

CASE SUMMARY

Case #2011/1168

Complainant: Paul Smith
6737 Caribou Circle
Indianapolis, IN 46278
317-328-2991

Applicator: James Eaks
Robert Stalets
Green Scene, Inc.
P.O. Box 248
Fortville, IN 46040
317-326-8888

Registered Technician
Certified Applicator
Licensed Business

1. On July 14, 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 Paul Smith. I observed the following during my on-site investigation:
 - a) Tips of spruce trees were curled and brown (see figure #1).
 - b) Pine needles are "balled up" and brown (see figures #2).
 - c) Boxwood is browning throughout (see figures #3 & #4).
2. I took the following photos depicting injured/damaged vegetation:



Figure #1



Figure #2



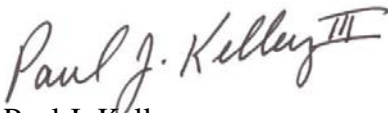
Figure #3



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) Pine
 - c) Boxwood
4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample from spruce tree

- b) Vegetation sample from boxwoods
 - c) Composite soil from turf
 - d) Composite soil dripline
5. According to a report from the PPDL, “There was no evidence of disease on the sample submitted (blue spruce, maple, boxwood, and shrub 2-needle pine). Spruce: some spruce spider mite eggs present but mites are not responsible for the tip dieback, curling and twisting of needles. Boxwood: The sample had twisted and distorted leaves and dead tips that can’t be explained by disease or insect injury. Photo of boxwood showing whole plants dying and symptoms on the sample sent in suggest possible herbicide injury. Leaf cupping seen in the photos of the other boxwoods that remained relatively healthy is due to boxwood psyllid injury, which will not cause significant harm in most cases. The samples of pine, spruce, and boxwood (and pictures of these plants and redbud and burning bush) submitted show symptoms that are associated with injury caused by 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 spruce tree | 116 PPB |
| b) Vegetation sample from boxwoods | 47 PPB |
| c) Composite soil from turf | 0.66 PPB |
| d) Composite soil drip line | 2.1 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 April 12th, 2011, at the rate of 0.1oz / 1000 square feet 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

Date: November 9, 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: November 22, 2011