CASE SUMMARY

Case #2011/1272

Complainant: Darrell Overpeck
1221 E. Brentwood Lane
Clinton, IN 47842
765-828-8485

Applicator: Tom Bekkering — Certified Applicator
Tommy Boys Lawncare — Licensed Business
631 Blackmon St.
Clinton, IN 47842
812-208-7626

1. On July 22, 2011, I, Agent Kevin Neal 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. A Notice of Inspection was issued to Darrell Overpeck. I observed the following during my on-site investigation:
   a) Tops of trees were curled (see figure 1)
   b) Brown and curling on tips of candles (see figure 2)

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


Figure One

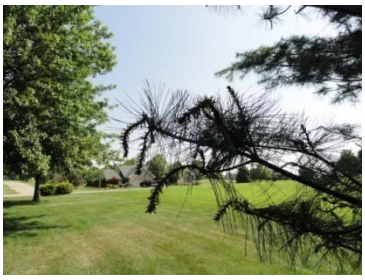
Figure Two

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) White Pine
   c) Maple

4. At the site I collected the following environmental samples for chemical analysis by the OISC Residue Lab:
   a) Maple Sample Overpeck (MS-1)

5. According to a report from the PPDL, "*There was no evidence of significant mite or insect injury or disease on the spruce and white pine samples submitted. Anthracnose, a fungal foliar disease, was confirmed on the maple. No infectious disease was found to be associated with the marginal leaf discoloration on the maple. The spruce and pine samples submitted showed symptoms that are typically found to be associated with injury that can be caused by a synthetic auxinic (growth regulator type) herbicide. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; dieback of distorted shoot tips; 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. If injury results in new shoot dieback in conifers there will be no regrowth this season. Leaf scorch, such as was observed on the maple tree, can be caused by a number of different root-stress related factors. Our diagnosis of the possibility of potential damage from herbicide injury is based on visual assessment of the samples and images submitted and whether the symptoms observed on non-target plants are typical of injury that could be caused by exposure or uptake of the herbicides purportedly applied to the area. Scorch damage from herbicide injury cannot be ruled out by visual observation since we do not know whether a synthetic auxinic (growth regulator-type herbicide) may cause this type of marginal scorch symptom on maple"*

6. According to the report from the OISC Residue Lab the following levels of aminocyclopyrachlor (active ingredient in Imprelis Herbicide) was found in the sample referenced in item paragraph #4:
    a) Maple Sample Overpeck MS-1 2.4 PPB

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on March 24 and May 13, 2011, at the rate of 4.3 oz/acre using ride on Z-sprayer.

Kevin W. Neal

Kevin W. Neal Date: September 19, 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

George N. Saxton Final Date: September 26, 2011
Compliance Officer