# ALBERTA ENVIRONMENTAL APPEALS BOARD

## Decision

Date of Hearing – December 4, 2008 Date of Decision – January 5, 2009

**IN THE MATTER OF** sections 91, 92, 94, 95, and 98 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12;

-and-

**IN THE MATTER OF** an appeal filed by Royco Air Services (Ron Lazenby) with respect to Administrative Penalty No. 08/03-AP-SR-08/03 issued to Royco Air Services (Ron Lazenby), under the *Environmental Protection and Enhancement Act*, by the Director, Southern Region, Environmental Management, Alberta Environment.

Cite as: Royco Air Services v. Director, Southern Region, Environmental Management, Alberta Environment (5 January 2009), Appeal No. 08-011-D (A.E.A.B.).

**BEFORE:** Mr. Eric O. McAvity, Q.C., Panel Chair,

Dr. Steve E. Hrudey, Board Chair, and Mr. Gordon Thompson, Board Member.

**SUBMISSIONS BY:** 

**Appellant:** Mr. Ron Lazenby, Royco Air Services.

**Director**: Mr. Darren Bourget, Director, Southern

Region, Environmental Management, Alberta

Environment, represented by Ms. Erika

Gerlock, Alberta Justice.

**BOARD STAFF:** Mr. Gilbert Van Nes, General Counsel and

Settlement Officer; Ms. Denise Black, Board Secretary; and Ms. Marian Fluker, Associate

Counsel.

**WITNESSES:** 

**Appellant:** Mr. Ron Lazenby, Royco Air Services; Mr.

Jared Lazenby, Royco Air Services; and Mr.

Mr. Tony Steen, Viterra.

**Director:** Mr. Darren Bourget, Director, Southern

Region, Environmental Management, Alberta Environment; Mr. Nick Spruit, Regional Compliance Investigator, Southern Region, Environmental Management, Alberta

Environment; and Mr. Larry Checknita, ASL

Laboratory Group.

#### **EXECUTIVE SUMMARY**

Alberta Environment issued an Administrative Penalty in the amount of \$4,500.00 to Royco Air Services for contravention of the *Pesticide Sales, Handling, Use and Application Regulation* and the *Pesticide (Ministerial) Regulation*. Alberta Environment determined that Royco Air Services: (a) applied a pesticide in a manner causing or likely to cause an adverse effect (\$3,000.00), and (b) failed to create a complete pesticide application record (\$1,500.00). Alberta Environment investigated after a complaint was received that a boy had been sprayed with a pesticide. Samples were taken of the vegetation in the area as well as the boy's shirt, and glyphosate (the active ingredient in the pesticide) was found in all of the samples.

The Board received a Notice of Appeal from Royco Air Services appealing the Administrative Penalty and held a Hearing.

Based on the submissions and evidence provided, the Board reduced the Administrative Penalty for applying a pesticide in a manner causing or likely to cause an adverse effect to \$1,500.00. The Board considered that the risk of an adverse effect was low, given the boy had no adverse effects resulting from what was an apparently low exposure. The Board upheld the \$500.00 reduction for having no history of non-compliance. The Board allowed an additional \$500.00 reduction because Royco Air Services took steps to mitigate the incident after they became aware of the complaint.

The Board confirmed the Administrative Penalty of \$1,500.00 for failing to maintain the required documents as specified in the legislation.

Therefore, the total Administrative Penalty assessed against Royco Air Services was \$3,000.00.

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#### I. BACKGROUND

On July 31, 2008, the Director, Southern Region, Environmental Management, Alberta Environment (the "Director"), issued Administrative Penalty No. 08/03-AP-SR-08/03 ("Administrative Penalty") to Mr. Ron Lazenby, operating under the trade name Royco Air Services (the "Appellant"), for contraventions of section 5(1)(a) of the *Pesticide Sales, Handling, Use and Application Regulation*, Alta. Reg. 24/97 and section 11(1) of the *Pesticide (Ministerial) Regulation*, Alta. Reg. 43/97. The Director has the authority to issue an administrative penalty under section 237(1) of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12 ("EPEA").

The Director issued the Administrative Penalty in the total amount of \$4500.00 based on two counts: in the first count the Director determined that the Appellant applied a pesticide in a manner causing or likely to cause an adverse effect (\$3000.00); and in the second count, the Director found that the Appellant failed to create a complete pesticide application record (\$1500.00). The Director had received a complaint that a 12-year old boy had been exposed to a pesticide. (The compliant was made by the boy's mother.) The Appellant was aerially spraying Vantage Plus Max ("Vantage Plus"), a herbicide containing glyphosate, on a target field located at 1-32-23-W4M in Kneehill County, adjacent to the boy's residence. Herbicides, such as Vantage Plus, are one of the classes of substances that are referred to generally as pesticides and regulated by the *Pesticide Sales, Handling, Use and Application Regulation* and the *Pesticide (Ministerial) Regulation*.

On August 20, 2008, the Environmental Appeals Board (the "Board") received a Notice of Appeal from Mr. Ron Lazenby. The Board acknowledged receipt of the appeal and notified the Director of the appeal. The Board also requested the Director provide the Board with a copy of the records (the "Record") relating to the Administrative Penalty, and that the Appellant and the Director (collectively, the "Parties") provide available dates for a hearing. The

Section 237(1) of EPEA provides:

<sup>&</sup>quot;Where the Director is of the opinion that a person has contravened a provision of this Act that is specified for the purposes of this section in the regulations, the Director may, subject to the regulations, by notice in writing given to that person require that person to pay to the Government an administrative penalty in the amount set out in the notice for each contravention."

Record was received by the Board on September 18, 2008, and a copy was provided to the Appellant on September 19, 2008.

- [4] According to standard practice, the Board wrote to the Natural Resources Conservation Board, the Energy Resources Conservation Board, and the Alberta Utilities Commission asking whether this matter had been the subject of a hearing or review under their respective legislation. All of the boards responded in the negative.
- [5] On October 1, 2008, the Board confirmed that the Hearing would be held on December 4, 2008. The Director provided his written submission on November 13, 2008, and the Mr. Ron Lazenby informed the Board by telephone on November 14, 2008 that the Appellant was relying on the Record and the Notice of Appeal, and therefore chose not to file a written submission.

#### II. SUBMISSIONS

#### A. Appellant

- The Appellant argued the evidence and findings of the Director contradict the Director's own conclusions and penalty assessed. The Appellant stated the level of glyphosate on the boy's shirt (1.9 mg/kg) was nearly 12 times the amount found in the target field (0.16 mg/kg), which the Appellant concluded would mean the boy would have had to be sprayed 12 times to reach that level, but the boy indicated he was only sprayed twice. The Appellant argued this indicates the boy was riding his motorbike in the target field either during or after the spraying.
- [7] The Appellant stated the lessee of the target field had observed the boy riding in the target field on many occasions and had asked the boy to leave. The Appellant argued this supports the theory that the boy was riding in the target field either during or shortly after the spraying and that is how his shirt had such high levels of glyphosate.
- [8] The Appellant stated the crop in the target field had plants five feet tall. The Appellant argued this would mean the 12-year old boy riding his motorbike in the field would not have been visible to the pilot when spraying. The Appellant explained that when the pilot is spraying, the plane is about six feet above the crop, making it nearly impossible to visibly

ascertain anything in the field other than the crop immediately being sprayed. In the oral testimony, the Appellant explained that, after reviewing the photographs of the target field, it appeared the crop height was between three and four feet so the boy would have been visible from the air. The Appellant stated it maintains a strict practice of doing reconnaissance ahead of time, including several fly-bys to check for obstructions or anything that might endanger the pilot. The Appellant stated the pilot did not identify any dangers or concerns during his reconnaissance.

[9] The Appellant argued the Director's decision was based on the boy's statement obtained in a telephone interview by the investigator. The Appellant argued the word of a 12-year old boy was taken over the word of the pilot, and this was not sufficient grounds for the Director to draw his conclusion and assess the penalty. The Appellant explained the pilot is experienced and conscientious and is a partner in the business.

[10] The Appellant explained that two weeks after the spraying of the target field, Messrs. Jared and Jason Lazenby attended the target field and the residence of the complainant. The Appellant stated they found a container of Roundup<sup>2</sup> on the premises that had been used by the complainant. The Appellant explained that Roundup has the same active agent, glyphosate, as Vantage Plus, the pesticide used by the Appellant in spraying the target field. The Appellant argued it was possible the complainant applied their own chemical to the area of the pasture tested. The Appellant noted the sample from the target field had 0.16 mg/kg of glyphosate, whereas the sample taken from the pasture measured 0.26 mg/kg. The Appellant argued this discrepancy should have alerted the Director that there must be another source of glyphosate other than the spray applied by the Appellant.

The Appellant explained the spray span of the plane is 55 feet, and if the boy had been sprayed on the road allowance as alleged, there would be approximately 20 feet of vegetation killed on both sides of the road because the road surface is 22 feet. The Appellant explained Vantage Plus is a non-selective herbicide for broadleaf weeds, and the product would have killed any green leafed plant it contacted on the complainant's property, the pasture, or the road allowance. The Appellant stated the buffer zone from the target field to the road allowance

At the Hearing this was verified to be Touchdown, not Roundup. The Parties explained Touchdown, Vantage Plus, and Roundup all have glyphosate as the active ingredient.

was 100 feet, and two weeks after spraying the target field, the buffer zone, grass on the road allowance, and foliage on the complainant's property had not browned. The Appellant stated this indicates there was not any overspray or spraying of the boy on the road.

- The Appellant submitted the Director's decision was incorrect based on the factual laboratory evidence and interviews with the pilot. The Appellant pointed out that the Director erroneously named the party on the Administrative Penalty Assessment form as Ken Lazenby and the Director's July 16, 2008 letter had an address in Calgary. The Appellant argued that the inconsistencies by Alberta Environment raise questions as to the degree of accuracy of their investigation.<sup>3</sup> The Appellant stated the investigators did not test the fields next to where the boy was allegedly sprayed.
- The Appellant commented the Director set an appointment to meet with the Appellant on July 16, 2008 at 1:00 pm at a restaurant in Three Hills, but he did not show until 2:30 pm, resulting in lost spraying time and \$4,800.00 in revenues. The Appellant explained it had an impeccable reputation for 30 years without incident or breach of the regulations. The Appellant stated the penalty would tarnish its reputation and would financially impact the small family owned and operated seasonal business. The Appellant argued the boy's statement was taken over that of the pilot working for a reputable business. The Appellant submitted the boy was in trouble for either illegally riding his motorbike on the road or for damaging the neighbour's crop and field.
- [14] The Appellant submitted that there is no evidence that would prove beyond a reasonable doubt the accusations of the complainant, and therefore, the Board should rescind the Administrative Penalty.

#### B. Director

The Director explained that on August 24, 2007, he received a complaint regarding a drift of pesticide spray that landed on the complainant's property and on her 12-year old son while he was out riding a motorbike on a road near their residence. The Director stated the complainant's property is adjacent to the target field that was aerially sprayed with the pesticide, Vantage Plus, that day. Both properties are located on a portion of 1-32-23-W4M.

- The Director stated the investigator responded to the complaint on August 25, 2007, and interviewed the complainant and her son. According to the Director, the boy stated that between 3:30 and 4:00 pm on August 24, 2007, he saw a plane spraying the crop to the west of his residence while he was riding his motorbike on the road about a half a kilometer from his residence. The Director quoted the boy, explaining that the plane came from the east, and after it flew over, he felt the spray on his arms and his shirt was wet. The boy returned to his residence to wash the spray off his arm and his bike. According to the boy, when he was in their front yard, the plane returned from the west and flew over the trees and their shed, and when the plane turned around and headed west, the boy felt the spray hit him again. The Director stated the boy noticed a mist when the plane was over the target field, but he did not see any mist from the plane when he felt the spray in his yard and he did not smell anything.
- The Director explained the investigator asked further questions of the boy on November 6, 2007. According to the Director, the boy stated the plane flew directly over him when he was on the road and it flew over the trees and pasture on the south side of his residence. When asked, the boy stated he saw a mist over the pasture when the plane was coming from the west from the target field. The Director stated the boy did not touch any chemicals at his residence that day and the boy denied going into fields that may have been sprayed on that day.
- [18] The Director stated that, on August 25, 2007, the investigator also took samples of vegetation from the complainant's pasture and from a poplar tree in her yard, from the target field, and a control sample. The complainant advised the investigator on October 2, 2007, that following the August 24, 2007 incident, she noticed the caragana hedge in her front yard had withered.
- The Director explained the investigator spoke with the pilot on August 27, 2007, and he stated he typically would not fly over a residence and in this particular job, he felt he had left a large buffer and did not fly over the acreage. The Director stated an in-person interview of the pilot, Mr. Jared Lazenby, was conducted on October 3, 2007. According to the Director, the pilot explained he flew in an east to west pattern oriented along the crop rows, and he left a 200-foot buffer along the west side of the two acreages adjacent to the target field and a 75-foot

Appellant's Notice of Appeal, dated August 19, 2008.

buffer along the north and south sides of the two acreages. The Director stated the pilot admitted to flying over the road, but the pilot did not see anyone. The Director was also told the pilot would shut off the spray boom before pulling up into the air from a spraying pass along the ground, and the pilot did not feel it was too windy that day to spray.

- The Director explained the Appellant partially completed the Pesticide Application Record on August 24, 2007, but it lacked certain information that was required to be recorded on the date of the application, including the target weeds/pests, the PCP number of the product applied, and the humidity at the time of the application. The Director stated the Appellant provided some additional information (not including the humidity) to the investigator on August 26, 2007.
- The Director explained the product applied to the target field, Vantage Plus, is a water soluble herbicide for non-selective broadleaf weed control that has glyphosate as the active ingredient. The Director stated that the environmental cautions on the label state that it is not to be applied on or near any body of water or sensitive habitats, it is an eye and skin irritant and potential skin sensitizer, and harmful if swallowed. The Director explained that, according to the label, for any skin contact, the skin should be immediately flushed and the contaminated clothing removed. The Director stated that the product should be kept away from children's reach. The Director explained the MSDS (material safety and data sheet) for the product stated the product may cause eye irritation, though prolonged skin contact is not likely to result in the product being absorbed in harmful amounts. The Director stated the MSDS also recommends avoiding breathing the vapours and mist and to avoid contact with skin, eyes, and clothing.
- [22] The Director stated the laboratory analysis of the samples taken by the investigator showed glyphosate levels as:

Target field (barley field) -0.16 mg/kg;

Complainant's pasture -0.26 mg/kg;

Vegetation from a poplar tree in complainant's front yard -0.05 mg/kg;

Control sample -0.02 mg/kg; and

Boy's t-shirt – 1.9 mg/kg.

[23] The Director explained the Administrative Penalty Assessment Form was prepared summarizing the facts, applicable legislation, and the particular offences. The Director

stated the completed form was provided to the Appellant prior to a subsequent meeting with the Appellant. The Director explained the meeting was to discuss the potential administrative penalty and to receive information from the Appellant.

[24] The Director stated the Administrative Penalty was issued on July 31, 2008, with the Director's reasons attached and confirming that the Appellant, by virtue of the actions of its employee, had committed each of the offences. The total final penalty was \$4,500.00.

The Director argued he properly exercised his authority and discretion under section 237 of EPEA and the *Administrative Penalty Regulation*, to issue an administrative penalty for each of the offences. The Director explained that, on a balance of probabilities and based on the evidence before him, the Appellant and/or its employee were guilty of contravening section 5(1) of the *Pesticide Sales, Handling, Use and Application Regulation*<sup>4</sup> and section 11(1) of the *Pesticide (Ministerial) Regulation*.<sup>5</sup>

Section 5(1) of the *Pesticide Sales, Handling, Use and Application Regulation* states:

"No person shall

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(a) use, apply, supply, handle, transport, display, store or dispose of

- (i) a pesticide, or a container used to hold a pesticide,
- (ii) seed that has been treated or mixed with a pesticide, or
- (iii) wood that has been treated with a pesticide,

or

(b) operate any machine, equipment or vehicle, aircraft or vessel in connection with the use, application, handling, transportation, storage or disposal of a pesticide

in a manner or at a time or place that causes or is likely to cause an adverse effect."

Section 11(1) of the *Pesticide (Ministerial) Regulation* provides:

"An applicator who uses or applies a pesticide must record the following information in a form acceptable to the Director by the end of the day on which the pesticide was used or applied:

- (a) the name of the person for whom the pesticide was applied;
- (b) the location where the pesticide was applied;
- (c) the year, month, day and time at which the pesticide was applied;
- (d) the name of the pest and purpose for which the pesticide was applied;
- (e) the approved common name or trade name of the pesticide and the *Pest Control Products Act* (Canada) registration number;
- (f) the application rate and total quantity of the pesticide applied;
- (g) the method of application;
- (h) if the pesticide was applied outside an enclosed structure, the meteorological conditions prevailing at the time of application, including temperature, humidity, precipitation and approximate wind speed and direction;
- (i) the location and distance of any pesticide used or applied within 30 horizontal metres of an open body of water."

[26] The Director referred to the Supreme Court of Canada decision, *F.H.* v. *McDougall*, <sup>6</sup> stating that in civil cases, the standard of proof is the balance of probability, and the evidence must be scrutinized to determine whether it is more likely than not that an alleged event occurred. The Director argued the balance of probabilities test must be based on evidence that is sufficiently clear and relevant.

The Director stated that, based on the evidence obtained during the investigation and from the Appellant at the July 16, 2008 meeting, that it was more likely than not that the boy was sprayed with Vantage Plus from the Appellant's plane on August 24, 2007, while riding his motorbike on the gravel road and also in the front yard of his residence. The Director believed the exposure to Vantage Plus causes or is likely to cause an adverse effect based on its chemical properties.

[28] The Director considered the following evidence which he felt was clear and relevant to the first count:

- verbal evidence from the 12-year old boy in which he stated he felt the spray on his forearms while out riding on his motorbike on the gravel road and again while standing in the front yard of his residence shortly thereafter;
- the boy saw the plane fly directly overhead while he was on the gravel road, and he had not touched any other chemicals that day or entered into any fields that had been sprayed;
- the analytical results from ASL Laboratory Group showed glyphosate on the boy's shirt at 1.9 mg/kg, more than 10 times the level found in the target field (0.16 mg/kg) and more than 7 times the level found from the sample taken from the complainant's pasture (0.26 mg/kg);
- verbal report that leaves on the complainant's caragana hedge were withered and contradictory evidence from the Appellant that a visit to the complainant's property a week or so after the incident did not reveal any effects of the pesticide spray on the caragana hedge or the complainant's pasture;

<sup>&</sup>lt;sup>6</sup> F.H. v. McDougall, [2008] S.C.C. 53.

- the partially completed application record indicated the weather was clear that day and the wind speed was 5 to 10 km/hr during the time of the application;
- the spray nozzles on the plane had been recently recalibrated and Mr. Jared Lazenby, the pilot, did not believe there was a reasonable possibility that the spray boom had leaked;
- no humidity readings were taken by the Appellant or any of its staff which could have supported the presence or absence of a temperature inversion which, in many cases, can result in a spray drift occurring;
- photographs taken on August 25, 2007, show the crop height to be no more than 3 to 4 feet, not consistent with the Appellant's original suggestion at the July 16, 2008 meeting that the crop height was 5 feet that would have made it impossible for the pilot to have seen the boy if he was riding in the field; and
- the pesticide label and MSDS for Vantage Plus which set out the environmental and human health exposure cautions related to this product and its active ingredient, glyphosate.
- The Director's witness, Mr. Checknita testified that Mr. Lazenby's calculation that the ratio of the glyphosate concentration in the boy's shirt to the level in the target field did not mean that the boy would have to be sprayed 12 times. Mr. Checknita indicated that the typical concentration of field samples if taken on the same day as spraying would be in the range of 5 to 10 mg/kg, so that none of the samples taken by the inspector were as high as Mr. Checknita would have expected for a sample taken from an area that was intentionally sprayed.
- The Director explained that, based on all of the evidence before him, he reached the conclusion that it was more likely than not that the boy was sprayed, albeit unintentionally, while out riding his motorbike. The Director referred to his decision in which he stated that he believed the boy was in contact with Vantage Plus that day and there was no evidence of the boy coming into contact with Vantage Plus by any other source. The Director stated the Appellant did not question the analytical results but questioned how the boy might have contacted Vantage Plus and suggested the boy may have entered the field during or immediately after spraying. The Director stated the pilot had indicated he left a buffer along the complainant's property but he did not say he left a buffer along the gravel road adjacent to the target field. The Director explained

the boy denied entering the field. The Director stated, "The boy did admit that he had been riding his motorbike on the road, so without any contrary information, it does not make any logical sense to me that he would then not admit to having been in the field."

The Director stated he considered the Appellant's explanation that the boy was actually in the target field when the field was sprayed and that would account for the glyphosate on the boy's shirt, but the height of the crop prevented the pilot from seeing the boy. The Director explained that given the boy's statements, the photographs of the target field, and the height of the crop, the Director reached the conclusion that there was no evidence to support the Appellant's theory.

[32] The Director stated it did not make sense that the boy would admit to riding his motorbike on the road illegally, but not admit to being in the target field even if, as the Appellant stated, the lessee of the target field had previously asked the boy to leave the field. The Director argued this did not support a case that the boy was actually in the target field on August 24, 2007.

[33] The Director explained he concluded on a balance of probabilities that the boy was sprayed with Vantage Plus while riding his motorbike on the road since there was no actual evidence to the contrary. The Director stated he did not disbelieve any of Mr. Jared Lazenby's evidence, but he believed one set of evidence over the other.

The Director argued the Appellant did not raise the defense of due diligence at the July 16, 2008 or in the Notice of Appeal. (Due diligence is a defense that allows an accused to be found not guilt of a contravention if he took all reasonable steps to prevent the contravention. Due diligence is an affirmative defense, meaning that an accused needs to present evidence to prove that he took all reasonable steps to prevent the contravention.)

The Director stated that glyphosate is an agricultural chemical that is to be used, handled, and applied only by certified applicators, and the product is not intended for application to humans without some possibility of an adverse effect. The Director concluded the application of Vantage Plus to a person clearly meets the intent of section 5(1)(a) of the *Pesticide Sales*,

Director's submission, dated November 13, 2008, at page 8.

Handling, Use and Application Regulation in that it was applied or used in a manner or place that could or is likely to cause an adverse effect.

The Director submitted that the adjustment factors set out in section 3(2) of the *Administrative Penalty Regulation* were appropriately applied to both counts. The Director submitted he reasonably reached the opinion on a balance of probabilities on the whole of the relevant evidence to issue the Administrative Penalty.

[37] The Director requested the Board confirm the Director's decision and Notice of Administrative Penalty and dismiss the appeal.

#### III. ANALYSIS

[38] When determining the administrative penalty that will be assessed, the Director refers to the Base Penalty Table included in the *Administrative Penalty Regulation*. In using this table, the Director looks at the type of contravention being investigated and the potential for an adverse effect. These two parameters are assessed as to whether each is minor, moderate, or major. Based on the assessment, the Director has a starting point to calculate the penalty.

[39] In this case, the Director issued an Administrative Penalty on two counts, the first for the application of a pesticide in a manner causing or likely to cause an adverse effect, and the second for the failure to create a complete pesticide application record on August 24, 2007.

#### A. Count 1

[40] On the first count, the Director assessed the type of contravention as major because it was a release of a substance into the environment at a location and to a target (human) that was not intended. The Director assessed the potential for an adverse effect as moderate, because based on the information label for the pesticide, there are potential human health

<sup>&</sup>quot;Subject to subsections (2) and (3), the amount of an administrative penalty shall be the base penalty calculated by the Director in accordance with the following Table:

	Type of Contravention				
		Major	Moderate	Minor	
Potential for	Major	\$5000	\$3500	\$2500	
Adverse Effect	Moderate	\$3500	\$2500	\$1500	
	Minor	\$2500	\$1500	\$1000	

Section 3(1) of the *Administrative Penalty Regulation*, A.R. 23/2003 states:

impacts including impacts from inhaling the vapours and skin and eye contact. The product was not intended to be applied to humans. Therefore, the base penalty assessed by the Director for the first count was major –moderate, which according to the table is \$3,500.00.

- [41] The *Administrative Penalty Regulation* allows the Director to consider mitigating factors that can reduce the penalty assessed. In determining the amount for the Administrative Penalty, the factors the Director considers to vary the assessment are:
  - (a) the importance to the regulatory scheme of compliance with the provision;
  - (b) the degree of willfulness or negligence in the contravention;
  - (c) whether or not there was any mitigation relating to the contravention;
  - (d) whether or not steps have been taken to prevent recurrence of the contravention;
  - (e) whether or not the person who receives the notice of the administrative penalty has a history of non-compliance;
  - (f) whether or not the person who receives the notice of the administrative penalty has derived any economic benefit from the contravention;
  - (g) any other factors that, in the opinion of the Director, are relevant.
- [42] In this case, the Director reduced the penalty assessed for the first count by \$500.00 because there was no history of non-compliance. The Director stated no mitigation was possible and there was no information regarding preventative steps.
- Throughout the Hearing the Parties raised questions whether the Director was correct in finding the boy was exposed to the pesticide by the Appellant spraying him. There was no doubt that if it did occur, there was no intent on the part of the pilot, and the Board agrees with the Director that the pilot did not see the boy on the road or in the target field at any time. Neither of the Parties provided definitive proof of how the boy came in contact with the glyphosate. All that is truly known is that the Appellant was spraying a pesticide containing glyphosate on an adjacent field and the boy had glyphosate on his shirt. The contradiction between the boy's and the pilot's accounts could not be resolved strictly on the basis of a second-hand account of the boy's interview.
- [44] What concerns the Board is whether the pesticide was released into the environment where it should not have been released. This is the factual basis of the first count

against the Appellant. In the Board's view, this factual requirement has been met and therefore an administrative penalty is warranted.

- [45] Based on the evidence, there is no doubt that a pesticide containing glyphosate was released into the environment into an area that was not part of the target field for the aerial spray application. There was pesticide found in the buffer zone and in the complainant's pasture. The Board recognizes that the purpose of the buffer zone is to protect sensitive or non-select areas from the pesticide exposure. The level of glyphosate in the buffer zone was 0.16 mg/kg, indicating some of the chemical did reach that area, but it was apparently found at more than 30 fold lower concentrations than would typically be found in an area subjected to intentional spraying, according to the experience of Mr. Checknita. A concentration of glyphosate lower than the target spray area would be expected in a buffer zone. The area that should not have received any glyphosate was the complainant's pasture. The vegetation sample taken from this area registered 0.26 mg/kg of glyphosate, still apparently about 20 times lower than expected for the intentional spray area, but readily detectable and strongly suggestive of unintended drift from the target field. No evidence was presented to suggest that the areas not intended for spraying experienced any browning of vegetation as would be expected for glyphosate sprayed at an intentional level.
- The onus of proof lies with the Appellant. The Appellant raised a number of possible scenarios that might have resulted in the boy being exposed to glyphosate. However, he did not provide any clear evidence to support the hypotheses. The low levels of glyphosate found in the leaves and grass from the complainant's yard indicates very low levels of drift, if any. The Appellant raised the possibility of the complainant using another pesticide that was found on her property that contained the same active ingredient, glyphosate. There was no clear evidence to support or refute the arguments of either of the Parties.
- The standard of proof before the Board is the balance of probabilities, not beyond a reasonable doubt. The Appellant admitted it was spraying in the area where the boy stated he was exposed to the spray. The pesticide being used by the Appellant contained the same active ingredient as what was found on the boy's clothing and vegetation from other areas tested by the investigator. It appears reasonable to conclude that, based on a balance of probabilities, that the

glyphosate found in areas other than the target field resulted from the aerial spraying of the property.

[48] It is much more difficult to draw conclusions about the relative intensity of exposure to glyphosate based on the evidence gathered. The glyphosate concentrations are expressed as milligrams of glyphosate per kilogram of sample material. Although Mr. Checknita argued that concentration numbers could be compared directly, the Board recognizes that a kilogram of shirt is not necessarily the same as a kilogram of plant material. These two materials do not necessarily have the same density, nor the same surface area to volume ratio. The respective capacity of a shirt versus a random collection of vegetation to collect droplets of pesticide spray, per unit of sample mass, is not necessarily comparable. As well, Mr. Checknita explained that the entire shirt was extracted for the analysis that was reported. This means that a single large drop of pesticide on one part of the shirt could yield the same result as an even spray of pesticide over the entire shirt. Those two scenarios could only be distinguished if the shirt had been cut into sub-samples of approximately equal mass that were analyzed separately. If the results of such sub-sampling yielded similar concentrations among sub-samples, that would suggest an even spray versus a single or a few large drops at one location on the shirt. Based on the evidence available from the shirt analysis it is only possible to conclude that the shirt was exposed to glyphosate. How the shirt was exposed and the relative degree of exposure compared to the vegetation samples is not clear.

[49] Because the burden of proof is a balance of probabilities, there was insufficient evidence presented that would warrant the Board reversing the Director's decision. Although the Board was not completely convinced by either the Director's or the Appellant's submissions, the Board needs more substantive evidence to overturn the Director's decision in this case. The Director in this case repeated throughout the Hearing that he did not believe that the Appellant intended in any way to cause the boy to be sprayed and he believed the pilot did not see the boy in the field or on the road. The Board also believes this to be true.

[50] The Board notes that the passage of time makes it possible to judge the effect, if any, resulting from the contravention. In this case, the boy had no effect from the exposure. Likewise, other than contested comments about damage to the complainant's caragana hedge, no evidence of unintended vegetation damage was presented. Therefore, while the exposure in

these circumstances might have had some potential for an adverse effect, the evidence reveals that none occurred. Based on this and using the Base Penalty Table, the Board considers the incident a major contravention with a minor potential effect, lowering the starting point for the Administrative Penalty for the first count to \$2,500.00. The Director allowed a \$500.00 reduction in the penalty because the Appellant had no previous history of contravening the legislation. The Board agrees with this reduction in the penalty.

The Board also reduces the Administrative Penalty a further \$500.00 because the Appellant took steps to mitigate the incident. Shortly after the Appellant became aware of the complaint, representatives for the Appellant attended at the residence of the complainant to explain what pesticide was used and to assess whether there was a possibility of other sources of the chemical exposure. At the time there were no laboratory analysis results to support or contradict the allegation. The Appellant stated the complainant wanted information, which was unreservedly provided. The Appellant was not required to take this step, but it willingly took this step on its own volition. Therefore, the Administrative Penalty on the first count is reduced a further \$500.00 to \$1,500.00.

The Board is of the view that when collecting evidence for a potential enforcement action, it is important that the investigator consider the evidence given and rationalize what would be logical data to collect to support or refute the claim. In this case the investigator collected vegetation samples from the yard in the approximate area where the boy stated he was when he felt the mist; in the pasture in the area where the boy stated he saw the plane fly over; in the target field, which was actually determined at the Hearing to be in the buffer zone; and at a control site. The Board notes that sampling along the road in the approximate area where the boy stated he initially felt the spray mist would have been useful information in this appeal.

[53] Further, the Board notes that the results of the quantitative analysis appears to be one of the matters taken into account by the Director, at least to the extent that the amount of pesticide on the boy's shirt was "high" compared to the level of pesticides found in the other samples. The quantitative analysis was one of the main points of discussion at the Hearing, and

The Board notes the following statement in the Director's submission of November 13, 2008:

one of the sources of confusion particularly for the Appellant. A scientific basis for reliably comparing any quantitative results for samples involves taking more than a single sample at any given location. The actual amount of glyphosate on the shirt and the amount measured in milligrams of glyphosate per kilogram of shirt material could not be numerically compared with the vegetation sample without a number of other measures or assumptions about the density and surface area to volume ratio of the sample materials. Likewise the method used on the shirt, effectively collecting all of the pesticide from the entire shirt, could not distinguish between a relatively uniform spray over the whole shirt at one extreme from a single large drop at the other extreme. In this case, testimony from the Mr. Checknita could only indicate that there was a readily detectable quantity of glyphosate present on the shirt. The Board agrees. The only useful information that can be taken from the analysis that was carried out is that pesticide was present in detectable amounts on the samples.

#### B. Count 2

[54] For the second count, the Director assessed the type of contravention as moderate, because recording of the pesticide application on the date it is applied is required under the legislation. The potential for adverse effect was deemed to be minor because there is only a minor potential for an impact from this contravention. Therefore, the penalty assessed by the Director was moderate-minor or \$1,500.00 for failing to record all of the information that is required on the date of the application of the pesticide.

[55] The Appellant did not argue that the information was not provided as required on the day the pesticide was applied. He admitted the error and pointed out that errors do happen,

<sup>&</sup>quot;The analytical results from ALS Laboratory for Glyphosate on the boy's t-shirt at 1.9 mg/kg, being more than 10 times the level found in the Target Property (0.16 mg/kg), and more than 7 times the level from the sample taken of the Complainant's Pasture (0.26 mg/kg)." Page 7, paragraph 6.

Further, the Board notes the following statements in the Director's decision document found at Tab 4 of the Director's Record:

<sup>&</sup>quot;The analytical results of the t-shirt indicate a **high** level of glyphosate, which when combined with the boy's statements regarding the incidents of August 24, 2007, leave no doubt in my mind that he was in contact with the Vantage Plus that day." (Emphasis added.) Page 8, paragraph 7.

<sup>&</sup>quot;It is submitted that given **the** levels of Glyphosate found on the boy's t-shirt, and the fact that Vantage Plus, an agricultural chemical is meant to be used, handled and applied, only by certified applicators, this is not a product that is intended for application to humans without some possibility of an adverse effect." (Emphasis added.) Page 9, paragraph 12.

Penalty. The completion of the information as required under the legislation is a cornerstone of the legislation. It is necessary to ensure accountability is maintained with all of the operators without requiring the Director and his staff to be constantly checking all operations in the province, something not possible with the resources available. It is also important to note that in this case, the missing data, including wind speed and direction and humidity, may have assisted the Appellant and the Director in determining the source of the glyphosate. Respectfully, the failure to complete documentation that is required by legislation is not the same as making other types of administrative errors.

It is clear from the Record and from the evidence provided by the Parties that the Appellant did not comply with the legislation. The forms were not completed on the day the pesticide was applied. The Board concurs with the Director's assessment that the contravention was moderate and the potential for an adverse effect was minor. No mitigating factors are applicable to this count. Therefore, the Administrative Penalty for the second count is confirmed at \$1,500.00.

#### IV. CONCLUSION

Based on the submissions and evidence provided, the Board reduces of the Administrative Penalty for applying a pesticide in a manner causing or likely to cause an adverse effect (Count 1) to \$1,500.00. The Board considers the risk of the effect as low, given the experience that the complainant's son had no adverse effects including any adverse health effects resulting from the exposure. The Board upholds the \$500.00 reduction for having no history of non-compliance. The Board allows an additional \$500.00 reduction because the Appellant took steps to mitigate the incidence after he became aware of the complaint.

[58] The Board confirms the Administrative Penalty of \$1,500.00 for failing to maintain the required documents as specified in the legislation (Count 2).

The Appellant indicated that the wrong name and address was originally used on the Administrative Penalty, that there was confusion over the pilot's name, and that the Director was one and a half hours late for the meeting to discuss the proposed Administrative Penalty.

[59] Therefore, the total Administrative Penalty assessed against Mr. Ron Lazenby operating under the trade name Royco Air Services is \$3,000.00.

#### V. ORDER OF THE BOARD

In accordance with section 98(2) of EPEA, the Board has the authority to confirm, reverse or vary the decision of the Director. Therefore, with respect to the decision of the Director to issue Administrative Penalty No. 08/03-AP-SR-08/03 to Mr. Ron Lazenby, operating under the trade name, Royco Air Services, for contravention of section 5(1)(a) of the *Pesticide Sales, Handling, Use and Application Regulation* and section 11(1) of the *Pesticide (Ministerial) Regulation*, the Board orders that the decision of the Director to issue the Administrative Penalty is confirmed subject to the following:

- 1. That the decision of the Director regarding the first count is varied by reducing the amount of the Administrative Penalty to \$1,500.00.
- 2. That the decision of the Director regarding the second count is confirmed, and the amount of the Administrative Penalty remains at \$1,500.00.

The total Administrative Penalty assessed to Mr. Ron Lazenby, operating under the trade name, Royco Air Services is \$3,000.00, payable in accordance with the legislation.

Dated on January 5, 2009, at Edmonton, Alberta.

"original signed by"
Eric O. McAvity, Q.C.
Panel Chair
"original signed by"
Steve E. Hrudey, FRSC, P.Eng.
Board Chair
"original signed by"
Gordon Thompson, P.Eng.
Board Member

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Section 98(2) of the Act provides:

<sup>&</sup>quot;In its decision, the Board may (a) confirm, reverse or vary the decision appealed and make any decision that the Director whose decision was appealed could make ...."