## **CASE SUMMARY**

Case #2011/1241

**Complainant:** Chris & Barb McEvoy

5941 McKinges Circle Carmel, IN 46033

**Applicator:** Justin Cash

**Business:** Green Scene, Inc. P.O. Box 248

Fortville, IN 46060 317-326-8888

Certified Applicator Licensed Business

- 1. On July 15, 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. I observed mature Norway spruces with distorted tips and dieback; one had extensive browning and was dropping needles. An Alberta spruce had some discolored new growth.
- 2. I photographed the site documenting the symptoms I observed:









Figure 4

Figure 3

3. I collected plant samples from Norway and Alberta spruces exhibiting symptoms for submission 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 Norway spruce foliage, a composite soil sample from the treated turf area and a composite soil sample from inside the drip lines of the Norway 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, "Norway spruce: There was no evidence of significant mite or insect injury or disease on the sample submitted. The sample (and pictures) submitted show symptoms that are associated with injury 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. Dwarf Alberta spruce: Spruce bud scale was found on the Alberta spruce. Most of the eggs have hatched and crawlers are settling on the needles. An application of imidacloprid or dinotefuran will control the problem. Old spruce spider mite injury and eggs were present. I would suggest monitoring for this pest in late August when the weather cools. Herbicide injury to the dwarf spruce can't be ruled out but the scales and spider mites are causing significant damage."
- 6. According to application information collected from Green Scene, Justin Cash applied Imprelis Herbicide (EPA Reg. No. 352-793) to the property on May 19, 2011, at a rate of 0.10 oz /1,000 square feet using hose-end equipment.

Date: October 28, 2011

Final Date: November 22, 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