CASE SUMMARY

Case #2011/1113

Complainant: Nancy Alexander

306 Eagle Dr.

Sweester, IN 46987 317-384-7632

Applicator: Joe Chandler

Alan Dray

Grant Co. Lawn, Inc. 707 N. Miller Ave. Marion, IN 46343 765-384-5219 Registered Technician Certified Supervisor Licensed Business

- 1. On June 30, 2011, I, Agent Jay Kelley of the Office of Indiana State Chemist (OISC), performed an investigation at the complainant's property in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Nancy Alexander. I observed the following during my on-site investigation:
 - a) Tops of spruce trees were brown and knotted (see figure #1).
 - b) Spruce tree has areas of brown needles extending from bottom to top (see figures #2).
 - c) Ends of candles are twisted and brown (see figure #3).
- 2. I took the following photos depicting injured/damaged vegetation:







Figure 1

Figure 2

Figure 3

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

- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample
 - b) Soil sample from yard
 - c) Control soil sample

NOTE: A decision was made by OISC management to not analyze these environmental samples. That decision was based on: 1) the large number of similar cases being investigated by OISC at the same time; 2) the large number of similar environmental samples already analyzed that had produced applicable representative results consistent with the presence of visible exposure symptoms; 3) the expertise developed by OISC investigators through repetition to identify Imprelis exposure symptoms without chemical confirmation.

- 5. According to a report from the PPDL, "No infectious disease or insect pest found to be associated with the dieback and distortion observed on spruce sample submitted. The sample (and picture) submitted show symptoms that are typically found to be associated with injury caused by synthetic auxin (growth regulator type) herbicides. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; 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 application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on March 29, 2011, at the rate of 1oz /1000 sq. feet using hand held ground spray equipment; no application was made directly to any exposed roots of any trees or ornamentals.

Date: September 22, 2011

Final Date: October 11, 2011

Paul J. Kelley

Pesticide Investigator

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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