CASE SUMMARY

Case #2011/1286

Complainant: Craig McKendree

7373 Rooses Way Indianapolis, IN 46217

Applicator: Jason Welty

Scott Black Greenleaf Landscaping 788 S. Runyon Road

Greenwood, IN 46143

317-373-9060

Certified Applicator Certified Applicator Licensed Business

- 1. On July 26, 2011, I, Agent Andy Roth of the Office of Indiana State Chemist (OISC), performed an investigation at Emerald Highlands in response to a claim of injury/damage to non-target trees possibly resulting from exposure to Imprelis Herbicide. Emerald Highlands is comprised of three housing additions (Killarney Hills, Emerald Hills and Shannon Lakes) with common-area frontages and entrances on three major roads. Craig McKendree is the homeowners' association contact. During my on-site investigation, I observed numerous white pines exhibiting twisted and stunted new growth, brown needles and premature needle drop. Norway spruces were in various stages of decline, most of which exhibited brown, twisted new growth and tip dieback; others exhibited brown needles in a spiraling pattern up the tree. I also observed distorted, browned tips on bald cypress near the pond at Shannon Lakes (Figure 5) and cupped, powdery leaves on sycamore (Figure 6). The vast majority of the affected trees were evergreens.
- 2. I photographed the site documenting the symptoms I observed:



Figure 4 Figure 5 Figure 6

- 3. I collected a plant samples from Norway spruce, white pine, bald cypress and sycamore exhibiting symptoms and submitted them to the Plant & Pest Diagnostic Lab (PPDL) at Purdue for assessment.
- 4. The report from the PPDL for the sample submitted indicates, "There was no evidence of significant mite or insect injury or disease on the samples (sycamore, white pine, bald cypress, spruce) submitted. The samples and images showed symptoms that are typically found to be associated with injury that can be caused by a synthetic auxinic (growth regulator type) herbicide. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; dieback of distorted shoot tips; 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. If injury results in new shoot dieback in conifers there will be no regrowth this season. The white 'fuzz' on the sycamore leaves and stems is normal --these are plant hairs known as trichomes."
- 5. According to application information collected from Greenleaf Landscaping, Jason Welty and Scott Black applied Imprelis Herbicide (EPA Reg. No. 352-793) to turf areas and the Emerald Highlands properties over a 3-day period from April 16 to April 18, 2011, at the rate of 4.5 oz /acre using ride-on application equipment.

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).

Date: October 4, 2011

Final Date: October 25, 2011

George N. Saxton
Compliance Officer