March 27, 2019

NAME: Hartung Brothers, Inc.  

INSPECTION: C-Ag Use 03/22/2019

SAMPLE NO.: none

SUSPECTED VIOLATION: None

ENFORCEMENT ACTION: None

RECOMMENDED EPA ENFORCEMENT ACTION:

COMMENT: Follow-up to Complaint No. KA-19-02

Intrepid 2F (EPA Reg. No. 62719-442)
INSPECTION TRACKING REPORT

INSPECTION DATE: 03-22-19
BUSINESS NAME: Hartung Brothers, Inc.
ADDRESS: P.O. Box 823

INSPECTOR: Ann Kam
INTERVIEWEE:
APPLICATOR: corn
CROP/SITE:

CERT NO.

COMPLAINT NO: KA-19-02
PHONE: 652-4080
ZIP: 96752
CITY: Kakaha
ST: HI

TRANSFER DATE: 03-25-19

INSPECTOR COMMENTS: Follow-up to 02-01-19 inspection. Provided new maps with correction to wind direction.

SAMPLE NO

PESTICIDE-CHEMICAL/ EPA REG. NO.

Suspected Violation(s):

Intrepid 2F / 62719-442

None

COMMENTS:

COMMENTS:

COMMENTS:

CASE PREPARATION

CASE RECEIVED: 03/27/19

VIOLATION(S): None

CASE REVIEWED: 03/27/19

ENFORCEMENT ACTION & DATE: None

PREP COMMENTS:

CIVIL PENALTY

DOCKET NO:

PROPOSED AMOUNT:

OTHER:

CHAIRPERSON REVIEW:

DATE NOV SENT TO AG:

NOV DATE:

DATE CA SENT TO AG:

RESPONDENT: DATE SIGNED:

SETTLED AMOUNT:

OTHER PENALTY:

EPA REFERRAL DATE:

CIVIL COMMENTS:

☑ SINGLE PAYMENT

☑ MULTIPLE PAYMENTS

TERMS:

☑ CHAIRPERSON APPROVED

☑ NOV APPROVED BY AG

☑ CA APPROVED BY AG

DATE CLOSED: 03/27/19
COMPLAINT – AGRICULTURAL USE
Complaint No. KA-19-02
Hartung Brothers, Inc.

03-22-19

ADDENDUM

On 03-22-19, at the direction of Mr. John McHugh, Program Manager for the Hawaii Department of Agriculture – Pesticides Branch, a follow-up inspection was conducted at Hartung Brothers, Inc. (Hartung), located at 7050 Kaumualii Highway, Kekaha, Hawaii 96752, to collect more information regarding to complaint number KA-19-02. A Notice of Pesticide Use/Misuse Inspection was issued to Mr.________ Operations Lead. ______ was interviewed.

and I reviewed and documented the following:

1. The wind direction provided during the 02-01-19 inspection was read incorrectly. The Weather station reads the direction that the wind is blowing FROM. ______ provided corrected maps to reflect the wind direction.
2. Weather station was calibrated on August 21, 2018. It is a mile away from the field.
3. Applicator provided information that he takes wind readings with anemometer and compass at field prior to spraying.
4. Corn was harvested on 3/12/19
5. There were three applications made to the field in the past year.
6. Boom height was in the corn canopy, in between the rows.
7. They do not calibrate the hand-held anemometers.
8. Hartung fields are more than 25ft. from the shrimp farms across the street.

Mr.________ applicator, was interviewed again. ______ said on 01-21-19, before applying the Intrepid 2F, he took wind readings at each field prior to spraying. _____ said he always takes wind readings prior to spraying each field and uses his hand-held anemometer. ________ said he uses the Raven Sprayer screen to take the wind direction reading. _______ said he recalls the winds being very low, at 2mph, at the time of application. ______ provided an attestation.

Ann Kam
Environmental Health Specialist
03-23-19
State of Hawaii  
DEPARTMENT OF AGRICULTURE  

NOTICE OF PESTICIDE USE/MISUSE INSPECTION  

<table>
<thead>
<tr>
<th>TYPE OF INSPECTION</th>
<th>TITLE</th>
<th>ADDRESS (Number, Street, City, State and ZIP Code)</th>
<th>SIGNATURE OF STATE INSPECTOR</th>
<th>REASON FOR INSPECTION</th>
</tr>
</thead>
</table>
|                    | Operations Lead | 7050 Kualii Hwy. / P.O. Box 823  
Kekaha, HI 96752  
Kekaha, HI 96752 | D. C. Fan | For the purpose of inspecting sites where pesticides are being used to collect data on the use of pesticides and to determine whether pesticides are being used in compliance with the Hawaii Pesticides Law (Chapter 149A, HRS) and Administrative Rules, Chapter 66, Pesticides, of the Department of Agriculture.  
For the purpose of inspecting sites where pesticides have been used and to determine whether the pesticides were used in compliance with the Hawaii Pesticides Law (Chapter 149A, HRS) and Administrative Rules, Chapter 66, Pesticides, of the Department of Agriculture.  
VIOLATION SUSPECTED:  
Follow-up to inspection conducted on 02/01/19 |

CONSENT  

☒ Voluntary Consent Necessary to enter for Inspection and/or Sampling.  
The undersigned hereby voluntarily consents to an inspection of Hunting Brothers Inc  
of which I am owner, Agent or Person-In-Charge, for the purposes of gathering information and/or samples in connection with the administration and enforcement of the Hawaii Pesticides Law (Chapter 149A, HRS) and Administrative Rules, Chapter 66, Pesticides, of the Department of Agriculture.
HAWAI‘I DEPARTMENT OF AGRICULTURE
ATTESTATION

Island

Kaua‘i

Sample Number(s)

Before a representative of the Hawaii Department of Agriculture, personally appeared and says:

Please see attached statement

I hereby affirm that the foregoing statement is true to the best of my knowledge and belief.

Signature

[Signature]

3/22/2019

Date

Attested to at (city and state) Ke‘ekaha, Hawaii

this 22nd day of March 2019.

Signature of HDOA Representative

[Signature]

Environmental Health Specialist

Title
March 22, 2019

Hawaii Department of Agriculture

This statement regards the complaint KA-19-02 that stated that we were spraying on 1/22/2019 at 7:00 PM. However, our records displayed that we were not spraying on that evening and volunteered to an inspection for a spray on different date at the same time, 1/21/2019 at 7:00 PM.

Ann Kam conducted an inspection on 2/1/2019 and upon review of the information collected the HDOA found a few items that needed to be clarified. Below is the information requested.

- Wind Direction
  - According to the Hartung's weather station on 1/21/2019 @ 7:00 PM wind was blowing FROM the east at sustained 2.1 mph and gusting at 4.4 mph. The weather station is located about 1-mile SE of the field. [redacted], the applicator, took wind readings that evening prior to every field he sprayed, he confirmed the wind speed was below 10 mph and the wind direction.
  - Upon further review of the weather stations data, incorrectly read the wind direction generated from the weather station as the original map provided to the HDOA stated the wind was blowing towards the east not from the east as reported by the weather station.
  - The weather station data presented was only supplemental data to the observation made by [redacted] prior to the application.
  - Here is an image of the anemometer [redacted] used that evening.

- Weather Station Calibration
  - August 21, 2018 – All Hartung’s weather stations were calibrated by a representative from Western Weather Group for the annual calibration. The weather station passed its calibration and [redacted] gave Ann Kam a copy of the calibration records.
- PHI for Intrepid is 21 days (Application date 1/21/2019)
  - Start of Harvest 3/12/2019 finished on 3/18/2019

- Intrepid 2F applications from 1/21/2018 to 1/21/2019
  - 16 fl oz/A/Application Max and 64 fl oz/acre/year

<table>
<thead>
<tr>
<th>Field</th>
<th>Intrepid 2F Application Date</th>
<th>Rate Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>KE-313A-02</td>
<td>1/25/2018</td>
<td>4 oz/A</td>
</tr>
<tr>
<td>KE-313A-02</td>
<td>12/13/2018</td>
<td>4 oz/A</td>
</tr>
<tr>
<td>KE-313A-02</td>
<td>1/21/2019</td>
<td>4 oz/A</td>
</tr>
</tbody>
</table>

- Total Rate Applied Per Acre
  - In Past Year 12 oz/A

- Maximum Allowed Rate
  - Per acre per year 64 oz/A

- Boom Height
  - Excerpt from Intrepid 2F label - "For groundboom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy"
  - Used Hagie STS-12 sprayer with boom having drop nozzles to target earworms
    - 24" Drop had 03 split nozzles which is a course spray
    - Corn canopy height varied but average 65"
    - Boom was just above the tassels at about 80" therefore the application was made roughly 9" below the top of the canopy.

- Sensitive Areas
  - As required by the label we had at least a 25' buffer from any sensitive areas.
  - We are greater than 25' from the roads and in communication with the shrimp farm across from our fields so they know when and where we plan our sprays.

Please let me know if you need any additional information to close out the investigation.

Best Regards,

Attestation

Hunting Brothers, Inc.
03/22/2023
UPDATE 3/22/2019
1/21/2019 @ 7:00 PM Wind was blowing FROM the east at sustained 2.1 mph and gusting at 4.4 mph this was according to the weather station located about 1 mile SE of the field. (applicator) took wind readings that evening prior to every field he sprayed and he confirmed the wind speed was below 10 mph and the direction.

Field being applied at 7:00 PM At time of observation
Before a representative of the Hawaii Department of Agriculture, personally appeared and says:

On Jan. 24, 2019, before applying Intrepid 2F tank mix, I took wind readings at each field prior to spraying. I always take wind readings before spraying each field with my hand anemometer and the the Bravo wind direction reading on the Raven Sprayer screen.

I hereby affirm that the foregoing statement is true to the best of my knowledge and belief.

[Signature]

March 22, 2019

Date

Yelah, Hawaii

22nd day of March 2019

[Signature]

Environmental Health Specialist

Signature of HDOA Representative

Title
Western Weather Group, Inc (WWG) performed the calibration of the automated weather stations for Hartung Brothers on Kauai, Hawaii on Aug 21th, 2018. The instrumentation used as transfer standards by WWG have been calibrated to NIST traceable standards.

The first section of this report outlines the tests that were performed during the calibration. The test section is followed by the calibration results, recommendations and a data sheet with the calibration test results.

**Calibration Tests Performed at the Station**

**Datalogger** – The program, error files, data storage, real-time sensor display and date/time were checked.

**Power supply** - Battery power and solar panel outputs are tested. The solar panel is disconnected and a 1-amp load applied to the battery for 30 second. This is done to test the battery voltage and its power reserve.

**Temperature and humidity sensors** (air) – The temperature and relative humidity were compared against a reference HMP155 temperature and RH probe. The two probes were placed side by side in a fan-aspirated shield and checked under ambient conditions.

**Wind speed and direction sensors** - Sensor output and starting threshold were checked to determine bearing wear. Orientation to true north was checked using a GPS and/or a declination corrected magnetic compass.

**Solar radiation** – The output was checked against a calibrated Epply Precision Spectral Pyranometer. The sensor mount was also checked to make sure it was level.

**Precipitation** – A volume of water equivalent to 0.25” of precipitation is allowed to slowly drip into the rain gauge. The total amount of equivalent precipitation measured by the weather station is recorded by the datalogger at the weather station and should be 0.25”, ± 5%. If needed, the gauge is adjusted and then tested again.

**General cleanliness** - The solar panel, pyranometer, radiation shield and rain gauge are cleaned as needed.
Calibration Results – Kokole

All sensors and hardware checked during this calibration were found to be in good working order.

Calibration Summary Table

<table>
<thead>
<tr>
<th>Measurement Parameter</th>
<th>Sensor Model</th>
<th>Passed Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind Speed</td>
<td>RM Young Wind Monitor Jr.</td>
<td>Yes</td>
</tr>
<tr>
<td>Wind Direction</td>
<td>RM Young Wind Monitor Jr.</td>
<td>Yes</td>
</tr>
<tr>
<td>Air Temperature</td>
<td>Vaisala HMP45</td>
<td>Yes</td>
</tr>
<tr>
<td>Air Relative Humidity</td>
<td>Vaisala HMP45</td>
<td>Yes</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>LiCor Li200X</td>
<td>Yes</td>
</tr>
<tr>
<td>Precipitation</td>
<td>Texas Electronics TE525WS</td>
<td>Yes</td>
</tr>
<tr>
<td>Battery/Charger</td>
<td>CSI PS100</td>
<td>Yes</td>
</tr>
<tr>
<td>Date / Time</td>
<td>Datalogger</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Recommendations

*Regularly scheduled cleanings and station maintenance will help insure accurate data. Annual calibrations should also continue to insure proper operation of the weather station. Also ant killer should be place around the stations monthly.
**Automated Meteorological Monitoring Station Calibration-Maintenance Worksheet**

**Company:** Hartung  
**Station:** Kokole

**Date:** 8/21/2018  
**Weather:** Sunny

**Time:** 8:30am  
**Performed By:** [Redacted]

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### Sensor Performance vs Western Weather Calibrated Reference

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Model</th>
<th>Test</th>
<th>To pass</th>
<th>Test After Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Station</td>
<td>Reference</td>
<td>Factory Spec.</td>
<td>Station Value</td>
</tr>
<tr>
<td>Temperature (°F)</td>
<td>HMP60</td>
<td>81.4</td>
<td>81.6</td>
<td>-0.2</td>
</tr>
<tr>
<td>Relative Humidity (%)</td>
<td>HMP60</td>
<td>70.5</td>
<td>71.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Dew Point Temp (°F)</td>
<td>HMP60</td>
<td>71.4</td>
<td>71.5</td>
<td>-0.1</td>
</tr>
<tr>
<td>Solar Radiation (W)</td>
<td>LI200x</td>
<td>394</td>
<td>409</td>
<td>-1.5</td>
</tr>
<tr>
<td>Rain Gauge (Inches)</td>
<td>TE526WS</td>
<td>0.25</td>
<td>0.25</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Wind Speed & Direction Sensors

<table>
<thead>
<tr>
<th>Direction</th>
<th>4 Point Test</th>
<th>Bearings</th>
<th>Orientation (to true north)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Wind Monitor</td>
<td>Fixed-Good Good</td>
<td>Good</td>
</tr>
</tbody>
</table>

### Datalogger and Station Status

<table>
<thead>
<tr>
<th>Charger / Battery</th>
<th>PS150 / 12V</th>
<th>Datalogger</th>
<th>CR800</th>
<th>Clock Chk</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging Voltage</td>
<td>13.2</td>
<td>OS</td>
<td>27.04</td>
<td>Grounding</td>
<td>Yes</td>
</tr>
<tr>
<td>Load/No Charge</td>
<td>12.7</td>
<td>Resets</td>
<td>0</td>
<td>Comm.</td>
<td>Good</td>
</tr>
<tr>
<td>Low 12V Errors</td>
<td>0</td>
<td>Skip Scans</td>
<td>0</td>
<td>Desiccant</td>
<td>Good</td>
</tr>
<tr>
<td>Int. Battery Volts</td>
<td>3.4</td>
<td>Overruns</td>
<td>0</td>
<td>Lat/Long</td>
<td></td>
</tr>
</tbody>
</table>

**Customer Notes:**

All sensors met manufacturer specs.