CASE SUMMARY

Case #2011/1222

Complainant: Shawn Marquadt
8914 Arbor View Court
Fort Wayne, IN 46835

Applicator: Matt Lordier
Solow Services
9510 Skipjack Cove
Fort Wayne, IN 46835
260-413-0523

Certified Applicator
Licensed Business

1. On July 12, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at the property listed above in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. At the site, I observed distorted tips, brown needles and tip dieback on new growth on a mature blue spruce in front and a smaller one in the side yard. A Norway in the back yard had extensive browning and was dropping needles. An oak had chlorotic leaves and a river birch had distortion and leaf curl.

2. I photographed the site documenting the symptoms I observed:

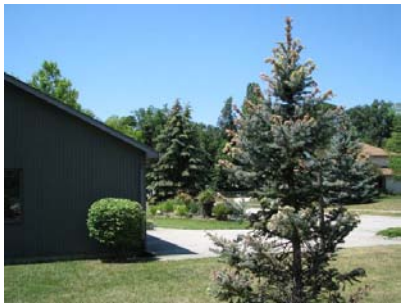

Figure 1

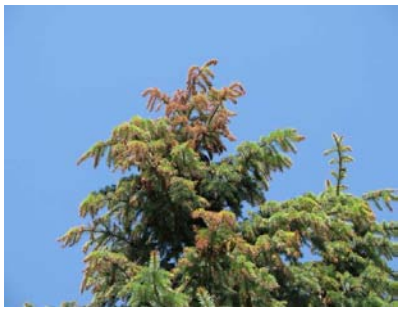

Figure 2

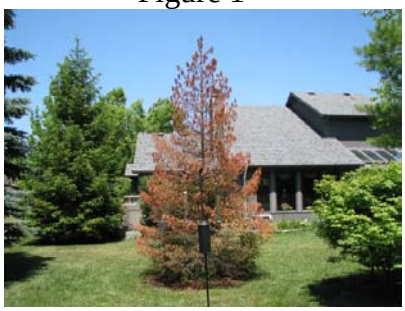

Figure 3

Figure 4

3. I collected plant samples from Norway and blue spruce, oak and river birch exhibiting symptoms and turned them in to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.

4. 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 Norway spruces for chemical analysis by the OISC Residue Lab.

   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 indicates, "*No infectious disease or insect pest was found to be associated with the distortion and dieback observed on the spruce sample. No infectious disease was found to be associated with the yellowing and spotting on the oak sample. Yellowing and leaf spotting on pin oak can be caused by iron deficiency and root stress. A few insect galls were noted on the leaves. No infectious disease or insect pest was found to be associated with the petiole distortion and leaf curl observed on the sample of river birch. Symptoms of leaf curl and distortion, such as those observed on the samples submitted, can 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.*"

6. According to application information collected from Solow Services, Matt Lordier applied Imprelis Herbicide (EPA Reg. No. 352-793) by hand on May 6, 2011, at a rate of 1.0oz/1,000 square feet.

Andrew R. Roth
Pesticide Investigator

Date: November 4, 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: November 18, 2011