CASE SUMMARY

Case #2011/1108

Complainant: Purdue Federal Credit Union

1557 Win Hentchel Blvd West Lafayette, IN 47906

Applicator: Jeff Walden Certified Applicator

A Beautiful Lawn 9205 McCombs Ct. Lafayette, IN 47909 765-714-9466

- 1. On June 28, 2011, I, Agent Kevin W. 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 Mr. Jeff Walden. I observed the following during my on-site investigation:
 - a) Tops of spruce trees were curled
 - b) Characteristic spruce spiraling of symptoms
 - c) Twisted and necrotic needles
- 2. I took the following photos depicting injured/damaged vegetation:







Figure One

Figure Two

Figure Three







Figure Four

Figure Five

Figure Six

- 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) Honey Locust
 - c) Maple
- 4. At the site I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Soil sample from parking island
 - b) Green pine sample
 - c) Pine sample Norway
 - d) Maple sample
 - e) Locust sample
- 5. According to a report from the PPDL, "There was no evidence of disease on the spruce sample submitted. The physical sample lacked the characteristic twisting of needles seen on other samples damaged by synthetic auxin (growth regulator type) herbicides, however, twisted, discolored and distorted needles were seen in the pictures. The extensive dieback of one tree seen in the pictures is unlikely to be caused by a disease or insect problem, especially if symptoms developed rapidly. 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)	SS-PI Soil Sample Parking Island	<i>32 PPB</i>
b)	GP-1 Green Pine Sample	<i>3.4 PPB</i>
c)	PS-1 Pine Sample Norway	25 PPB
d)	MS-1 Maple Sample	BDL
e)	LS-1 Locust Sample	9.6 PPB

7. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied at the rate of 4 oz per acre a Z-Spray ride on applicator.

Kevin W. Neal

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).

Compliance Officer

Final Date: September 26, 2011

Date: August 15, 2011