill these weeds using non-chemical methods at the scale they exist on the sites.

Explanation of IPM Methods Used: Staff will only use herbicide in the areas identified above. All other acreage included in stormwater management areas is maintained using all IPM techniques, always with a priority on least chemical use. Access roads, channels and slopes that can be mowed or trimmed will receive those treatments, as needed, to keep access clear and fire risk low.

Mulching is not an appropriate technique to control weeds in the stations because it still poses a fire risk and quickly fills up with new vegetation.

Strategies to Prevent Future Applications: Effective, well-timed control will decrease pesticide usage over time because less seed and reproductive material will be present in the soil. However, the need for access to secure public safety may affect this trend, depending on conditions such as rainfall amounts, timing and ground temperature. We propose to reduce our use in the following ways:

- Spray timing is critical to effective control and reduced use over time. The proposed timing of the spray is BEFORE annual grass seeds set, preventing another generation of weed growth.
- Stations with asphalt surfaces will be crack-sealed this summer to prevent future infestations in those areas.
- Double-check surrounding areas during dry months to make sure no irrigation over-spray is affecting conditions.

- Keep sites and stations maintained to prevent flooding of access areas and deposition of weed seeds.
- Practice responsible vehicle access during wet months to prevent road damage and the need for repair work that is a vector for invasive species.
- Clean and maintain all equipment before and after use to prevent the transfer of seeds and plant materials between sites and/or into sensitive areas.
- Continue to promote the use of tree canopy to shade conveyance channels and prevent weed growth that blocks flow.

Additional comments: PW staff has extensive experience with vegetation management and knows what is necessary to protect the people of Davis from the risks of flooding. This justification will allow staff to continue to meet their mandate for public health and safety, while reducing the overall reliance on chemical pesticides. I believe the proposed application is appropriate and will increase the habitat value of the site.

Stormwater/Streets divisions currently has on hand about 4 gallons of glyphosate (as Roundup Custom) and plans to exhaust the currently supply until further IPM policy development. This reduces the cost associated with hazardous waste material disposal.

Submitted By:

_Tony Landrum, signed electronically_____

Stormwater Supervisor

Approved By:

Approved electronically

Richard Tsai, Environmental Resources Division Manager

Approved electronically

Mike Webb, City Manager