## **CASE SUMMARY**

Case #2011/1346

**Complainant:** Tim & Amy Engelhardt

13281 Zellwood Court Carmel, Indiana 46033

317-846-8730

**Applicator:** Royal Flemming

The Greenskeeper Inc. 1051 Summit Drive Carmel, Indiana 46032

317-846-7131

- 1. On July 28, 2011, I, Agent George N. Saxton 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 Amy Engelhardt. I observed the following during my on-site investigation:
  - a) Curling of the tops and needles of the white pine (see figures 1 & 2)
- 2. I took the following photos depicting injured/damaged vegetation:



Figure #1



Certified Applicator

Figure #2

- 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. White Pine
- 4. According to a report from the PPDL, "There was no evidence of significant mite or insect injury or disease on the sample submitted. The sample (and pictures) submitted show symptoms that are 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. When injury results in new shoot dieback in conifers there will be no regrowth this season, and with certain species, such as Norway spruce, the entire tree can die."

Tom Creswell

Director, Plant and Pest Diagnostic Lab <a href="mailto:creswell@purdue.edu">creswell@purdue.edu</a>

5. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied April 20, 2011, at the rate of 4.3 oz/acre using a Z-sprayer; no application was made to the soil within the drip line of any of the trees or ornamentals; no application was made directly to any exposed roots of any trees or ornamentals.

**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).

Final Date: October 21, 2011

George N. Saxton

Compliance Officer