CASE SUMMARY

Case #2011/1167

Complainant: Catherine Stewart

6535 Kingswood Dr. Indianapolis, IN 46256

317-849-5016

Applicator: The Greenskeeper, Inc.

P.O. Box 575 Carmel, IN 46082 317-846-7131 Licensed Business

- 1. On July 12, 2001, I, Agent Jay Kelley 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 Catherine Stewart. I observed the following during my on-site investigation:
 - a) Tips of Yews brown (see figures #1 and #2).
 - b) Needles of yews distorted and yellowing (see figure #3).
- 2. I took the following photos depicting injured/damaged vegetation:



Figure #1



Figure #2



Figure #3

- 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) Yew
- 4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample from yew.
 - b) Composite soil sample from turf.
 - c) Composite soil sample from drip line
 - d) Vegetation sample from maple tree
 - e) Vegetation sample from gum tree

- 5. According to a report from the PPDL, "Sweetgum and Maple: The primary symptoms of yellowing and stunting of leaves may be caused by any of several factors, including nutrient deficiency or problems in the trunk or roots; however possible involvement of herbicide root uptake can't be ruled out. Yew: dieback of needles appears to be caused by an injury rather than disease. The pictures submitted show symptoms that may 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)	Vegetation sample from yew	38 PPB
b)	Composite soil sample from turf	1.4 PPB
c)	Composite soil sample from drip line	0.41 PPB
d)	Vegetation sample from maple tree	BDL
e)	Vegetation sample from gum tree	BDL

PPB=Parts Per Billion

BDL=Below Detection Limits

Date: August 9, 2011

Final Date: September 19, 2011

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 24th, 2011, at the rate of 4.5oz /acre using hand held ground spray 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.

Paul J. Kelley

Pesticide Investigator

J. Kelley II

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