

## **Comments about Volatilization Drift to the Environmental Protection Agency Scientific Advisory Panel**

Submitted by Jan Wroncy

Accounts of Volatilization Drift and their negative impacts:

August 21, 2009: Oregon Forest Management Services applied Chopper manufactured by BASF, EPA No. 241-296 (imazapyr, active ingredient) plus Methylated Seed Oil foliar by back pack sprayers for Weyerhaeuser Company on steep clearcut forestland in the Coast Range of Oregon within Lane County adjacent to protected Coastal Coho Salmon streams (Congdon Creek and tributaries flowing into Lake Creek and then into the Siuslaw River).

Below is a picture of the Oregon Forest Management Services crew after they finished spraying the unit on August 21, 2009 about two air miles from my organic farm. (Photos by Gary Hale).



This type of application normally does not cause the amount of drift that an aerial application would, however, both kinds of applications do cause significant volatilization drift. Because of the steepness of the slopes treated and the herbicide/adjuvants used, there is noticeable vapor movement uphill with the warming air during the daytime, and downhill movement with the cooling air in the evening. The wind carries these vapors for miles, and the vaporization of these chemicals lasts for days, weeks, and even months.

The photo below shows how steep this unit is. The diurnal movements of air transport the vapors for a great distance from the sprayed units for a long time after the initial application of the pesticide or herbicide and adjuvant mixtures. Almost all the homes and farms are located in the bottom land in the valleys. The town of Horton was inhabited over 100 years ago. Our farm is the original homestead of Samuel Horton, one of the founding families of the town.



The following photo was taken of the sprayed unit after the herbicide was sprayed on the trees (mostly Big Leaf Maple) some of which were 15 or more feet tall. Spraying vegetation that tall with back pack sprayers would have increased the chance of drift during application.



Congdon Creek is the large fish-bearing stream below the unit that was sprayed. It is a prime spawning stream for Coho, Chinook and Steelhead. Congdon Creek flows into Lake Creek and then joins the Siuslaw River many miles downstream. The 1947 irrigation water right for our organic farm is around 3 miles downstream from the treated unit. The picture below is of Congdon Creek, taken from Majors Creek Bridge on the day of the spray. This part of the stream is prime spawning grounds for endangered salmon.



Not only did we receive drift from the original ground application, but we also received volatilization drift for weeks afterward. Then following rain, the contamination of our legal registered water right for irrigation water was evidenced by damage to the rows of crops watered by drip lines supplied with the river water.

The drift from vapors made it very difficult to work in my fields for any length of time because I quickly became ill (headaches, achiness, muscle aches, breathing problems and arrhythmia, etc.). My farm work fell behind schedule and I was never able to catch up for the season. Our farm cats, and dog also suffered from the vapors. My son was affected also. My husband was able to work inside with fewer effects because of a very expensive air filter we run in the house. But outside work remained difficult during this time.

After about one month, we went up to the public road (Bureau of Land Management road; Congdon Creek Road) below the spray unit to view the damage. All of the same symptoms of the vapors intensified again to the level they were present during the first few weeks after the unit was sprayed, so clearly the vapors were still present, and clearly the symptoms were a result of exposure to the vapors.

The photo below shows the same view of the sprayed unit over five weeks later (taken October 2, 2009). This unit was still fuming vapors which affected my health negatively, and were still capable of drifting off-target for a significant distance.



Vapor drift is significant and harmful to human health, animal health and the environment. Vapor drift is capable of being transported over long distances and lasts for days, weeks and months. Not only initial drift but also vapor drift must be taken into account by the Environmental Protection Agency while regulating pesticides and pesticide adjuvants.

Respectfully submitted by

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