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January 12, 2009

Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P)
Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460-0001

RE: Docket # EPA-HQ-OPP-2008-0129: Reregistration Eligibility Decision For
Sulfometuron Methyl

Dear Sir or Madam:

The National Alliance of Forest Owners ("NAFO") appreciates the opportunity to comment on the Environmental Protection Agency's ("EPA") Reregistration Eligibility Decision ("RED") on the herbicide sulfometuron methyl, issued pursuant to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). 73 Fed. Reg. 66893 (November 12, 2008). In short, NAFO supports EPA's decision that sulfometuron methyl is eligible for reregistration under FIFRA, but at the same time believes the record fails to support certain proposed risk mitigation measures. Accordingly, NAFO respectfully requests that EPA reconsider the proposed buffer zone and spray height restrictions. We would welcome the opportunity to discuss with EPA appropriate mitigation measures that meet the goal of sufficiently protecting sensitive forest environments while at the same time reflecting the best available information and the practical application of sulfometuron methyl in forests.

NAFO's mission is to protect and enhance the economic and environmental values of private forests through targeted policy advocacy at the national level. At the time of this submission, NAFO's members represent 74 million acres of private forests in 47 states. NAFO was incorporated in March 2008 and has been working aggressively since to sustain ecological, economic, and social values of forests and to assure an abundance of healthy and productive forest resources for present and future generations.

NAFO welcomes EPA's decision that sulfometuron methyl does not pose a risk to human health or the environment and that the herbicide is eligible for reregistration under FIFRA. Sulfometuron methyl is an important forest management tool that has been used prudently and successfully for over 20 years to support productive and sustainable forestry in an environmentally protective manner.

At the same time, NAFO believes that the record does not support certain of the risk mitigation measures to control drift spray that EPA proposes as conditions of reregistration. In particular, EPA's proposed requirements for 500-foot buffer zones

for aquatic vegetation and release points no greater than 10 feet above the tree canopy for aerial application, and 100-foot buffer zones for ground application, are not supported by the record and are not suitably tailored for environmental protection. Indeed, imposing such requirements may cause weed management practices with more adverse environmental consequences to be substituted for sulfometuron methyl, create hazardous conditions for applicators, and decrease the productivity of the nation's forests.

Buffer Zones

EPA's proposal to require 500 foot buffer zones for aerial application and 100 foot buffer zones for ground application are based on overly conservative modeling projections that do not reflect typical use conditions and ignore contrary evidence in the record. The National Council for Air and Stream Improvement, Inc. (NCASI) has submitted extensive technical comments on these issues, which NAFO endorses.

In a risk assessment conducted by the United States Forest Service—the Federal Agency with particular expertise regarding the use of herbicides in forests—the Forest Service concluded that the “risk quotient” to terrestrial plants from aerial spraying or ground application was several orders of magnitude less than the “risk quotient” predicted by EPA. For example:

- At the 500 foot downwind increment in an aerial application situation, the Forest Service modeled “hazard quotients” of 0.1 for tolerant species and 4 for sensitive species.¹ By contrast, for that same interval, EPA, asserted that the “risk quotients” were 1,128 for tolerant species and 20,505 for sensitive species.² Thus, EPA's estimate of risk for spray drift from aerial application 500 feet from the point of application was approximately 10,000 greater than that of the Forest Service for tolerant species, and 5,000 times greater for sensitive species. Indeed, EPA's modeled risk at the edge of the proposed 500 foot buffer is 20

¹ *Sulfometuron Methyl, EXCEL Worksheets for Human Health and Ecological Risk Assessments*, USDA, Forest Service (2006) (“Forest Service Risk Worksheets”) at worksheet G05b. The *Forest Service Risk Worksheets* are part of the Forest Service's *Sulfometuron Methyl Human Health and Ecological Risk Assessment – Final Report* (2004) (“Forest Service Risk Report”).

² *Environmental Fate and Ecological Risk Assessment for the Reregistration of Sulfometuron-methyl: Vegetative Management and Other Non-crop Uses*, U.S. EPA (2008) (“EPA Risk Assessment”) at p. 98. These were the values generated by EPA's “high exposure” modeling scenario, which included atypical parameters such a application in a 15 mph wind. These are the values expressly cited by EPA in the RED. RED at p. 20. The RED also noted that EPA's modeling using slightly less conservative parameters produced “risk quotients” approximately 1/3 less than those generated by the “high exposure” scenario. However, even those lower values are still orders of magnitude greater than those reported by the Forest Service.

times greater than the risk projected by the Forest Service for direct spraying (i.e., the "0" foot downwind distance).

- At the 100 foot downwind increment in a ground application situation, the Forest Service modeled "hazard quotients" of 0.3 for tolerant species and 11 for sensitive species.³ EPA's comparable "risk quotients" were 517 and 9394, or approximately 1700 times and 850 times the values calculated by the Forest Service.⁴ Again, EPA's modeled "risk quotient" results at the proposed 100 foot buffer line are significantly greater than those modeled by the Forest Service at the point of direct spraying.

Importantly, EPA makes no effort to explain this discrepancy in the RED, and neglects to adequately discuss the Forest Service's risk assessment. In EPA's own risk assessment, the Agency essentially dismisses the Forest Service's assessment without any analysis:

No previous environmental fate and ecological risk assessment was available for sulfometuron methyl that was comparable to current OPP practices. However, comprehensive ecological risk assessments were available from two other Federal sources: US Forest Service (USDA, 2004) and the Bureau of Land Management (BLM, 2005). In many cases, the overall methodology and data used in these assessments was similar to that used by OPP, although some differences in the models, interpretation of data, and associated assumptions were evident.

Results from the US Forest Service Ecological Risk assessment (USDA, 2004) indicate that risk of direct toxicity to aquatic and terrestrial animals is unlikely, due to exposure via contaminated diet, dermal contact, and inhalation. Risks were evident to terrestrial and aquatic plants, with hazard quotients (equivalent to Agency RQ values) up to 4 for aquatic plants (peak concentrations) and up to 15,000 for terrestrial plants based on the NOAEC for vegetative vigor. The US Forest Service assessment considered only ground applications, which would likely result in lower RQs compared to aerial applications that are modeled in the OPP ecological risk assessment.⁵

While EPA vaguely refers to "some differences" in the models, it makes no effort to justify any differences between the two approaches. Yet, given the vastly contrary conclusions by the Forest Service, EPA is required to: (1) consider the pertinent Forest Service views in the record; (2) and, in the event it disagrees with those views, provide an adequate rationale for why. It has done neither in the RED.

³ *Forest Service Risk Worksheets* at worksheet G05a.

⁴ *EPA Risk Assessment* at p. 97.

⁵ *EPA Risk Assessment* at p. 24.

In addition to being dismissive of the Forest Service conclusions, the RED record simply is wrong in concluding that “the US Forest Service assessment considered only ground applications.” To the contrary, the Forest Service risk assessment indeed explicitly modeled aerial applications of sulfometuron methyl.⁶ However, EPA did not transparently and fully evaluate the Forest Service’s risk assessment and explain or justify the very significant differences in the results. EPA’s general statement about the unavailability of risk assessments that produced results “comparable to current OPP practices” is not responsive, since it presumes that “current OPP practices” are correct and do not have to be adjusted or justified to take into account the risk assessments conducted by other agencies. These errors and omissions result in a record on the buffer zones that is inadequate, and require the buffer zones to be reconsidered in light of the Forest Service conclusions.

In addition to inadequately considering the relevant Forest Service data, EPA also ignored the record evidence (including that submitted in the NCASI comments) demonstrating the widespread implementation and effectiveness of Best Management Practices (“BMPs”) that have resulted in a 20-year record of environmentally protective application of sulfometuron methyl. These practices, compliance with which are generally required by State law, were not fully taken into account in EPA’s modeling assumptions.⁷ Further, EPA is required to address the record evidence, including the several studies cited by NCASI, demonstrating that the proposed buffer zones are not necessary. The “one-size-fits-all” buffer restrictions proposed by EPA do not reflect the wide range of conditions under which sulfometuron methyl is applied, and the existing and documented BMPs and state requirements that tailor application requirements to specific conditions and risk scenarios. Failure to adequately consider these factors has resulted in an insufficient record to support the buffer zones.

The small number of reported incidents in the 20-year history of the use of sulfometuron methyl also indicates that the record does not support EPA’s proposed requirements. The sole “highly probable” incident involved drought and windy conditions (20 – 40 mph) that caused the wind erosion of treated soil.⁸ As to the other

⁶ In addition to the *Forest Service Risk Worksheet* summarizing the Forest Service’s assessment of the risk of aerial spraying, the Forest Service Risk Report stated in several places that aerial spraying was evaluated. See, e.g., *Forest Service Risk Report* at pp. xiii, xiv, 2-1, 2-3, 3-12, 3-13. Indeed, the Forest Service used the AgDRIFT software to model aerial spraying, the same software used by EPA in its risk assessment, with the Forest Service noting that the “AgDRIFT estimates used are for consistency with comparable exposure assessments conducted by the U.S. EPA.” *Forest Service Risk Report* at p. 4-16.

⁷ Just to provide one example, EPA’s risk assessment assumed applications using either “fine” (for the “high exposure” scenario) or “fine to medium” droplets of the herbicide. *EPA Risk Assessment* at pp. 56 – 57. As set forth in more detail in the NCASI comments, EPA’s assumptions regarding droplet size are not representative and, by themselves, that error can create a 5 to 20-fold difference in the amount of driftable fine droplets.

⁸ RED at p. 23.

34 reported incidents, which stretch back to 1984, EPA's own assessment notes that the majority probably involved ground application (i.e., making them not relevant to establishing buffers for aerial application), and that these incident reports do not conclusively establish that sulfometuron methyl was the cause of the reported damage.⁹ EPA was at most able to conclude that these incident reports "suggest" that non-target terrestrial plants can be "susceptible" to spray drift and runoff from the herbicide, but was not able to relate this information to the proposed buffer zones. EPA must base its decisions to impose use restrictions that will have significant adverse environmental and economic consequences on more than a "suggestion" of potential impacts, particularly given the contrary evidence in the record.

Finally, as noted by several commenters, EPA must take into account the adverse environmental effects of its proposed requirements. The record demonstrates, and EPA appears to agree, that sulfometuron methyl is a very low-toxicity herbicide. The buffers proposed by EPA could likely lead to the use of weed management practices with more adverse environmental consequences to be substituted for sulfometuron methyl.

Spray Height Restrictions

EPA's proposal to prohibit aerial applications more than 10 feet above the canopy is similarly unsupported by the record for the reasons discussed above, is impractical, and will result in hazardous operating conditions. There is no evidence that current spray height practices have created problems or concerns (indeed, EPA notes that most of the reported incidents involving this herbicide do not appear to involve aerial application at all, much less being traceable to spray height issues). As noted by NCASI and other commenters, forest sites are often characterized by uneven terrain and varying canopy heights, making it difficult, impractical, and unsafe to attempt to maintain a 10 foot spray height. The fact that the proposed spray height restriction is qualified by the statement that it does not apply if "a greater height is required for aircraft safety" does not resolve this issue. It will still create regulatory pressure to fly at unsafe low levels, and creates uncertainty and the potential for future disputes over when such a "greater height" would be justified.

Conclusion

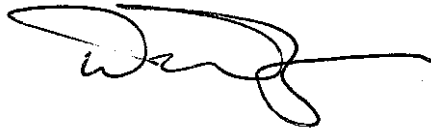
NAFO appreciates EPA's efforts on the RED, particularly the determination of edibility of reregistration of a low toxicity herbicide necessary to achieve environmentally sound forest management. At the same time, the record fails to support EPA's proposed buffer and spray height restrictions, which are directly contradicted by field and risk assessment information that is in the record. Accordingly, these proposed conditions for re-registering sulfometuron methyl should be reconsidered and withdrawn.

⁹ *EPA Risk Assessment* at pp. 99 – 100.

The deficiencies in these proposals are not cured by EPA's offer to allow alternative mitigation measures that achieve "equivalent risk reduction." First, EPA provides no guidance on how such a demonstration can be made. More importantly, as discussed above, the record does not support EPA's evaluation of the risks posed by the aerial and ground application of sulfometuron methyl. Therefore, EPA's risk assessment conclusions must be corrected before alternative risk mitigation measures can be meaningfully discussed.

Thank you for this opportunity to present NAFO's views on this important issue for sustainable forestry. We look forward to working with EPA to resolve the remaining issues regarding the safe and environmentally protective use of sulfometuron methyl. Please feel free to contact me at 202-367-1163 to discuss opportunities for NAFO and EPA to work together on this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Tenny", with a long horizontal flourish extending to the right.

David P. Tenny
President and Chief Executive Officer