CASE SUMMARY

Case #2011/1106

Complainant: Mike Holen

413 Old St. Rd. 28 Williamsport, IN 47993

765-585-7361

Applicator: Chris Knight

Tippecanoe Lawn Care 4400 St. Rd. 25 N. Lafayette, IN 47905 765-589-8251 Certified Applicator Licensed Business

- 1. On June 27, 2011, I, Agent Kevin Neal 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 Mike Holen. I observed the following during my on-site investigation:
 - a) Tops of spruce trees were curled (see figure #1).
 - b) Needles "balled up" and brown on tips of candles (see figure 2).
 - c) Juniper (arborvitae) yellowing with twisting and curling (see figure 3)
- 2. I took the following photos depicting injured/damaged vegetation:



Figure One



Figure Two



Figure Three

- 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
 - b) Arborvitae

- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample from yard (spruce/arborvitae)
 - b) Soil sample from yard

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 pathogens or insect pests were found to be associated with the sample submitted. The spruce and juniper samples submitted show symptoms (wavy or curvy shoots) that are typical of injury 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. The proximal yellowing on the juniper is not typical of most variegated foliage on ornamental cultivars of juniper."
- 6. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied at the rate of 4.5 oz/acre using hand held ground spray equipment.

Date: September 9, 2011

Final Date: September 21, 2011

Kevin W. Neal Pesticide Investigator

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