CASE SUMMARY

Case #2011/1223

Complainant: Dr. Ted Grayson

10657 Winterwood Carmel, IN 46032

Applicator: Phil Tapp

Business: Allen & Scott Enterprises

> 136 Casco Drive Avon, IN 46123 317-339-8536

Registered Technician **Licensed Business**

- 1. On July 13, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the above listed address in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. At the site, I observed very large Norway spruces exhibiting discolored needles and tip dieback. A magnolia, which Dr. Grayson indicated had disease problems in the past (Figure 4), and a dogwood also showed some chlorosis and distortion of the leaves.
- 2. I photographed the site documenting the symptoms I observed:





Figure 2



Figure 3



Figure 4

3. I collected plant samples from Norway spruces, magnolia and dogwood exhibiting symptoms for submission to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.

- 4. I collected a Norway spruce foliage sample, a composite soil sample from the treated turf area and a composite soil sample from inside the drip-lines of the spruces for chemical analysis by the OISC Residue Lab.
 - 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 for the samples submitted states, "Magnolia scale and sooty mold were confirmed on the branch of the magnolia sample. Dogwood anthracnose was confirmed on the twigs of the dogwood sample. Some chlorosis and foliar distortion was noted on the dogwood foliage. No infectious disease or insect pest was found to be associated with the browning of needles and branch dieback on the spruce sample submitted. Some needle distortion was observed. Distortion of foliage is a symptom that can be 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."
- 6. According to application information collected from Allen & Scott, Phil Tapp applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on April 19, 2011 at a rate of 0.1oz/1,000 square feet using ride-on application equipment.

Date: November 10, 2011

Final Date: November 22, 2011

Andrew R. Roth
Pesticide Investigator

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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