CASE SUMMARY

Case #2011/1624

Complainant: Greencroft Middlebury
701 Windridge Drive
Middlebury, Indiana 46540
574-537-4068

Applicator: Andy Buller — Licensed Applicator
Director of Grounds
Greencroft Communities
701 Windridge Drive
Middlebury, Indiana 46540
574-537-4068

1. On June 30, 2011, I, Agent Kevin Gibson 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 several non-target trees possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Andy Buller. I observed the following during my on-site investigation:
   a) Spruce tree with brown needles and close-up (see figures #1& #2).
   b) Blue spruce tree with brown needles and close-up (see figures #3& #4).

2. I took the following photos depicting injured/damaged vegetation:

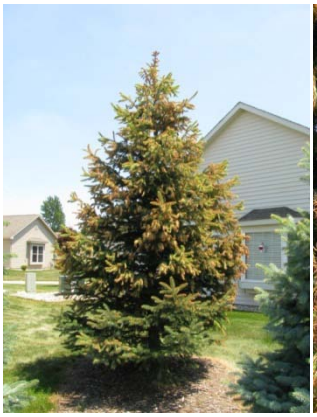
Figure #1

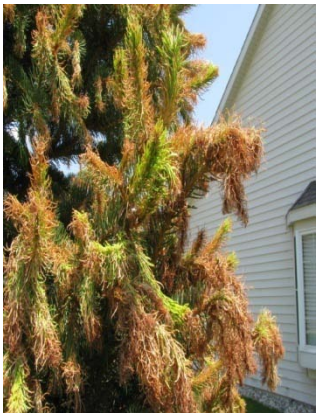
Figure #2

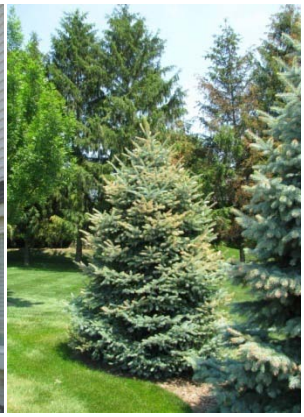
Figure #3


Figure #4

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
   b) Blue spruce

4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
    a) Composite vegetation sample from property (spruce)
    b) Composite vegetation sample from property (blue spruce)
    c) Soil sample (inside drip line)
    d) Soil sample (outside drip line)

5. According to a report from the PPDL, "*There was no evidence of insects or disease on the sample submitted. A few scale insects (probably pine needle scale) were present but are not causing significant harm to tree. The sample (and pictures) submitted show symptoms that are typically found to 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 the report from the OISC Residue Lab the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) were found in the samples referenced in item #4:
    a) *Composite vegetation sample (spruce)* *179 PPB*
    b) *Composite vegetation sample (blue spruce)* *44 PPB*
    c) *Composite soil sample (inside drip line)* *BDL*
    d) *Composite soil sample (outside drip line)* *1.9 PPB*

    PPB=Parts Per Billion BDL=Below Detection Limits

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 5, 2011, at the rate of 4.5 oz. per acre using ground spraying equipment and a back pack sprayer; 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.

Kevin W. Gibson Date: October 4, 2011
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 Final Date: October 21, 2011
Compliance Officer