CASE SUMMARY

Case #2011/1165

Complainant: Ginny Kelleher
2920 West 166th Street
Westfield, Indiana 46074
317-867-5833

Applicator: Ed Clevenger — Licensed Applicator
The Greenskeeper — Licensed Business
1051 Summit Drive
Carmel, Indiana 46032-2582

1. On July 18, 2011, I, Agent Kevin Gibson 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 several non-target trees possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Ginny Kelleher. I observed the following during my on-site investigation:
   a) Tops of white pine trees were curled and twisted (see figure #1).
   b) Tips of spruce tree were brown and curled (see figure #2)

2. I took the following photos depicting injured/damaged vegetation:

Figure #1

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) Spruce
   b) White Pine

4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
    a) Vegetation sample from yard (spruce)
    b) Vegetation sample from yard (white pine)
    c) Soil sample from yard inside drip line
    d) Soil sample from yard outside of drip line

    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, "*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 that normal) and have abnormal leaf margins.*

6. At this time a decision was made not to analyze the vegetation samples in the Residue lab.

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 18, 2011 to the back yard and on June 16, 2011 to the front and side yards at the rate of4.5 oz. / acre on Z Spray ground equipment; 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.

Kevin W. Gibson
Pesticide Investigator

Date: September 27, 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 19, 2011