



February 8, 2018

WI DNR Pesticide Use Advisory Team

This Pesticide Assessment was conducted at the request of the Wisconsin Department of Natural Resources (WI DNR). The Department Pesticide Use Team requested that Dr. Mark Renz (University of Wisconsin Professor and Extension Weed Specialist) review and summarize aspects of active ingredients commonly used for unwanted plant control in forests and natural areas and provide his **professional opinion** on the risks and value of this active ingredient compared to other commonly used practices. For more detailed information about this active ingredient, please consult the [US Environmental Pesticide Agency](#) or [National Pesticide Information Center](#). Pesticide labels are the law and must be followed.

Per your request, I am providing information to consider when determining if MCPA should be listed as a general pesticide for use on Wisconsin Department of Natural Resources lands. My comments are related to the specific assessment considerations that you wanted me to consider. Nearly all of my toxicological information is taken directly from the US EPA document that was used to consider re-registration of this active ingredient in 2005. It can be accessed directly from the EPA website or by clicking [here](#).

MCPA has been used for weed control for decades, and while the majority of use is residential, it can be applied to a range of agronomic crops as well as non-crop situations as described in the proposed use pattern. Use has declined in most crops but is likely stable in residential areas.

Assessment Considerations

1. What are the human health risks (applicator and the public)? The US Environmental Protection Agency did review this product in 2005 and concluded that minimal risks are present to human health from ingestion of residue from its current use. EPA is concerned about occupational risk (risk to applicator), but believes that reducing the rates applied (implemented to labels in 2005/2006) can mitigate this effect if proper PPE are used per the label instructions. Given that the proposed use pattern is for spot application, I feel that applications to $< \frac{1}{4}$ acre via a spot application won't provide high levels of risk.



2. What are the potential negative environmental impacts and risks? US EPA is concerned about ecological risk (non-target plant/wildlife injury). Risks appear to be mostly due to off-target movement of the molecule. It does not persist long in the environment (typical half-life of 10 to 14 days but can persist 1 month in wet conditions and 6 months in drier conditions), but does have potential to leach into groundwater in sandy soils or areas with high water-tables thus EPA **encourages** users to avoid application in these situations if possible. **This is not a requirement.** For wildlife the general risk is considered low for animals, but some non-lethal effects for birds are a concern, especially those that consume grasses exclusively. Plants are also a concern for off-target drift and many species are sensitive. EPA felt that reducing the application rates (now implemented on labels) and requiring medium to coarse spray droplets only during application would minimize (but not eliminate) risks to wildlife and plants.
3. How effective is the proposed pesticide for the proposed target(s)? MCPA alone is moderately effective at controlling shrub species, but other active ingredients show more consistent results across a range of brush species. Its effectiveness when mixed with other active ingredients has been suggested to be improved, but I have not seen any data to allow me to evaluate this claim.
4. What is the specificity of the proposed pesticide to the proposed target(s)? MCPA is considered a “broadleaf” herbicide with limited activity on grass species. I suggest avoiding applications within a month prior/post seeding of grass species unless injury is acceptable. Some broadleaf species may be more tolerant than others, but the response is often rate and/or timing specific.
5. Is there a need for a maximum application site frequency and/or area other than specified on the product label? Not that I am aware of but EPA re-registration document states no more than 3 lbs/A per year for spot treatment control of shrubs. I would ensure people don’t surpass this amount as often this does not get onto the label but is a requirement.
6. Is there another pesticide and/or Integrated Pest Management (IPM) technique that should be considered in-lieu of the proposed pesticide? Brush management is challenging in general and often land management goals drive techniques used vs effectiveness. MCPA in general is not viewed as a very effective brush herbicide but it can provide acceptable control in some situations. With brush



management I suggest comparing the use of MCPA (alone or in mixtures) to Triclopyr based products as these are the standard treatments. If control isn't better or cost isn't substantially less I would not recommend using this active ingredient.

7. Other Considerations: I have heard that economics is a main driver for the proposed use of this active ingredient in combination with others on DNR lands. I suggest conducting a close comparison of acute toxicity of products being considered to ensure that no increased risks are present with one product over another. I do know that some new formulations of triclopyr now have reduced risk of eye injury, compared to older formulations or products. I would consider using the safer products over others that are less expensive assuming control is acceptable with both options. In my opinion avoiding any potential eye injury is a greater benefit than reducing costs of herbicide purchased.

Feel free to contact me if you have any specific questions with regards to this information.

Sincerely,

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