

SPRAY DRIFT: MANAGING THE RISK

Safeguarding your business with complete and accurate activity records.



Chemical spray drift poses serious business risks, including fines and the potential for lawsuits against growers suspected of misuse. Managing this risk requires more than by-the-book application practices. Growers need meticulous, comprehensive recordkeeping to protect their crops, business and reputation.

The challenge of chemical drift.

Spraying chemical herbicides has inherent risks. Atmospheric conditions are nearly always less than ideal, with factors like wind speed and humidity leading to chemical drift even when proper equipment and formulations are used. Even small traces of herbicides like 2,4-D and dicamba can seriously impact sensitive crops . While new application technology lessens the risk of droplets drifting to adjacent fields, reports of drift damage are rising as the use of these chemicals becomes more widespread. The financial impact can be enormous: thousands of dollars in crop losses to affected growers, as well as legal costs in the millions for growers found to be negligent.

Investigation and litigation.

In cases of alleged spray drift, auditing agencies investigate the damage by soliciting records from affected farmers and nearby growers. Factors in the investigation include weather conditions recorded at the time, seeing that label requirements were followed, and that precautions were taken to avoid drift. If a nearby grower is found to be negligent in the use of chemicals, fines or other penalties may be imposed. Farmers affected by spray drift who want monetary compensation often pursue civil litigation against growers found to be at fault.

In a recent case in Texas¹, one farmer sued a neighbor over cotton crops damaged by spray drift. The plaintiff showed there was wind the day of application, the pilot was aware there was danger of spray drift, and witnesses said they smelled chemicals on the plaintiffs' field after the application occurred. Based on these findings, the court concluded that the applicator was responsible and entered a judgment on behalf of the plaintiff.

Good records are the only defense.

Without an iron-clad audit trail, growers spraying dicamba and other herbicides are vulnerable to fines and lawsuits even if they have taken appropriate precautions. Maintaining accurate records of atmospheric conditions, operator certification, and the activities and locations of spray applications is the only sure way to counter accusations of wrongdoing. The more information a grower has, the better.

The Conservis farm management system can help protect against such claims. As part of a comprehensive platform of tools and best practices in data management, Conservis seamlessly maintains a full, accurate record of production activities and conditions as they happen. Growers are able to ensure a certified operator is completing spray applications. Wind speed is automatically captured during and after sprays. Tank cleanout activities can be easily tracked. With a time-stamped record of who, what, when, where and how restricted-use chemical applications are managed, Conservis gives producers full circle documentation of responsible practices to strengthen a defense.

1. Boyd v. Thompson-Hawyard, 450 S.W.2d 937 (Tex. Ct. App. - Tyler 1970)

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Proof in action: one grower's story.

A Kansas grower who uses Conservis faced three allegations of spray drift onto neighboring fields, the third resulting in a report to the Kansas Department of Agriculture. The state compelled the grower to prove when spraying occurred, contents of the spray tank, and the wind direction, wind speed, and temperature at the time. Using the Crop Protection Report from Conservis, the farmer demonstrated he did not cause spray drift in all cases. In the first two instances, Conservis records proved the spraying activity could not have blown into the affected fields because of the wind's speed and direction. In the last case, the timestamp of the activity showed spraying occurred a week later than the neighboring farm alleged.

Before using Conservis, this grower recorded the dates and times of spraying activities manually in a log book, not correlated to data on wind speeds or other conditions that affect spray drift. Had the operation not upgraded its recording methods, these analogue records would likely have been an insufficient defense. Conservis has meant peace of mind for us. With the costs of spray drift litigation and civil settlements running as high as \$4 million, the system has more than paid for itself in this aspect alone.

Kansas Grower

FIGURE 1



Conservis Work Orders provide explicit instructions to field workers to ensure proper spray chemical and application rate are used.

FIGURE 2

Machine Data

Farm:	Session
Field:	Sessiar
Activity Type:	Spraying
Start Date:	04/17/2017 3:04 p.m.
Completed Date:	04/17/2017 3:49 p.m.
Elapsed Time:	45 minutes
Covered Area:	50 acres
Crop Year:	2017
Equipment:	Sprayer A
Total Applied:	1605 floz

Input	Target Rate	Actual AppSed	Actuel Rate
Roundup	32 floz/ac	1605 floz	32.1 floz/ac

If you use John Deere Operations Center, as-applied maps and data of spraying activity are automatically created as a Conservis Activity record.



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FIGURE 3

Spraying Ticket Details

Create Date: 05/25/2017 10:38 AM Updele Date: 05/25/2017 11:00 AM Type: Spraying Equipment: Sprayee Operator: Heather Field: Leroys Crop: Soybeans Total Acres Applied: 72,7 Applied Speed: 8 Applied Input Carrier: Water Method: Past Field Complete: (r) Ticket #: FA-2017-143 Temperature: 73,4 F Sky Conditions: Clear Seal Conditions: Good Seart Date/Time 05/26/2017 10:35 AM Wind Speed: 2 MPH Wind Direction: N End Date/Time 05/26/2017 12:50 PM Wind Speed: 3 MPH Wind Direction: NE Crop Year: 2017 Commants:

Inputs

Mix	Input	Raco	Total Unmixed Applied	Unita
	Roundup Powermax	32	2326.4	FI Ounces
	Boundary	2	145.4	Pints
	Sprayer	(72.7	Each
	Laborett 00	24	25.3	Each

Capture comprehensive spraying activity records from pre to post application including operator, chemical used, time stamp, weather conditions, and clean-out.

ABOUT CONSERVIS:

Conservis provides a farm management system that helps smart farmers become even smarter. Our software delivers comprehensive data to plan and manage each stage of the production year, while our team provides knowledgeable, on-the-farm support. Created through conversation with growers on the ground, Conservis is truly farmer-inspired. And in an age where data is bought and sold, Conservis puts yours to work for you and *only* you. We are based in Minneapolis and we're proud to serve farmers across four continents.

To learn more, please visit **www.conserviscorp.com**.