

CASE SUMMARY

Case #2011/1152

Complainant: Lee Clouse
HDG Mansur Communities, Inc.
10800 Club Point
Fishers, IN 46037
317-845-9300
Britton Falls by Del Webb

Property Manager

Applicator: Hittle Landscaping
17778 Sun Park Drive
Westfield, IN 46074
317-896-5697

1. On July 8, 2011, Agent George Saxton, Agent Matt Pearson, and I, all of the Office of Indiana State Chemist (OISC), performed an investigation at the common area of Britton Falls by Del Webb. The investigation was 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 Lee Clouse, the area community manager. I observed the following on the spruce trees during my on-site investigation:
 - a) Browning throughout the branch and needle drop (see figure 1 & 2).
 - b) Curling at the top of tree (see figure 3).

I observed the following on the maple trees during my on-site investigation:

- a) Leaves were red/ rusty in color (see figure 4 & 5).
- b) Galls on leaves (see figure 4).
- c) Bark cracking and splitting on tree trunk (see figure 5).

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



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

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) Maple
4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
 - a) Vegetation sample
 - b) Soil sample from lawn (composite)
 - c) Soil inside the drip line

NOTE: A decision was made by OISC management to not analyze the environmental samples in this case. That decision was based on: 1) the large number of similar environmental samples already analyzed that had produced representative results consistent with the presence of visible exposure symptoms; 2) the expertise developed by OISC investigators through repetition to identify Imprelis exposure symptoms without chemical confirmation; and 3) the large number of similar cases being investigated by OISC at the same time.

5. The PPDL report stated the following:
"There was no evidence of disease nor significant mite damage on the samples submitted."

Spruce: The physical samples showed tip dieback but no twisting and distortion of the needles. The dieback shown might be related to the extended dry weather in many parts of the state last summer and fall, however symptoms are not directly diagnostic for this problem.

The spruce pictures from the landscape showed some bending and distortion of upper branches. We can't rule out an association with injury that might be 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.

Maple: The maple sample had red discoloration of leaves, a symptom that may be associated with many different stress factors. The pictures show extensive bark cracking on at least 2 different trees. The cracking has been present for at least a year and may due to any of several types of injury. Trees should probably be removed as they will not recover well enough to become desirable trees."

6. According to the application information collected from Hittle Landscaping, Imprelis Herbicide (EPA Reg. No. 352-793) was applied on May 10, 2011, at a rate of 4.5 fluid ounces per acre with a ride on sprayer.



Elizabeth C. Carter
Pesticide Investigator

Date: September 23, 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: October 18, 2011