CASE SUMMARY

Case #2011/1292

Complainant: Jeff Yeary
Start to Finish, Inc.
3375 S CR 500 E
Whitestown, IN 46075
317-769-2211
317-710-5802

Applicator: Roberto Tapia — Registered Technician
Start to Finish, Inc. — Licensed Business
3375 S CR 500 E
Whitestown, IN 46075
317-769-2211
317-710-5802

1. On July 26, 2011, I, Agent Beth Carter 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 possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Jeff Yeary, the owner of Start to Finish Inc. I observed the following symptoms on the property:
    a) **2 spruce trees**: browning of the entire tree and curling at the top (see figure 1, 2, & 3).
    b) **2 Hibiscus**: cupping and curling of the leaves along with a "leathery" feeling to the leaves (see figure 4 & 5).

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


Figure 1


Figure 2


Figure 3


Figure 4


Figure 5

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) Hibiscus

4. I collected the following environmental sample for chemical analysis by the OISC Residue Laboratory:
    a) Vegetation sample – hibiscus

5. The report from the PPDL stated in part, "*There was no evidence of significant mite or insect injury or disease on the samples submitted. 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. The 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.*"

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) Vegetation sample – hibiscus *5.2 PPB*
    PPB=Parts Per Billion

7. According to the application information collected from the applicator, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 11, 2011, at a rate of 4.0 fluid ounces per acre using a ride on sprayer.

Elizabeth C. Carter
Pesticide Investigator

Date: September 21, 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

Final Date: September 27, 2011