

## CASE INVESTIGATION SUMMARY

**Company:** Hemingway Orchard      **Licensed:** PPA 44366

**Origin of Case:** A series of complaint calls to BPC from one abutting property owner, and a single complaint from a second abutter

**Background:** The previous owner of Hemingway Orchard sold two house lots along the road frontage. These lots are essentially part of the orchard with no physical barriers. This owner had a good working relationship with his new neighbors. He sold the remainder of the orchard to Dennis and Jan Barker, who resumed operation of the orchard.

**Summary of Allegation(s):** The Board received five complaint calls from the two abutters between 2008 and 2011. The first complaint, in 2008, regarded notification; the four other complaints alleged pesticide drift. In two incidents, off-target residues were detected.

- 6-4-2008 – Bradley Cadman, abutting owner complained about the notice he had received regarding application
- 4-25-2010 – Cadmans and the other abutter, Kim Pelletier, alleged drift from a pesticide application at the orchard; off target residues were detected
  - **Pesticide(s) Involved:** Drexel Damoil, Imidan 70-W Insecticide, Sovran Fungicide, Lorsban 75WG and Polyram 80DF
- 5-10-2011 – Cadman alleged drift from a pesticide application at the orchard; no off-target residues were detected
- 5-23-2011 – Cadman alleged drift from a pesticide application at the orchard; no off-target residues were detected
- 6-9-2011 – Cadman alleged drift from a pesticide application at the orchard on 6-4-2011; off-target residues were detected
  - **Pesticide(s) Involved:** Captec 4L Fungicide, Imidan 70-W Insecticide

**Staff Action:** A Board inspector visited the site after each complaint and collected residue samples during each of the last four visits. Off-target residues were detected from the 4-25-2010 and the 6-9-2011 samples. Since the Barkers were attempting to spray trees abutting the property line, the staff provided some suggestions for ways to continue to operate the orchard while minimizing off-target drift. Efforts to settle the violations have been unsuccessful to date. An inspector followed up with on-site inspections including interviews and sampling.

### **Samples collected**

- 4-26-2010: Three samples from abutting property one (Cadman), one sample from abutting property two (Pelletier), one sample from the orchard
- 6-9-2011: Three samples collected from abutting property (Cadman), one sample from the orchard

**Staff Findings:** The staff assessment indicates it would be virtually impossible to spray the entire orchard using an airblast sprayer without resulting in off-target residues given the complete lack of physical separation between the orchard trees and the abutting properties. The Barkers began incorporating a buffer sometime in 2011, which apparently provides some relief, but it is not always adequate to prevent off-target residues.

The staff and Assistant Attorney General Randlett have concluded that the off-target residues detected in a sensitive area likely to be occupied constitute prima facie evidence that the applicator failed to minimize drift to

the maximum extent practicable. A summary of the sample results for the two alleged violations are outlined below.

- **4-26-2010 lab results** – asked lab to analyze for Lorsban and Imidan; all samples positive for both
  - Abutting property one:
    - wipe car windshield: Lorsban 3.43 ug, Imidan 0.475 ug
    - wipe top of storage bin: Lorsban 2.33 ug, Imidan 0.0972 ug
    - vegetation from lawn: Lorsban 0.656 ppm (9.68% of target), Imidan 0.035 ppm (19.77% )
  - Abutting property two:
    - vegetation from lawn: Lorsban 0.249 ppm (3.67% target), Imidan 0.0098 ppm (5.53%)
  - Orchard sample:
    - Lorsban 6.77 ppm, Imidan 0.177 ppm
- **6-9-2011 lab results** –asked lab to analyze for Imidan; all samples positive for Imidan
  - Abutting property:
    - vegetation lawn by air intake to house : Imidan 0.275 ppm (2% of target)
    - vegetation lawn by garage: Imidan 0.662 ppm (4.8% of target)
    - wipe parked truck tool box on lawn by garage: Imidan 0.482 ug
  - Orchard sample:
    - vegetation from orchard : Imidan 13.9 ppm

**Attachment(s):**

- Consent Agreement with cover letter dated 7-7-2010, for first drift incident (unresolved)
- Consent Agreement & cover letter dated 8-4-2011, combining first and second incidents (unresolved)
- Summary sheet showing dates and attempted negotiations
- Use/misuse inspection reports for above incidents
- Inspector narratives and letters
- Letters from the Barkers
- Photo exhibits related to the cases
- Lab reports for results of sample analyses.

**Applicable Citations of Law:**

CMR 01-026 Chapter 22 Section 2(B)

Weather Conditions

- II. Pesticide application must cease immediately when visual observation reveals or should reveal that spray is not being deposited on target.

CMR 01-026 Chapter 22 Section 2(C)

Identifying and Recording Sensitive Areas

Prior to spraying a pesticide, the applicator must become familiar with the area to be sprayed and must identify and record the existence, type and location of any Sensitive Area located within 500 feet of the target area.

Applicators shall prepare a site map or other record, depicting the target area and adjacent Sensitive Areas. The map or other record shall be updated annually. The site map or other record shall be retained by the applicator

for a period of two years following the date of applications and shall be made available to representatives of the Board upon request. This requirement shall not apply to commercial application categories 3B (turf), 3A (ornamental tree and plant) or 7A (structural general pest control applications).

CMR 01-026 Chapter 22 Section 4(A)

Pesticide applications shall be undertaken in a manner which does not result in off-target direct discharge of pesticides, unless prior authorization and consent is obtained from the owner or lessee of the land onto which such discharge may occur in a manner consistent with the pesticide label.

CMR 01-026 Chapter 22 Section 4(B)

- I. General Standard. Pesticide applications shall be undertaken in a manner which minimizes pesticide drift to the maximum extent practicable, having due regard for prevailing weather conditions, toxicity and propensity to drift of the pesticide, presence of Sensitive Areas in the vicinity, type of application equipment and other pertinent factors.
- II. Prima Facie Evidence. Pesticide residues in or on any off-target Sensitive Area Likely to Be Occupied resulting from off-target drift of pesticides from a nearby application that are 1% or greater of the residue in the target area are considered prima facie evidence that the application was not conducted in a manner to minimize drift to the maximum extent practicable. The Board shall review the site-specific application checklist completed by the applicator and other relevant information to determine if a violation has occurred. For purposes of this standard, the residue in the target area, and the residue in the Sensitive Area Likely to Be Occupied, may be adequately determined by evaluation of one or more soil, foliage or other samples, or by extrapolation or other appropriate techniques.

**Staff Recommendation(s):** Since the staff has been unable to reach a settlement, it recommends referring the case to the Office of the Attorney General.