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**DIVISION III CASE NO. 361454**

**IN THE COURT OF APPEALS OF THE STATE OF  
WASHINGTON  
DIVISION THREE**

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**AG AIR FLYING SERVICES, INC. AND LENARD BEIERLE,**

**Appellants**

**v.**

**WASHINGTON STATE DEPARTMENT OF AGRICULTURE**

**Respondent**

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**ON APPEAL FROM THE FINAL ORDER OF THE DIRECTOR OF  
THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE  
FOLLOWING JUDICIAL REVIEW BY THE SUPERIOR COURT  
OF GRANT COUNTY**

**The Honorable John Antosz**

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**APPELLANTS' OPENING BRIEF**

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## **I. INTRODUCTION**

On August 27, 2014, Lenard Beierle/Ag Air Flying Service, Inc. made an aerial application of pesticides to a potato field east of Mattawa, WA on Highway 24. It was subsequently alleged that this aerial application drifted between .6 and .7 miles and exposed farm workers to the pesticide, resulting in injury to the farm workers. Mr. Beierle asked the Department of Agriculture (the "Department ") to investigate. Following its investigation, the Department issued a Notice of Intent to Assess Civil Penalty (the "NOI") which alleged that Mr. Beierle/Ag Air Flying Service violated RCW 15.58.150(2)(c), WAC 16-288- 1500(1)(b), and WAC 16-288-1200(1). The NOI imposed a \$7,500 fine and 90-day suspension.

Mr. Beierle/Ag Air Flying Service appealed and an adjudication before ALJ Courtney Beebe was held. Judge Beebe issued an initial order that upheld the NOI but reduced the fine and suspension. The initial order was appealed by both parties. Following appeal and reconsideration the Director of the Department issued the Final Order that is the subject of this appeal.

## **II. ASSIGNMENT OF ERROR AND ISSUES PERTAINING TO THE ASSIGNMENT OF ERRORS**

- A. There are errors in Findings of Fact numbers 4, 8, 9, 14, 15, 16, 23, 24, 25, 29, 39, 40, 42, 43, 44, 46, 48.

- B. There are errors in Conclusions of Law 7, 14, 15, 16, 17, 18, and 28 and finding that by a preponderance of the evidence that Lenard Beierle/Ag Air Flying Service violated RCW 15.58.150(2), WAC 16-288-1500(1)(b), and WAC 16-288-1200(1) (Conclusion of Law 28) and affirming the NOI.

Is there sufficient evidence when the record as a whole is reviewed to find that the Appellants' application of pesticides violated a law, statute, ordinance or pesticide label?

- C. Issues pertaining to the assignment of errors.

1. **Finding of Fact 4: Corrected to read: The next field to the west of the Timothy Field, also paralleling Road 24 SW, is the Grant 24 apple orchard ("Apple Orchard").**

The finding of fact incorrectly describes the geography of the location where the incident occurred. Because of the distance the drift is alleged to have traveled and the time frame in which it would have had to travel does Finding of Fact 4 provide sufficient evidence to support the Final Order?

2. **Finding of Fact 8: Appellant used CP flat fan nozzles (40°) at 55 psi and 0° deflection with an air speed of 140 miles per hour. The configuration produces a droplet volume mean diameter of 350 microns which is an ASAE medium classification droplet size. The same nozzle also produces droplet sizes that are less than 228 microns in 10% of the spray volume, meaning 10% of the droplets in the spray volume are less than 228 microns which could remain suspended in the air column longer and also be more prone to drift. The wingspan of the aircraft measured 56' and total boom length measured just less than 60% of the total wingspan from the outside nozzle tip to outside nozzle.**

According to the testimony of Dr. Wolf, the volume of droplets of less than 228 microns is actually 5.7% not 10%. CP 1526. Should the

finding of fact be corrected to accurately reflect trial testimony? Does

Finding of Fact 8 provide sufficient evidence to support the Final Order?

3. Finding of Fact 9: **At the time of application the Appellant recorded the wind as coming from the SE at 165 degrees, at a speed of 1 to 2 mph. Appellant verified the wind direction with smoke and noted "no workers present or adjacent." (Department's Exhibit 8.)**

The Work Order indicated "no workers present" (CP 1791).

However, Mr. Beierle testified he observed workers north across Highway 24 in the grapes (Southwest corner, just north of Highway 24). CP 1220.

Should the finding of fact be corrected to accurately reflect the testimony at trial? Is Finding of Fact 9 sufficient evidence to support the Final

Order?

4. Finding of Fact 14: **Corrected to read: Between approximately 6:30 AM and 7:00 AM on August 27, 2014, 68 farm workers for Ag Management ("Farm Workers") arrived for fieldwork at the Apple Orchard. The Farm Workers were assigned to two crews, one led by David Ramirez and one led by Alfonso Aguilar. The Farm Workers drove east on Road 24 SW and parked vehicles on the north edge of the Apple Orchard on or near Road 24 SW. The Farm Workers began work tying vines on the north-eastern and north-western rows of the Apple Orchard. The Farm Workers wore long pants, long sleeved shirts, gloves, hats, sunglasses and bandannas around their necks.**

The workers were located in Rows 37 and 75(CP 1145-1145)

which is more specific that "north-eastern and north-western rows of the Apple Orchard." Should the finding of fact be corrected to accurately reflect where the farm workers were actually located in the Apple

Orchard? Is Finding of Fact 14 sufficient evidence to show where the Farm Workers were located to support the Final Order?

5. Finding of Fact 15: **At approximately 8:30 AM or shortly thereafter, on August 27, 2014, Mr. Aguilar drove east bound on Road 24 SW past the Target Field. Mr. Aguilar drove an Ag Management pick-truck. The truck was sprayed with pesticide when the Appellant's plane sprayed the Target Field edge from east to west.**

Is there sufficient evidence to find that the truck driven by Mr. Aguilar was sprayed by the Appellant?

6. Finding of Fact 16: **Corrected to read: Sometime around 8 AM Farm Workers saw the airplane piloted by Appellant and became ill almost immediately upon smelling a strong odor. The Farm Workers left the Apple Orchard between 8:15 AM and 8:30 AM and returned to the Grant 24 shop located to the east of the Target Field complaining of scratchy eyes and throats, respiratory discomfort, dizziness, skin rash and nausea. The Farm Workers were instructed to go home or seek medical attention, change their clothes, shower, in return for work at 11:00 a.m. if they felt able to work.**

Finding of Fact 16 is not supported by the evidence submitted at trial. Should Finding of Fact 16 be changed to accurately reflect evidence submitted at trial. Does Finding of Fact 16 provide sufficient evidence to support the Final Order?

7. Finding of Fact 22. **The Appellant and the Department conducted a simulated fly over on September 8, 2014. During the simulated fly over Department investigator Matt West recorded a video while standing in the approximate location of the Farm Workers. The video does not show any leaking from the Appellant's nozzles, and the Appellant's plane is visible from the Apple Orchard. (Exhibit 19).**

Appellant agrees that the video was made, however, the evidence at trial indicated there were farm workers were working down in rows 37 and 75 The statement in the Finding of Fact that the video was recorded with Matt West "standing in the approximate location of the Farm Workers" is only partially factually supported.

8. Finding of Fact 23: **Corrected to read: Weather data from the Washington State University AgWeatherNet Mattawa station which is near the Apple Orchard and Target Field, recorded the airspeed between 7:45 AM and 8:45 AM on August 27, 2014 as averaging between 1.1 mph and 3.7 mph, with gusts of 4.2 mph to 5.3 mph the wind direction was blowing from the NE to E.**

The AgWeatherNet Mattawa station is approximately 3 miles SE of the Target Field. CP 1702. The finding that these weather stations are "near" is not a finding of fact but an opinion. Is wind speed and direction readings from a weather station that is 3 miles distant from target field sufficient evidence of the direction and speed of the alleged drift sufficient to support the Final Order?

9. Finding of Fact 24: **Corrected to read: Weather data from the Washington State University AgWeatherNet Wahluke Slope station which is near the Apple Orchard and Target Field, recorded the airspeed between 7:45 AM and 8:45 AM on August 27, 2014 as averaging between 2.8 and 3.9 mph and gusting at 4.6 to 5.3 mph. The wind direction was blowing from the E and SE.**

The AgWeatherNet Wahluke Slope station is 2.2 miles NE of the Target field. CP 1703. The finding that this is "near" the Apple Orchard and Target field is an opinion not a fact. Is the wind direction/speed from a

weather station that is approximately 2.2 miles from the Target Field and Apple Orchard sufficient evidence to convince a trier of fact of the direction and speed of the alleged drift?

10. **Finding of Fact 25. The Department of Health investigated the effects of the incident on the Farm Workers. The Department of Health's conclusions were that 1 worker was classified as having a pesticide-related illness, 65 workers were classified as having a probable pesticide related illness, and 2 workers were classified as having insufficient information to classify. All but 2 workers reported experiencing more than one symptom: ninety-three percent (93%) reported respiratory symptoms; eighty-seven percent (87%) reported headaches; fifty-six percent (56%) reported gastrointestinal symptoms, and thirty-seven percent (37%) reported eye symptoms.**

The Department of Health's report was not submitted as part of the adjudication. The investigation results were included in the Case Management Report at CP 1720 but does not include any medical diagnosis. Further, gastrointestinal symptoms are not symptoms associated with exposure to any of the pesticides as indicated in Conclusion of Law 41. Are the Department of Health's conclusions that are not based on any medical record sufficient evidence that the farm workers were exposed to any of the pesticides applied to the Target Field?

11. **Finding of Fact 29: On August 27, 2014 , Investigator West also collected a swab sample from the vehicle window driven by Alberto Aguilar. The swab was placed in a paper bag, sealed, and placed into a plastic bag that was sealed.**

The issue with Finding of Fact 29 is the same as that of Finding of Fact 15.

12. Finding of Fact 39: **Corrected to read: The Farm Workers were freshly laundered clothing to perform work on August 27, 2014 and did not use pesticides containing Lambda near or around their homes or housing units prior to August 27, 2014.**

There is no testimony that the clothing samples collected were from clothing that were freshly laundered. In fact, Asst. Attorney Mitchell suggested that testimony be corrected to indicate that no one testified that the clothing had been laundered the day before the alleged incident. CP 862. Does this finding of fact provide sufficient evidence that the Farm Workers were drifted on by pesticides applied to the Target Field by the Appellant?

13. Finding of Fact 40: **The Farm workers observed the Appellant's plane flying near the area where they were working, but not directly over their work location.**

Several farm workers testified they saw the plane above or directly above them. Is the finding of fact sufficient to support the Final Order?

14. Finding of Fact 42: **The direction of the wind and the wind speed at the time of the pesticide application cannot be determined.**

Is a finding of fact that the trier of fact cannot determine the direction and speed of the wind sufficient evidence to persuade a fair-

minded person that there was an off-target application of pesticide that affected the farm workers?

15. Finding of Fact 43: **There is insufficient information in the record to determine whether either Mana Silencer or Oro WetCit has an identifiable odor when sprayed from an aerial applicator.**

There is sufficient information in the record to determine whether Silencer or WetCit has an identifiable odor, and sufficient evidence in the record to determine the odor smelled by the Farm Workers was not Silencer or WetCit, or Oberon. Even if one accepted as a verity that there is insufficient evidence to determine whether Man Silencer or Oro WetCit has an identifiable odor, is that sufficient evidence to persuade a fair-minded person that it was Mana Silencer/Oro WetCit that the farm workers were exposed to?

16. Finding of Fact 44: **Investigator West followed the Department's investigative procedures and manuals when collecting samples, conducting interviews, obtaining records, and collecting evidence. (Appellant's Exhibit 18.)**

Mr. West did not follow recommended sampling protocols. It is not argued that he didn't sufficiently sample the Target Field, however, Mr. West took one sample in the Timothy field that borders the Target Field on the West, approximately 1,000 feet from the edge of the Target Field. Mr. West did not take another sample between the Timothy Field sample, and the sample he took on the north edge of the Apple Orchard a

distance of over 2,000 feet. It is undisputed that Mr. West did not sample any of the Apple Tree foliage facing East, did not take samples were the workers were actually working inside of the orchard between 7:55 when Mr. Beierle made his first spray pass and when he left the Target Field. Is this finding of fact sufficient to persuade a fair-minded person that the Farm Workers were exposed to the pesticides applied to the Target Field during the time the farm workers were at the Orchard?

**17. Finding of Fact 46: Department personnel handled, transported, and analyzed the samples collected by Investigator West in accordance with the Department's procedures. There is no evidence of improper handling, tampering, or contamination of the sample.**

The Appellants do not dispute that the samples pulled by Mr. West were analyzed in accordance with Department procedures. However, the Appellants requested split samples of all the samples collected by Mr. West. One of the samples requested, Sample 14, was not provided to Mr. Beierle/Ag Air because the Department could not find the Sample. According to Mr. Firman, the Department's laboratory director, the lab could not find it and did not know what happened to it. CP 1182. Split samples of clothing are particularly important in showing whether the farm workers were actually drifted on by the pesticides applied by Mr. Beierle/Ag Air.

**18. Finding of Fact 48: The quantity of Lambda detected in the samples from the Department in the Appellant is inconsistent**

**due to sample usage in the sensitivity of laboratory equipment. As a result, there is insufficient evidence for factfinder to draw any conclusions as to the quantity of Lambda the Farm Workers were exposed to during the aerial application.**

There is sufficient evidence at trial to show that the farm workers were not exposed to a quantity of Lambda sufficient to have caused any of the injuries claimed by the Farm Workers or to show that the Farm Workers were even exposed to Lambda. Is this finding of fact sufficient to persuade a fair-minded person that the farm workers were exposed to the pesticides applied to the Target Field by the Appellant.

### **III. PROCEDURAL HISTORY**

On April 28, 2018, the a "Notice of Intent to Assess a Civil Penalty and to Suspend License and Notice of Rights and Opportunity for Hearing. CP 6. Lenard Beierle/Ag Air Flying Service timely requested a hearing. CP 15). The hearing was held in front of ALJ Courtney Beebe in Yakima, Washington on December 8-10, 2015 (CP 26) and telephonically on January 4, 2016. (CP 463). On April 27, 2016 the ALJ issued an Initial Order which found that Lenard Beierle/Ag Air Flying Service, Inc. violated RCW 15.58.150(2), WAC 16-228-1200(1) and WAC 16-28-1220(2) but modified the penalty to \$550 fine and nine-day license suspension. CP 555-574. Both parties petitioned the Director of the Department for Administrative Review before the May 17, 2016 deadline.

CP 555-574. On October 31, 2016 the Director issued his Final Order which upheld the Initial Order of the ALJ as to both the penalty and findings. CP 639-659. On November 29, 2016 Lenard Beierle/Ag Air Flying Service, Inc. filed a Petition for Judicial Review in the Grant County Superior Court, Cause No. 16-2-01394-1. On May 24, 2018, a hearing was held before Judge John Antosz who upheld the Final Order. On June 25, 2018, Lenard Beierle/Ag Air Flying Services filed a Notice of Appeal in Grant County Superior Court. The appeal was perfected on July 10, 2018.

#### **IV. STATEMENT OF THE CASE**

Lenard Beierle is an experienced pilot and is licensed by the Department of Agriculture. CP 1197.

Mr. Beierle was contracted via a Work Order (CP 1791) to apply 7.89 gallons of Silencer (active ingredient Lambda-Cyhalothrin) and 9.86 gallons of WETCIT (active ingredient Alcohol Ethoxylate) on 263 acres of potatoes. The 263 acres comprised two fields, one of 114 acres, what we will refer to as the "Target Field", and one of 149 acres. The application rate was 3.84 oz. per acre of the Silencer and 48 oz. per 100 gallons of the WETCIT. CP 1453-1454, 1791.

Mr. Beierle first application under the Work Order was on the Target Field. The Target Field is shown on Department Exhibit 11 (CP 001856).

Mr. Beierle utilizes a "Satloc" system on his airplane. The Satloc is the data recording system and logs data system on the airplane and logs the flight path of the plane and when the nozzles are open (spraying) and when they are closed (not spraying) and can be overlaid on Google Earth maps to give an accurate flightlog. CP 1212:22-001212:8, CP 1231-1232. CP 1890-1954 is the Satloc data overlaid on Google Earth map of the Target Field.

Mr. Beierle began his application on the Target Field at 7:54:04 a.m. with a smoke pass to gauge windspeed and direction and finished at 8:04.22. CP 1217-1218, 1229. He determined that the wind was out of the southeast, compass point 165°, at between one and two miles per hour. CP 1218, 1791, 1915. After completing the initial application at the Target Field, Mr. Beierle left the Target Field and applied the same mixture on another Jones field to the south/southeast. He returned to the Target Field at approximately 8:27 a.m. to finish that field. CP 1698. The only application that is claimed to have exposed the farm workers was the initial application on the Target Field.

At the time he began his initial application his spray booms had e approximately 10 gallons of the Oberon solution (Oberon diluted with water), with about 35 gallons of that solution mixed in with the Silencer and WETCIT in the plane's 600-gallon tank that was left from an earlier application that morning of a different field. CP 1388-89. His airplane was properly configured to comply with and was set up to be safer than the label requirements. CP 1108-1109, 1224, 1699. No evidence was presented that there was any mechanical malfunction of his equipment.

At the same time, working in an apple orchard between .6 and .7 miles to the west from the west edge of the Target Field were a number of farm workers. The farm workers saw the plane over their heads and immediately smelled a strong odor and began immediately to feel sick. CP 715-716, 760, 797.

Sometime between his second and third loads, a Mr. Ron Turner left Mr. Beierle a note to contact him. Mr. Beierle did so and was accused by Mr. Turner of spraying workers in the orchard. Because of the accusation, Mr. Beierle contacted the WSDA and requested the WSDA investigate. CP 1699.

The WSDA did an investigation headed up by Matt West. Following the investigation, the Department issued a Notice of Infraction

(NOI) alleging violations of RCW 15.58.150(2)(c), WAC 16-288-1500(1)(b), WAC16-288-1200(1) and WAC 16-288-1220(2). CP 5-15.

Mr. Beierle appealed the agency NOI. An adjudication was conducted by ALJ Courtney Beebe presiding. Her initial order was disputed by both the Department and the Petitioners. A review was conducted by the Department pursuant to applicable rule, with a Final Order being issued by the Department on October 31, 2016 that essentially parroted the initial order and upheld the NOI except for a reduction of the penalty. *See* Section IV *supra*.

#### **V. STANDARD OF REVIEW**

The Washington State Administrative Procedure Act (APA), RCW 34.05 governs judicial review of government agency decisions. RCW 34.05.570; *Ryan v. Dept't of Social & Health Servs.*, 171 Wn. Ap. 454,465, 287 P.3<sup>rd</sup> 629 (2012).

The appellate court plays the same role as the superior court, applying the APA standards of review directly to the agency record, not the record of the superior court without considering or reviewing the lower court decision. *E.g. Teamsters Local Union No. 117 v. Department of Corrections*, 179 Wn.App 110, 118 8, 317 P. 3d 511 (2014). The appellant need not assign error to the superior court's decision. *Waste Mgmt. of*

*Seattle, Inc. v. Utils. & Trsp. Comm'n*, 123 Wn. 2d 621, 632, 869 P.2d 1034 (1994).

Under the APA, relief may be granted where the agency's decision "is not supported by evidence that is substantial when viewed in light of the whole record before the court." RCW 34.05.570(3)(e). Substantial evidence is "evidence in sufficient quantity to persuade a fair-minded person of the truth of the declared premise." *Mowat Constr. Co. v. Dep't of Labor & Indus.*, 148 Wn.App. 920, 925, 201 P.3d 407 (2009). The evidence and reasonable inferences therefrom are viewed "in the light most favorable to the prevailing party. . ." *Erection Co. v. Dep't of Labor & Indus.*, 160 Wn.App. 194, 202, 248 P.3d 1085 (2011)."

## **VI. ARGUMENT**

### **A. General Statement.**

Mr. Beierle and Ag Air Flying Service, Inc. contend that contrary to the findings of Final Order and even when viewed in a light most favorable to the Department, there is insufficient evidence to support the Final Order.

At issue is whether an aerial application of pesticides by Mr. Beierle drifted between 3,400 and 4,000 feet in about 8 minutes and endangered the farm workers.

B. Findings of Fact

The Petitioners have assigned error to numerous Findings of Fact.

What follows is a discussion of why the Findings of Fact do not show sufficient evidence to support the Final Order.

1. Finding of Fact 4.

The geographical description of Finding of Fact 4 is not correct. Between the Timothy field and the Grant 24 Orchard is strip of land. West of that is an irrigation canal, west of the canal is a gravel road, west of the gravel road is an irrigation pond. West of the pond is another gravel road, then the Grant 24 orchard. CP 1860. Accurate geographical description would seem to be important given the distance that this drift would have had to cover in a very limited time.

2. Finding of Fact 8.

Finding of Fact 8 found that Mr. Beierle used CP flat fan nozzles (40°) at 55 psi and 0° deflection with an air speed of 140 miles per hour. The configuration produces a droplet volume mean diameter of 350 microns which is an ASAE medium classification droplet size. The same nozzle also produces droplet sizes that are less than 228 microns of in 10% of the spray volume, meaning 10% of the droplets in the spray volume are less than 228 microns which would could remain suspended in the air column longer and also be more prone to drift. The wingspan of the

aircraft measured 56' and total boom length measured just less than 60% of the total wingspan from the outside nozzle tip to outside nozzle. CP 641.

The finding is correct regarding the type of nozzle utilized. However, according to the testimony of Dr. Wolf, the Department's own expert, the volume of droplets of less than 228 microns is 5.7% not 10%. CP 1526. Droplet size is important. The smaller the droplet, the longer it may remain airborne and the greater the risk of drift.

Dr. Alan Felsot, an expert in pesticide drift and a toxicologist, testified extensively about Stokes Law, which deals with theoretical physics and describes the movement of particles in the air relative to gravity. CP 1283, 1294-1300. As part of his testimony, he utilized two slides that were on his computer that show drop rates for various size particles that were developed by a Professor Loren Bode from the University of Illinois. Based on those charts, in a 3 mile an hour wind a 200-micron particle would drop vertically 10 feet (the height at which Mr. Beierle was spraying) in two to four seconds and would move 30-50 feet horizontally in that time. A 100-micron particle would move horizontally 70 to 80 feet while dropping vertically 10 feet. CP 1295-1299. This is amply demonstrated by the samples taken by Matt West. CP1021-1023.

Taking all the windspeeds and directions that could have possibly pushed the products towards the farm workers in the orchard, it is improbable that the pesticides would have moved between .6 and .7 miles (3,600-4,000 feet) in the timeframe in which the workers smelled the odor and became ill.

3. Finding of Fact 9

Finding of Fact 9 held that at the time of application Mr. Beierle recorded the wind as coming from the SE at 165 degrees, at a speed of 1 to 2 mph. Appellant verified the wind direction with smoke and noted "no workers present or adjacent." CP 641. We agree that the Work Order (CP 1791) stated "No workers present or adjacent", however, Mr. Beierle testified that he observed workers north across Highway 24 in the grapes (Southwest corner, just north of Highway 24). CP 1220. None of the workers in the vineyard north of Highway 24 and the Target Field reported to Mr. West that they had been drifted on. CP 303.

4. Finding of Fact 14.

Finding of Fact No. 14 states that the farm workers began work tying vines on the north-eastern and north-western rows of the Apple Orchard. That is a vague general description. In reality the workers were in Rows 37 and 75 which is where Mr. West took samples and is more

specific than “north-eastern and north-western rows of the Apple Orchard.” CP 1024-1025.

Specification is important as the general testimony of the workers is that they were working down in the orchard, not along the northern edge of the orchard where the cars were parked along the gravel access road. Yet the Department failed to take any samples from the trees/foliage in the areas where the workers were actually working. The map showing where the Department took samples is at CP 1754-1757.

5. Finding of Facts 15 and 29.

Finding of Fact 15 and 29 should be read together as they deal with the same matter, i.e. that a truck driving by Mr. Aguilar was sprayed at about 8:30 a.m. CP 643, 645. Mr. Aguilar did not testify at the adjudication. Mr. Beierle testified that he did not spray the pickup truck driven by Mr. Aguilar. Mr. Beierle testified that looking at his flight data, he shut off spraying whenever there were vehicles on the road, as borne out by the Sat Loc data. CP 1476-1477. Additionally, as Mr. Beierle testified, the pictures contained in the Departments exhibits were of a Chevrolet pickup, not a Toyota pickup that was allegedly driven by Mr. Aguilar. Mr. Beierle also pointed out the substantial differences between droplet patterns on a windshield from an aerial application versus droplet patterns from other types of applications. CP 1476-1479.

6. Findings of Fact 23 and 24.

Findings of Fact 23 and 24 dealt with windspeed and direction based on AgWeatherNet stations (Mattawa and Wahluke Slope). CP 644-645. In both instances the Final Order characterizes the weather stations as being "near" the Target Field.

The AgWeatherNet Mattawa station is approximately 3 miles SE of the Target Field. CP 946, 947 and the Wahluke Slope is approximately 2.2 miles NW of the Target Field. CP 305. CP The finding that these weather stations are "near" is not a finding of fact but an opinion. CP 2086, a map created by Matt West, the investigator for the Department shows the various wind directions from the weather stations. His testimony about the map is found at CP 1055.

The distance of the weather stations is important because of the issue of drift and wind directions. You have conflicting data regarding wind direction with the Department cherry picking the wind direction it felt best supports its case. Further, the Department presumes that wind direction and speed at the weather stations remains constant for a substantial distance and that the wind direction and speed at the Target Field was the same as at the Mattawa station, with no evidence at all to support that proposition.

7. Finding of Fact 25.

Finding of Fact 25 deals with the report of the Department of Health to Matt West that the farm workers exhibited symptoms of illness consistent with exposure to pesticides. CP 645. The Department of Health's actual report was never presented at trial. All that we had from the Department of Health was the summary contained in the Case Management Report at CP 323-324. There were no medical records introduced. Gastrointestinal symptoms, which were apparently complained of by fifty-six percent of the farm workers are not symptoms associated with exposure to any of the pesticides as indicated in Conclusion of Law 41. CP 643.

8. Finding of Fact 36.

Finding of Fact 39 dealt with the farm workers clothing. There is no testimony that the clothing samples collected were from clothing that was freshly laundered. In fact, Asst. Attorney Mitchell stated that no one testified that the clothing had been laundered the day before the alleged incident, just that they were wearing "clean" cloths. CP 862.

What is also missing from this Finding of Fact is the fact that numerous other pesticides were found on the clothing samples, the Department's samples 13 and 15 (CP 1996-1999).

9. Finding of Fact 40.

Finding of Fact 40 finds that the Farm workers observed the Appellant's plane flying near the area where they were working, but not directly over their work location.

Several farm workers testified they saw the plane above or directly above them. Modesto Gomes testified she saw the plane three times, but that it was almost immediately after seeing the plane "go over" her that she smelled the odor and began coughing and sneezing. CP 725. Rocio Gomes testified that she saw the plane one time directly above her and immediately smelling the strong odor. CP 760. Irma Aguilar testified that she saw the plane overhead with something white coming out of it and immediately smelled a strong odor. CP 797.

10. Finding of Fact 42.

Finding of Fact 42 states that the direction of the wind and the wind speed at the time of the pesticide application cannot be determined. If it cannot be determined, then it is simply speculative for the Department to have determined that drift occurred during the scant minutes of Mr. Beierle's initial application. However, there substantial evidence in the record to determine wind direction and wind speed. Mr. Beierle testified as we have point out in this Brief that the wind was on a bearing of 165° out of the southeast towards the north at between 1 and 2 miles per hour. Mr. Beierle was the only witness that determined wind direction and

speed. The remainder of the wind direction and speed data were collected from weather stations several miles away as discussed in the objections to Findings of Fact 23 and 24 above.

11. Finding of Fact 43.

Finding of Fact 43 holds that there is insufficient information in the record to determine whether either Mana Silencer or Oro WetCit has an identifiable odor when sprayed from an aerial applicator. However, the Silencer MSDS sheet describes Silencer (Lambda-Cyhalothrin) as having an “aromatic of solvent” odor. CP 1881. The Oberon (Spiromesifen) MSDS describes Oberon as having a “musty earth odor.” CP 1875. The WETCIT MSDS sheet describes it as having a “light citrus” odor. CP 1888. The MSDS sheets describe the odor of the product as it is delivered in the container to the applicator, and the products are mixed with water for application on the fields. CP 1722 and 1859.

All the farm worker witnesses testified they smelled a “strong odor” and immediately became ill. None of the workers could describe the odor other than it was very strong, biting, worse even than sulfur. E.g., CP 716, 726, 761-762, 774. Gail Amos, the Department’s senior investigator testified that Lambda-cyhalothrin does not have much if any odor (CP 1001) and the WETCIT was basically odorless (CP 1001). Mr. West, the Department investigator testified that Lambda-Cyhalothrin has an odor but

not a strong odor and pegged it at about a 5 on the same 1-10 scale utilized with the workers (CP 1095) but made no effort to determine what might have caused the strong odor. CP 1095. Given the dilution of the products, the identified odor of the various products on the MSDS sheets, it is more reasonable than not that the strong odor smelled by the workers did not come from any of the products applied by Mr. Beierle.

12. Finding of Fact 44.

Finding of Fact No. 44 deals with the investigative procedures followed by Mr. West in relation to the Department's procedure manual which is found at CP 2052-2084.

The Investigator Manual discusses in detail the processes that should be utilized in sampling drift cases, and in particular collecting foliage samples. CP 2064-2065. It is not argued that he didn't sufficiently sample the Target Field, however, Mr. West took one sample in the Timothy field that borders the Target Field on the West, approximately 1,000 feet from the edge of the Target Field. Mr. West did not take another sample between the Timothy Field sample, and the sample he took on the north edge of the Apple Orchard a distance of over 2,000 feet. CP 1754-1757. Mr. West did not sample any of the apple tree foliage facing East and did not take sample where the workers were working when Mr. Beierle made his first spray pass.

Additionally, Gail Amos, the WSDA's senior investigator gave testimony as to the thoroughness of the Department and Mr. West's investigation particularly relating to the sampling. CP 1005-1007.

13. Finding of Fact 46.

Finding of Fact 46 essentially states that the Department handled, transported and analyzed the samples according to Department procedures. CP 648. However, the Department could not locate Sample 14, which was clothing. CP 11182-1183. As a result, Mr. Beierle was unable to conduct testing on that sample.

14. Finding of Fact 48

Finding of Fact 48 deals with an insufficiency of evidence to be able to determine the quantity of Lambda-Cyhalothrin the farm workers were exposed to during the aerial application. CP 648. We do not dispute the first sentence of Finding of Fact 48. However, there is sufficient evidence for a fact finder to draw conclusions as to the quantity of Lambda-Cyhalothrin the farm workers were exposed to during the aerial application.

No one disputes Lambda-cyhalothrin was found in the samples taken by both parties. The question in to parts is (i) whether it is more probable than not that a drift covered .6 to .7 miles during Mr. Beierle's

initial application and (ii) even if that happened were the farm workers exposed to enough pesticide to endanger them?

Our discussion of Finding of Fact 8 discusses Dr. Felsot's testimony regarding Stokes Law, which is used to describes the movement of particles in the air relative to gravity. We would refer the Court to that discussion rather than repeat it here.

With regard to the second part of the question, Dr. Felsot testified the drift model program that he utilized in preparing his report was AgDrift. AgDrift is utilized by the EPA, has undergone exhaustive testing, and has proven to be a very reliable predictor of drift. He explained that the purpose of doing the drift modeling is to determine the likelihood that someone would experience symptoms at different distances downwind from where the application occurred. CP 1253-1257. The modeling does not mean that there is no product in the air but shows that even if there is product in the air, it is not at a level sufficient to negatively affect the exposed person. CP 1272-1273.

Dr. Felsot discussed at length how the EPA tests products prior to licensing them to establish what is called the “lowest observable effects level.” There are no observable adverse effects from the product being tested below this dosage level. Once that no observable effects dose level has been established, the EPA builds in a safety factor of 100. In other

words, they divide the no observable effects dose level by 100 to come up with what is called the “acute reference dose level” or RfD. Exposure below the RfD is not considered harmful to humans. CP 1259-1263.

In doing the modeling, Dr. Felsot used a very conservative, “worst case” scenario. In this instance, he plugged in the airplane variables (nozzle count, type of nozzles, boom length, etc.) and used a 10 mile per hour wind (far in excess of any of the wind speeds reported) with the wind blowing directly at the workers. The modeling showed that within 150 feet of the spray swath, the potential exposure is already below the RfD and continues to drop the further out we go. CP 2030-2041.

Dr. Felsot concluded that at the distance between the application source and the workers, any potential exposure was not likely to have caused any adverse effect to the workers, not only from dermal exposure, but also from inhalation and regard to the amount of Lambda-cyhalothrin found on the clothing samples that given the amount of Lambda-cyhalothrin on the clothing, the workers wearing that clothing would have had to be very close and really within the spray swath, and unlikely that it came from the aerial application. CP 1281-1282.

**C. Conclusions of Law.**

Although not necessary, we did assign error to numerous  
Conclusions of Law.

1. Conclusion of Law 7.

Conclusion of Law 7 states that both Mana Silencer and Oro WetCit labels can be summarized as requiring the applicator to use extreme care to avoid contact with humans and to avoid drift. CP 650.

“Extreme care” is not a valid legal conclusion but is simply the opinion. The application requirements for aerial application for both products is clearly set out in the labels and can be more accurately characterized as “use common sense” and follow label directions. Further, there was no evidence presented by the Department that Mr. Beierle in any way applied the pesticides contrary to label instructions. The application requirements for the Silencer (Lambda-Cyhalothrin) are found at CP 1723-1724,

2. Conclusions of Law 14, 15 and 16.

Conclusions of Law 14, 15 and 16 need to be discussed together. Conclusion 14 states it cannot be determined by the evidence presented how the aerial application resulted in a pesticide drift, and Conclusion 15 elaborates on why the Department thinks there is sufficient evidence to support the conclusion that the farm workers were drifted on. Conclusion 16 discusses not applying pesticides in a manner that would harm humans. There is insufficient evidence to support these Conclusions of Law.

The application began just after 7:55 a.m. and concluded at 8:05 a.m. No evidence was presented that would allow a fair-minded person to conclude by a preponderance of the evidence how the pesticides drifted between .6 and .7 miles in the approximately 8 of the initial application minutes regardless of the windspeed and direction one elects to use. The consistent testimony of the farm workers was they saw the airplane above them and almost immediately smelled the strong odor and immediately began to be sick.

As we previously discussed, no one disputes Lambda-cyhalothrin was found in the samples taken by both the Petitioner and the Department. However, Conclusions of Law 14 and 15 completely ignore the testimony given by Dr. Alan Felsot, an acknowledged expert in pesticide drift and a toxicologist. I refer the Court to the earlier discussion on drift and levels of exposure.

Finding of Fact 41 was that the gastrointestinal symptoms were not identified as a reaction to exposure to Mana Silencer, Oberon or WetCit. The Farm Workers complained of gastrointestinal symptoms that are not consistent with exposure to Lambda-cyhalothrin/WetCit in their diluted application concentrations as per the labels. We do not dispute the symptoms described on the labels are similar to symptoms allegedly experienced by the Farm Workers. However, in reaching Conclusion 15

the Department ignores the gastrointestinal symptoms that were experienced by the farm workers at the same time. A fair-minded person is easily persuaded that given the additional gastrointestinal symptoms experienced by the farm workers it is more likely than not exposure to Lambda-cyhalothrin was not the cause of any of their illnesses.

Given the testimony of Dr. Felsot as pointed out above, it is more likely than not that even if Lambda-cyhalothrin did reach the area where the workers were, the workers would have been long gone before the Silencer/WetCit would have reached them and even if it had, the exposure would have been below the level that would cause the workers to have any adverse effects.

Mana Silencer and Oro WetCit labels provide that an application must avoid contact with human skin and eyes and be conducted under certain conditions to avoid drift. The Department concluded that the Appellant conducted the aerial application “inconsistent with labeling” in violation of RCW 15.58.150(2)(c). The Department presented no evidence that Mr. Beierle applied any product in a way that “will contact workers or other persons either directly or through drift” or that his application was conducted in anything other than “under certain conditions to avoid drift.”

According to the Silencer label, certain spray drift precautions should be taken for aerial applications: the application should be made

only if the wind direction favors on-target deposition; the wind should not exceed 15 mph; there should be no temperature inversions; medium or coarser spray nozzles should be used; the spray boom should be mounted so as to minimize drift caused by wingtip vortices, with the minimum practical boom length no exceeding 75% of the wing span; flight speed and nozzle orientation must be considered in determining droplet size; spray should not be released above 10 feet above the canopy unless aircraft safety requires it; if there is a cross wind, the swath is to be displaced downwind, and compensate for the displacement on the downwind edge by adjusting the path of aircraft upwind. CP 1723-1724. There is no evidence that Mr. Beierle violated any of these requirements. In fact, the evidence is completely to the contrary. The spray application was not outside the confines of the Target Field. CP 641. The spray boom was 60% of the wing span, shorter than label's 75% maximum required. CP 301-302, 641 and 1724. Mr. Beierle was using approved nozzles. CP 301-302. Wind speed was substantially below the 15-mph maximum safe wind speed of the label. CP 1723.

### 3. Conclusion of Law 17.

Conclusion of Law 17 finds that because the Farm Workers left work and sought either medical treatment or recovery time, one must conclude that Mr. Beierle applied pesticides "in such a manner as to

endanger humans and their environment in violation of WAC 16-228-1200(1)" and " ... caused damage or injury to humans ..." in violation of WAC 16-228-1220(2). CP 652.

There is no direct evidence that the Silencer/WETIT is what caused the Farm Workers to be ill. Finding of Fact 25 (CP 645) states that the Department of Health concluded that the farm workers had pesticide related illnesses of various sorts and classifications. However, nothing in the evidence presented at trial or in the Department of Health's conclusion identifies Silencer, Oberon, or WetCit as being the agents causing the symptoms and ignores that 56% of the workers experienced symptoms that were not consistent with pesticide exposure.

#### 4. Conclusion of Law 18.

Conclusion of Law 18 holds that by a preponderance of the evidence Mr. Beierle/Ag Air Flying Service, Inc. violated RCW 15.58.150(2), WAC 16-228-1200(1) and WAC 16-228-1220(2). We have discussed in this brief the fallacy of that Conclusion of Law.

The Department has not shown by a preponderance of the evidence that Mr. Beierle violated any of the cited laws and statues. As has been discussed above, the preponderance of the evidence based on correct findings of fact, and based on the testimony and evidence as discussed in this brief is:

- The alleged drift would have had to move between .6 and .7 miles in approximately 8 minutes and the Department presented no evidence to show how the drift occurred within the time frames reported by the witnesses for seeing the airplane, smelling the strong odor, and getting sick.
- The wind direction and speed from the only witness who was on site was that it was from 165° at 1-2 miles per hour.
- Mr. Beierle complied with all the application requirements of the labels, i.e. boom width, nozzles, windspeeds.
- The symptoms complained of by the Farm Workers include gastrointestinal illness, which are not consistent with exposure to Silencer and WetCit. Further the Department presented no medical evidence that it was any of the pesticides being applied by Mr. Beierle that caused any of the symptoms complained of by the Farm Workers.
- No Oberon (spiromesifen), which was in his boom at the beginning of the application and would have been the first product sprayed, and was also mixed in the tank, was found in the samples taken by WSDA or Mr. Beierle at the Apple Orchard or in the clothing worn by the Farm Workers. The only Oberon found was in the sole sample taken from the Timothy field and in the Target Field. One would expect to see Oberon at the

Orchard and on the clothing considering it was already in the booms and tank when the Petitioner began application of the Target field.

- Based upon Dr. Felsot's testimony and the EPA toxicology determinations, the Farm Workers could not have been exposed at a level that would have made them sick.

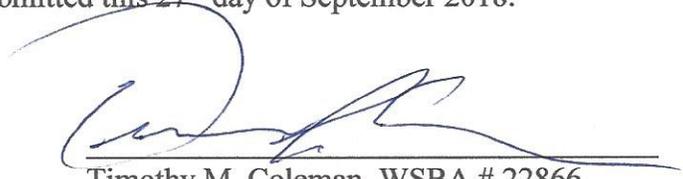
## **VII. CONCLUSION**

Considering all the record, it is more probable than not that Mr. Beierle did not violate RCW 15.58.150(2)(c) and WAC 16-288-1500(1)(b) by using the pesticide Silencer (active ingredient lambda-cyhalothrin) and the surfactant WetCit (active ingredient alcohol ethoxylate) contrary to label direction. Nor did he violate WAC 16-288-1200(1) by utilizing the pesticides in such a manner as to endanger humans and their environment because of an off-target movement by pesticides. Neither did he violate WAC 16-288-1220(2) by allowing an off-target movement of pesticides that allegedly injured sixty-six people.

We have shown by a preponderance of the evidence that the actual application was properly done regarding all the safety factors set out in the pesticide labels. There was no evidence of leaky nozzles, no evidence of any actual off target application. Mr. Beierle was within confines of the Target Field every time he pushed the trigger to start spraying, and he

relieve Mr. Beierle/Ag Air Flying Service, Inc. from all penalties associated therewith.

Respectfully submitted this 27<sup>th</sup> day of September 2018.

A handwritten signature in blue ink, appearing to read 'Timothy M. Coleman', written over a horizontal line.

Timothy M. Coleman, WSBA # 22866  
Attorney for Appellants

**COLEMAN LAW OFFICE PC**

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