CASE SUMMARY

Case #2011/1576

Complainant: John Lantz

8010 E. CR300S Avilla, IN 46710

Applicator: Matt Lordier

Solow Services 9510 Skipjack Cove Fort Wayne, IN 46835

260-413-0523

Certified Applicator Licensed Business

- 1. On September 1, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the property listed above in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. At the site, I observed distorted tips, brown needles and tip dieback on new growth of several mature Norway spruces; one had extensive browning and was dropping needles. A white pine exhibited some tip distortion.
- 2. I photographed the site documenting the symptoms I observed:



Figure 1



Figure 2



Figure 3



Figure 4

- 3. I collected plant samples from Norway spruces exhibiting symptoms and turned them in to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
- 4. The report from the PPDL for the samples submitted indicates, "Spruce: There was no evidence of significant mite or insect injury or disease on the sample submitted. The spruce sample had dieback of new growth. The spruce pictures submitted show dieback new growth in a spiral pattern. The white pine picture shows twisting and distortion of new growth. These symptoms are associated with injury caused by root uptake of 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 color, size and shape (usually smaller than normal) and have abnormal leaf margins. When injury results in new shoot dieback in conifers there will be no regrowth this season, and with certain species, such as Norway spruce, the entire tree can die. Stress from environment, site, cultural and chemical factors can contribute to conifer dieback, as discussed in the following Factsheet:

http://www.ppdl.purdue.edu/PPDL/pubs/briefs/Conifer-Dieback.pdf"

5. According to application information collected from Solow Services, Matt Lordier applied Imprelis Herbicide (EPA Reg. No. 352-793) on May 20, 2011, at a rate of 0.10oz/1,000 square feet using ride-on, ground application equipment.

Andrew R. Roth

Pesticide Investigator

Date: October 31, 2011

Final Date: November 22, 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