## **CASE SUMMARY**

Case #2011/1189

**Complainant:** Susan & Richard Gates

1014 Rosemont Carmel, IN 46032

**Applicator:** James Eaks **Business:** Green Scene, Inc.

P.O. Box 248

Fortville, IN 46060 317-326-8888

Registered Technician Licensed Business

- 1. On July 11, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the above listed address in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis herbicide. During my on-site investigation, I observed two Norway spruces in the backyard which exhibited twisted tips and brown needles on new growth.
- 2. I photographed the site documenting the symptoms I observed:









Figure 3

Figure 4

- 3. I collected plant samples from spruces exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
- 4. Environmental samples were collected for chemical analysis by the OISC Residue Lab. Specifically, I collected spruce foliage, a composite soil sample from the treated turf area and a composite soil sample from inside the drip lines of the spruces.

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 report from the PPDL for the samples submitted states, "No infectious disease or insect pest was found to be associated with the dieback observed on the spruce sample submitted. Branch dieback can be caused by a number of stresses including site, environmental, cultural and chemical related factors. Symptoms that are typically found to be associated with injury caused by a synthetic auxin (growth regulator type) herbicide usually 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, irregular size and shape (usually smaller than normal) of new leaves. The prospects for recovery from herbicide damage depend on the dose and the extent of the damage. Don't give up on herbicide damaged trees and shrubs too quickly."
- 6. According to application information collected from Green Scene, James Eaks applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on May 19, 2011, at the rate of 0.1oz /1,000 square feet using hose-end application equipment.

Date: October 5, 2011

Final Date: October 25, 2011

Andrew R. Roth 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).

George N. Saxton

Compliance Officer