## **CASE SUMMARY**

Case #2011/1186

Complainant:	Frank Madden
	5964 Sandalwood Drive
	Carmel, IN 46033
	317-848-1714

- Applicator:Robert AndrewsCertified ApplicatorThe Greenskeeper, Inc.Licensed BusinessP.O. Box 575Carmel, IN 46082317-846-7131Jin 2000
  - 1. On July 13, 2011, I, Agent Beth Carter 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 Frank Madden. I observed the following on approximately three spruce trees during my on-site investigation:
    - a) Browning of the needle tips (see figure 1 &4).
    - b) Distorting of the needle tips (see figure 1).
    - c) Slight yellowing of needle tips (see figure 2).
    - d) Curling of the needle tips (see figure 4).
  - 2. I took the following photos depicting injured/damaged vegetation:









Figure 3



Figure 4

- 3. I collected a sample from a visibly impacted spruce tree as described in paragraph #1 for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL).
- 4. I collected the following environmental sample for chemical analysis by the OISC Residue Laboratory:
  - a) Vegetation sample (spruce)
  - b) Soil from lawn (composite)
  - c) Soil inside drip line

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

- 5. The report from the PPDL stated in part: "No infectious disease or insect pest was found to be associated with the dieback and distortion observed on the samples submitted. The sample and images submitted show symptoms that are typically found to be associated with injury that can be caused by a synthetic auxin (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; 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 Greenskeeper, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 4, 2011, at the rate of 4.5 fluid ounces per acre with a hose and reel sprayer.

Carton

Elizabeth C. Carter Pesticide Investigator Date: September 23, 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 18, 2011