CASE SUMMARY

Case #2011/1227

Complainant: Rene Carroll

16727 Brookhollow Drive

Westfield, IN 46062

Applicator: Billy Lloyd Green Scene, Inc.

P.O. Box 248 Fortville, IN 46060 317-326-8888 Registered Technician Licensed Business

- 1. On July 14, 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 white pines with distorted tips and stunted needles on new growth; needles had some minimal browning. An Austrian pine also had some stunted new growth.
- 2. I photographed the site documenting the symptoms I observed:



Figure 1



Figure 3



Figure 2



Figure 4

- 3. I collected plant samples from white and Austrian pines exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
- 4. Environmental samples were collected for chemical analysis by the OISC Residue Lab. Specifically, I collected white pine foliage, a composite soil sample from the treated turf area and a composite soil sample from inside the drip lines of the Norway spruces.

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, "There was no evidence of significant mite or insect injury or disease on the white pine sample submitted. The white pine sample exhibited symptoms that are associated with injury that can be caused by synthetic auxinic (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; shoot tip dieback; 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. The Austrian Pine sample submitted exhibited symptoms on needles (reddish-brown bands) that are associated with a needle disease known as Dothistroma needle blight."
- 6. According to application information collected from Green Scene, Billy Lloyd applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on April 18, 2011, at a rate of 0.10 oz /1,000 square feet using hose-end equipment.

Date: November 4, 2011

Final Date: November 18, 2011

Andrew R. Roth

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