CASE SUMMARY

Case #2011/1245

Complainant: Rick Scheid

2501 E. Thomas Ave. Terre Haute, IN 47805

812-466-5320

Applicator: Gary Richardson

Bowman's Pro Turf 5121 N. Murphy Rd. Brazil, IN 47834 812-448-1852 Certified Applicator Licensed Business

- 1. On July 25, 2011, I, Agent Scott Farris 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 non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. I observed the following during my on-site investigation:
 - a) Spruce trees showing browning (see figure #1&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
- 4. According to a report from the PPDL, "There was no evidence significant mite or insect injury or disease on the sample submitted. There was little twisting or distortion of the growth on the sample or in the pictures but there was extensive dieback on all growing points, similar to many other cases we've seen this year of injury to spruce associated with the application 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 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. In the case of these spruce trees there was extensive dieback on one tree adjacent to another tree which was unaffected. An examination of the extent of the root systems of the two trees might tell us something about why the difference. A more extensive well established root system would cover a wider area and make a tree less susceptible to drought stress damage, yet make it more susceptible to damage from a herbicide that enters the tree via root uptake."

5. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 20th, 2011, at the rate of 4.0oz /per acre using Z sprayer 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.

Date: September 1, 2011

Final Date: September 14, 2011

Scott M Farris

Pesticide Investigator

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. On August 12, 2011, a letter was sent to E.I. duPont de Nemours and Company, Inc. proposing cancellation of the registration for Imprelis Herbicide, EPA registration number 352-793, for distributing a pesticide product with label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation.

George N. Saxton

Compliance Officer