## **CASE SUMMARY**

Case #2011/1276

**Complainant:** Tom Cloyd

PO Box 160 Clinton, IN 47842 765-832-9945

**Applicator:** Tom Bekkering

Tommy Boys Lawncare

631 Blackmon St. Clinton, IN 47842 812-208-7626 Certified Applicator Licensed Business

- 1. On July 22, 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 Tom Cloyd. I observed the following during my on-site investigation:
  - a) Spiraling of dead trees (see figure 1)
  - b) Brown and curling on tips of candles (see figure 2)
- 2. I took the following photos depicting injured/damaged vegetation:



Figure One



Figure Two

- 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) Yew
- 4. At the site I collected the following environmental samples for chemical analysis by the OISC Residue Lab:
  - a) Yew Sample Cloyd Backyard (YS-1)
- 5. According to a report from the PPDL, "There was no evidence of significant disease on the sample submitted. Very light spider mite injury was noted on the spruce but it is not

contributing to the dieback noted on the new growth. The Yew sample 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. The spruce sample and pictures showed dieback without twisting or distortion. Dieback induced by drought stress is unlikely since only portions of the tree are affected. Herbicide injury to eh spruce can't be confirmed or ruled out, based on the symptoms alone."

- 6. According to the report from the OISC Residue Lab the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) was found in the sample referenced in item paragraph #4:
  - a) Yew Sample Cloyd Backyard YS-1

7.2 PPB

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on March 25 and May 14, 2011, at the rate of 4.3 oz/acre using ride on Z-sprayer.

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

Final Date: September 26, 2011

Date: September 19, 2011