CASE SUMMARY

Case #2011/1218

Complainant:	Shannon Marshman 53582 Wakefield Drive Elkhart, IN 46514 574-320-3999	
Applicator:	Brian Lattimer Lattimer Lawn Care 51633 CR 3 Elkhart, IN 46154-8879 574-262-5051	Certified Applicator Licensed Business

- 1. On July 14, 2011, I, Agent Joe Becovitz of the Office of Indiana State Chemist (OISC), performed an investigation at the Marshman residence in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. I observed the following during my on-site investigation:
 - a) An arborvitae hedge that is on the Marshman property and separates the Marshman property from his neighbor (the Overmyers) had leaf tips that were browned and yellowed. The browned and yellowed leaf tips were only observed along the part of the Overmyer property that was treated with Imprelis herbicide (see case #2011/1213). The part of the arborvitae hedge that bordered the untreated portion of the Overmyer property appeared healthy and normal (see Figures 1 thru 3).
- 2. I photographed the site documenting the symptoms I observed:



Figure 1-Marshman hedge

Figure 2-closeup of injured portion of hedge

Figure 3-closeup of uninjured portion of hedge

- 3. I collected the following vegetation samples from visibly impacted non-target vegetation, as described in paragraph #1, for examination by the Plant & Pest Diagnostic Lab (PPDL) at Purdue:
 - a) Arborvitae

- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Lab:
 - a) Injured foliage from the Marshman arborvitae hedge
 - b) Normal foliage from the Marshman arborvitae hedge
- 5. The report from the PPDL for the samples submitted indicates, "There was no evidence of significant disease or insect injury on the specimen submitted. The samples (and pictures) submitted show symptoms that are typically found to be associated with injury that can be caused by a synthetic auxinic (growth regulator type) herbicide. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; dieback of distorted shoot tips; leaf cupping which can be upward or downward, and in extreme cases, new leaves can be irregular in size and shape (usually smaller than normal) and have abnormal leaf margins"
- 6. According to the report from the OISC Residue Lab, the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) were found in the samples referenced in item #4:
 - a) Injured arborvitae foliage
 b) Uninjured arborvitae foliage
 PPB=Parts Per Billion
 BDL=Below Detection Limits
- 7. According to the application information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied to the neighbor's property on May 1, 2011, at the rate of 2.8 oz/acre using a ride-on type sprayer.

Joseph D. Becovitz Pesticide Investigator

Date: October 5, 2011

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. Effective September 15, 2011, the Indiana registration for Imprelis Herbicide, EPA Reg. #352-793, was cancelled because it was determined by OISC that the product is "misbranded" (it bears label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation).

George N. Saxton Compliance Officer

Final Date: October 26, 2011