CASE SUMMARY

Case #2011/1197

Complainant: Patrick Creque

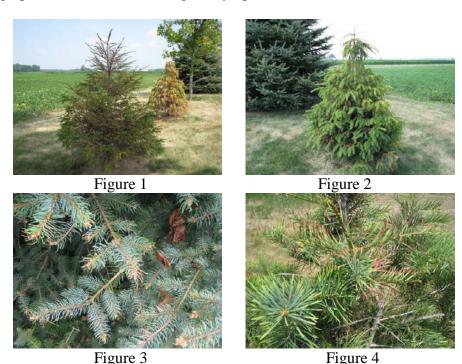
3535 W. CR500S Berne, IN 46711

Applicator: Scott Minnich

Business: Minnich's Lawn Care

P.O. Box 504 Bluffton, IN 46714 260-824-8103 Certified Applicator Licensed Business

- 1. On July 18, 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. During my on-site investigation, I observed young Norway spruces with distorted and discolored tips and dieback on new growth. Firs and a mature blue spruce had similar yet less severe symptoms on tips. A tulip poplar also showed some leaf distortion and spotting.
- 2. I photographed the site documenting the symptoms I observed:



- 3. I collected plant samples from Norway spruce, fir and tulip poplar 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 Norway spruce foliage, a composite soil sample from the treated turf area and a composite soil sample from inside the drip lines of the 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 sample submitted. The spotting on the tulip poplar is known as physiological leaf spotting. It's the trees reaction to stress factors such as drought or injuries. The samples (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 than normal) and have abnormal leaf margins."
- 6. According to application information collected from Minnich's, Scott Minnich applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on April 6, 2011, at the rate of 3.75oz /acre using ride-on application equipment.

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

Final Date: November 18, 2011

Date: November 15, 2011