

CASE SUMMARY

Case #2011/1137

Complainant: Joe Howe
3683 Lakeshore Ct
Greenwood, IN 46143
317-627-0562

Applicator: Jason Welty
Greenleaf Landscaping, Inc.
788 S. Runyon Rd
Greenwood, IN 46143
317-881-4566

Registered Technician
Licensed Business

1. On July 11, 2011, I, Agent Jay Kelley of the Office of Indiana State Chemist (OISC) performed an investigation at the Willow Lakes East subdivision's common area in response to a claim of injury/damage to non-target trees and shrubs possibly resulting from exposure to the herbicide Imprelis. I observed the following during my on-site investigation:
 - a) Tops of pine and spruce were curled. See figure 1.
 - b) Clumped and twisting of needles. See figure 2.
 - c) Euonymus and willow show cupping and distortion of leaves. See figures 3 and 4.
2. I took the following photos depicting injured/damaged vegetation:

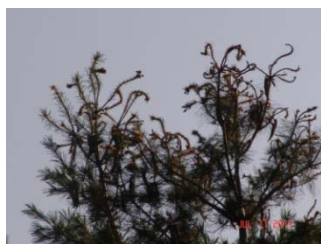


Figure #1



Figure #2



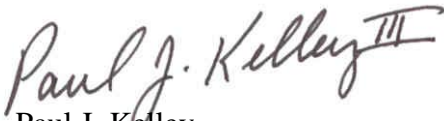
Figure #3



Figure #4

3. I collected the following vegetation samples from visibly impacted non-target vegetation for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL).
 - a) *Spruce*
 - b) *Pine*
 - c) *Willow*
 - d) *Euonymus*
4. At the site I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample from weeping willow.
 - b) Vegetation sample from Evergreen.

- c) Vegetation sample from other ornamentals.
 - d) Composite soil sample from turf.
 - e) Composite soil sample from drip line.
5. According to a report from the PPD, “No infectious disease or insect pest was found to be associated with the distortion observed on the spruce, pine, euonymus and willow samples submitted. Spruce spider mites were found on discolored, inner needles of the spruce sample and marssonina leaf spot was confirmed on the willow leaves. Symptoms that are typically found to be associated with injury caused by a synthetic auxin (growth regulator type) herbicide 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, and irregular size and shape (usually smaller than normal) of new leaves. These symptoms were present on the branch samples submitted.”
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:
- | | |
|--|----------|
| a) Vegetation sample from weeping willow. | 36 PPB |
| b) Vegetation sample from Evergreen. | 27 PPB |
| c) Vegetation sample from other ornamentals. | 5.6 PPB |
| d) Composite soil sample from turf. | 0.86 PPB |
| e) Composite soil sample from drip line. | BDL |
- 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 21, 2011, at the rate of 5.5 oz/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

Date: August 8, 2011

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. On August 12, 2011, a letter was sent to E.I. duPont de Nemours and Company, Inc. proposing cancellation of the registration for Imprelis Herbicide, EPA registration number 352-793, for distributing a pesticide product with label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation.



George N. Saxton
Compliance Officer

Final Date: September 13, 2011