



NATIONAL COUNCIL FOR AIR AND STREAM IMPROVEMENT, INC.  
SOUTHERN REGIONAL CENTER  
*Mailing and Street Address:*  
402 SW 140<sup>th</sup> Terrace, Newberry, FL 32669  
Phone (352) 331-1745  
FAX (352) 331-1766

---

April 16, 2008

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

**RE: Docket ID #EPA-HQ-OPP-2008-0129**

Dear Sir:

The National Council for Air and Stream Improvement (NCASI) is an independent, non-profit research institute that focuses on environmental topics of interest to the forest products industry. NCASI staff are actively involved in addressing a variety of topics related to the use of herbicides such as sulfometuron methyl in forest ecosystems. Our activities range from preparing literature reviews to conducting original research on herbicide toxicity, habitat effects, environmental fate and transport, and application techniques. I am submitting these comments on behalf of NCASI and in response to the *Federal Register* notice of February 27, 2008 announcing the notice of availability of sulfometuron methyl risk assessments.

There are two sections of the risk assessment documents that we wish to address, the ecological risk assessment and the occupational handler risk assessment. First, a general comment on the identification of indirect effects on freshwater and estuarine/marine fish and invertebrates as risk of concern in the ecological risk assessment. This finding is based on expected surface water concentrations estimated using the PRZM and EXAMS models. These models are, by nature, conservative, even for the agricultural applications to which they were designed to apply. They become even more conservative when used to estimate surface water concentrations associated with forestry applications. In addition to following any specifications on the herbicide product label, forestry operations are also conducted in accordance with Best Management Practice (BMP) guidelines that mandate practices such as the creation of buffer zones around water bodies, designed to prevent movement of herbicides into surface water through either spray drift or runoff. Thus, assumptions such as the application areas being cropped at 100% do not apply to forestry application scenarios. Any decisions about reregistration of sulfometuron methyl for forestry uses should take into consideration this extra level of conservatism in the risk assessment.

Also, on page 44 (Section 3.2.2.1) of the ecological risk assessment, it is reported that Michael (2003) “found, after application of sulfometuron methyl at 0.42 kg/ha to watersheds of unspecified area (reflecting a forestry planting usage) that concentrations of sulfometuron methyl in runoff water collected at the edge of the field reached a maximum of 49 ug/L (24-hour average).” Although this was cited in the body of the document, it was not listed in the reference section. However, it appears that the citation refers to a paper published by J. L. Michael in the *Journal of Environmental Quality* (32:456-465, 2003). If so, then the 49 ug/L in runoff water was from a site treated with an experimental pelleted formulation that was dropped from consideration for registration by the manufacturer. On the experimental site treated with Oust, only 12.5% of the runoff water samples collected contained quantifiable residues of sulfometuron methyl and the maximum 24-hour average concentration was less than 30 ug/L. In addition, the risk assessment inaccurately identifies 1 ug/L as the minimum detection limit from the study. It was actually 0.2 ug/L.

Finally, the occupational handler risk assessment finds that excess risks are associated with the exposure scenario of mixing/loading WDGs for aerial application to forestry and non-crop areas, even with the use of additional PPE. The risk assessment correctly notes that concern associated with this finding is “significantly reduced,” based on the number of conservative assumptions used in the assessment, such as the assumption of 100% dermal absorption. This risk assessment might be strengthened by the inclusion of a dermal exposure assessment using structure-activity relationships to predict the permeability coefficient of sulfometuron as described in EPA/600/8-91/011B. This approach was used in the development of the USDA Forest Service Human Health and Ecological Risk Assessment for Sulfometuron Methyl.

Worldwide demand for forest products has increased and projections are that demand will continue to increase in the future. Intensive forest management will be essential to meeting these increasing demands and the use of herbicides for vegetation management is an integral component of intensive management plans. Sulfometuron methyl is a valuable tool for forest managers for several reasons. It is a broad-spectrum pre- and post-emergence herbicide, used in conifer and hardwood site preparation and release and in herbaceous weed control. It is also highly efficacious and can thus be applied at relatively low rates, reducing total chemical use. In addition, sulfometuron methyl is, as illustrated by the risk assessments, of low direct toxicity to animal life. For these reasons, we urge US EPA to proceed with the reregistration of sulfometuron methyl herbicide formulations.

We appreciate the opportunity to submit comments on the sulfometuron methyl risk assessment documents and hope that you will find them useful.

Sincerely,



Vickie Tatum, Ph.D.  
Project Leader