
A BILL FOR AN ACT

RELATING TO ENVIRONMENTAL PROTECTION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that the number of large-
2 scale, outdoor commercial agricultural operations in Hawaii has
3 been increasing. Unlike the majority of Hawaii's farmers, these
4 operations regularly apply high volumes of restricted use
5 pesticides into the environment. The United States
6 Environmental Protection Agency classifies pesticides as
7 restricted use pesticides if they are determined to cause
8 "unreasonable adverse effects on the environment" when used
9 "without additional regulatory restrictions." The legislature
10 also finds that information pertaining to the intensive use of
11 pesticides in large-scale commercial agriculture within the
12 State is not readily available to the public.

13 In 2013, the department of agriculture began the Kauai
14 agricultural good neighbor program to collect and publish
15 information regarding outdoor usage of restricted use pesticides
16 by large-scale, commercial agricultural operations in the county
17 of Kauai. Similar programs do not exist for the other counties



1 or political subdivisions in the State. Moreover, the
2 information collected is completely voluntary, is unverified,
3 and is only published on the department's website months after
4 the reported pesticide applications. As a result, the public is
5 unable to evaluate the full extent of any impacts accruing to
6 Hawaii's environment or its residents and to decide whether the
7 risks associated with the large-scale agricultural use of such
8 pesticides across the State is acceptable.

9 The legislature further finds that the State currently does
10 not have an adequate regulatory structure in place to monitor
11 the human health impacts of pesticide drift near sensitive
12 populations. Moreover, the direct, indirect, and cumulative
13 impacts on the environment and public health related to long-
14 term intensive commercial use of pesticides have yet to be
15 properly or independently evaluated.

16 Children can be exposed to pesticides applied on school
17 grounds, pesticides that drift onto school grounds, or pesticide
18 residues. Of greatest concern are restricted use pesticides
19 such as chlorpyrifos, which scientists have definitively linked
20 to developmental delays in children, and other toxic exposure to
21 pesticides during fetal, neonatal, and infant life that may



1 disrupt critical development processes. Life-long pesticide
2 exposure for those living in exposed areas has been linked to
3 long-term health effects, including cancer and other serious
4 diseases, decreased cognitive function, and behavioral problems.

5 The legislature finds that children, the elderly, and other
6 sensitive residents have no choice but to live, work, and
7 commute daily in close proximity to areas where restricted use
8 pesticides are being sprayed. Pesticides may volatilize, or
9 change from a solid or liquid state into a vapor state, into the
10 lower atmosphere for days, weeks, or months after the
11 application. Accordingly, drift from restricted use pesticides
12 may have lingering effects on the environment long after the
13 initial exposure.

14 The study entitled, "Pesticide Use by Large Agribusinesses
15 on Kaua'i," published by the independent Joint Fact Finding
16 Study Group and issued in May 2016, confirms that the State
17 lacks sufficient data on pesticide use and human and
18 environmental exposure. Specifically, the Joint Fact Finding
19 Study Group recommended the implementation of "green screens,"
20 or vegetation within buffer zones, as further mitigation



1 measures to address drift concerns of pesticide-laden dust
2 particles.

3 The legislature recognizes that since 1996, WeVoteHawaii,
4 formerly Kids Voting Hawaii, has simulated the Hawaii biennial
5 adult voting process for school-aged children in kindergarten
6 through twelfth grade in public, parochial, independent,
7 charter, and home schools on all six islands. In 2016, over
8 eighty per cent of the 62,133 respondents voted in support of
9 pesticide buffer zones around schools.

10 The purpose of this Act is to protect the State's children
11 and childcare facilities from the unintended impacts of large-
12 scale agricultural pesticide use by:

13 (1) Making the reporting guidelines of the Kauai
14 agricultural good neighbor program mandatory for
15 large-scale, outdoor commercial agricultural
16 operations across the State;

17 (2) Establishing disclosure and public notification
18 requirements for outdoor applications of pesticides
19 in, as well as in proximity to, schools, healthcare
20 facilities, childcare and eldercare facilities, and
21 other sensitive areas; and



1 (3) Establishing a pilot program for vegetative buffer
2 zones, as recommended by the Joint Fact Finding Study
3 Group, around selected schools within the State.

4 SECTION 2. Chapter 149A, Hawaii Revised Statutes, is
5 amended by adding a new part to be appropriately designated and
6 to read as follows:

7 "PART . PESTICIDE MANDATORY DISCLOSURE AND VEGETATIVE
8 BUFFER ZONES PILOT PROGRAM

9 §149A-A Definitions. As used in this part:

10 "Adult residential care home" means an adult residential
11 care home as defined in section 321-15.1 that is licensed by the
12 State.

13 "Ahupuaa" shall have the same meaning as in section 226-2.

14 "Assisted living facility" means an assisted living
15 facility, as defined in section 321-15.1, that is licensed by
16 the State.

17 "Child care facility" means a child care facility, as
18 defined in section 346-151, that is licensed by the State.

19 "Commercial agricultural entity" means any individual,
20 partnership, association, corporation, limited liability
21 company, or organized group of persons, regardless of whether



1 incorporated, that is engaged in commercial agricultural
2 production.

3 "Commercial agricultural production" means:

4 (1) Commercial production of any seed, crop, plant,
5 timber, livestock, poultry, fish, bees, or apiary
6 products; or

7 (2) Testing or experimental production of any seed, crop,
8 plant, timber, livestock, poultry, fish, bees, or
9 apiary products.

10 "Commercial agricultural production area" means real
11 properties and areas owned, leased, or otherwise operated or
12 controlled and used by a commercial agricultural entity for
13 commercial agricultural production.

14 "Early childhood education and care facility" means any
15 property licensed by the State for the care and instruction of
16 children from birth to age five.

17 "Expanded adult residential care home" means an expanded
18 adult residential care home, as defined in section 321-15.1,
19 that is licensed by the State.



1 "Experimental use pesticide" means a pesticide whose use is
2 authorized by an experimental use permit by either the EPA or
3 the State.

4 "Extended care adult residential care home" shall have the
5 same meaning as in section 323D-2.

6 "Family child care home" means a family child care home, as
7 defined in section 346-151, that is licensed by the State.

8 "Group child care center" means a group child care center,
9 as defined in section 346-151, that is licensed by the State.

10 "Group child care home" means a group child care home, as
11 defined in section 346-151, that is licensed by the State.

12 "Health" includes physical and mental health.

13 "Hospice home" shall have the same meaning as in section
14 321-15.1.

15 "Hospital" includes all hospitals licensed pursuant to
16 section 321-14.5.

17 "Outdoor application" means an application of a pesticide
18 made outside of a building or enclosed structure. The term
19 excludes:

20 (1) Indoor applications of pesticides; and



1 (2) Structural or termite application of pesticides,
2 whether the applications are applied in or outside of
3 a building or enclosed structure.

4 "Primary care clinic" means a primary care clinic, as
5 defined in section 323D-2, that is licensed by the State.

6 "School" means an academic institution, including a public
7 school, department school, or charter school, as those terms are
8 defined in section 302A-101, early learning institution, or
9 private school licensed by the State. The term does not include
10 institutions of higher education, as defined in section 346-16.

11 "School grounds" means:

12 (1) Land associated with any school, child care facility,
13 early childhood education and care facility, family
14 child care home, group child care center, or group
15 child care home, including playgrounds, athletic
16 fields, and agricultural fields used by students or
17 staff of these entities; and

18 (2) Any other outdoor area used by students or staff of a
19 school that is under the control or operation of any
20 school, child care facility, early childhood education



1 and care facility, family child care home, group child
2 care center, or group child care home.

3 "Sensitive area" includes any school, hospital, adult
4 residential care home, assisted living facility, child care
5 facility, early childhood education and care facility, family
6 child care home, group child care center, group child care home,
7 hospice home, extended care adult residential care home,
8 expanded adult residential care home, health care facility, and
9 primary care clinic.

10 **§149A-B Mandatory disclosure and notification of outdoor**
11 **pesticide use on affected grounds.** Effective one year following
12 the effective date of this Act, any school, child care facility,
13 early childhood education and care facility, family child care
14 home, group child care center, and group child care home that
15 uses or purchases in excess of ten pounds or ten gallons of
16 restricted use pesticides during the prior calendar year and is
17 selected as a pilot school under this section shall disclose the
18 use of all pesticides, including restricted use, general use,
19 and experimental use pesticides, as follows:

20 (1) Public posting of pesticide outdoor application. At a
21 minimum of twenty-four hours prior to the outdoor



1 application of any pesticide on affected grounds, each
2 entity subject to this section shall post public
3 warning signs in the area in which pesticides are to
4 be applied, in the manner prescribed by section
5 149A-D;

6 (2) Notification to parents and guardians. At a minimum
7 of twenty-four hours prior to the outdoor application
8 of any pesticide on affected grounds, each entity
9 subject to this section shall provide written
10 notification to the parents or guardians of children
11 attending the school, child care facility, early
12 childhood education and care facility, family child
13 care home, group child care center, or group child
14 care home, as the case may be, in the manner
15 prescribed by section 149A-D; and

16 (3) Recordkeeping and annual public disclosure. No later
17 than sixty days following the end of each calendar
18 year, each entity subject to this section shall
19 provide to the department annual public reports of all
20 pesticides used in outdoor applications during the



1 preceding calendar year. The annual reports shall
2 comply with the requirements of section 149A-E.

3 §149A-C Mandatory disclosure and notification of
4 commercial agricultural pesticide use. Effective one year
5 following the effective date of Act , Session Laws of Hawaii
6 2017, any commercial agricultural entity that annually purchases
7 or uses in excess of ten pounds or ten gallons of restricted use
8 pesticides during the prior calendar year shall disclose the use
9 of all pesticides, including restricted use, general use, and
10 experimental use pesticides, as follows:

11 (1) Public posting of pesticide outdoor application. At a
12 minimum of twenty-four hours prior to the outdoor
13 application of any pesticide, any commercial
14 agricultural entity subject to this section shall post
15 public warning signs in the area in which pesticides
16 are to be applied, in the manner prescribed by section
17 149A-D;

18 (2) Notification to occupants and residents of sensitive
19 areas. At a minimum of twenty-four hours prior to the
20 outdoor application of any pesticide, any commercial
21 agricultural entity subject to this section shall



1 provide written notification to any sensitive area and
 2 any property owner, lessee, or person otherwise
 3 occupying any residential property within feet of
 4 the property line of the commercial agricultural
 5 entity where any pesticide is anticipated to be
 6 applied outdoors, in the manner prescribed by section
 7 149A-D; and

8 (3) Recordkeeping and annual public disclosure. No later
 9 than sixty days following the end of each calendar
 10 year, each commercial agricultural entity subject to
 11 this section shall provide to the department annual
 12 reports of all pesticides used in outdoor applications
 13 during the preceding calendar year. The annual
 14 reports shall comply with section 149A-E and shall be
 15 public records and posted online on the department's
 16 website.

17 **§149A-D Public warning signs; written notifications;**
 18 **contents.** (a) Any public warning sign required to be posted
 19 under section 149A-B or 149A-C shall remain posted during the
 20 outdoor application of any pesticide and until expiration of the
 21 applicable restricted-entry interval established by the EPA for



1 the particular pesticide. The posting of a warning sign during
2 and after the outdoor application of any pesticide shall conform
3 to the worker protection standard established by the EPA.

4 (b) The department shall adopt rules pursuant to chapter
5 91 requiring that all warning signs posted, and written
6 notifications provided, pursuant to section 149A-B or 149A-C
7 include the following information:

- 8 (1) The trade name of the pesticides to be applied;
- 9 (2) The names of the active ingredients of the pesticides
10 to be applied;
- 11 (3) The potential hazards to humans and domestic animals,
12 as listed in the precautionary statements of the
13 pesticide's label;
- 14 (4) Emergency telephone numbers to call in case of
15 poisoning from the pesticides; and
- 16 (5) Any other related information the department deems
17 appropriate.

18 **§149A-E Public reports; contents.** The department shall
19 adopt rules, pursuant to chapter 91, requiring that public
20 annual reports required under sections 149A-B and 149A-C include
21 the following information:



- 1 (1) A listing of all pesticides used in outdoor
- 2 applications by federal and state registrations or
- 3 permit numbers, commercial product names, and active
- 4 ingredients;
- 5 (2) The total quantities used for each pesticide; and
- 6 (3) A general description of the geographic location,
- 7 including at minimum the tax map key number and
- 8 ahupuaa, where the pesticides were used.

9 **§149A-F Pilot program for vegetative buffer zones around**
10 **schools; selection.** Effective six months following the
11 effective date of Act , Session Laws of Hawaii 2017, the
12 department shall adopt rules pursuant to chapter 91 to designate
13 one individual school (on the island of Oahu, one on the island
14 of Kauai, one on the island of Maui, one on the island of
15 Hawaii, and one on the island of Molokai) as pilot centers for
16 vegetative buffer zones. The selected schools shall be located
17 within feet of a commercial agricultural production area
18 that is operated by a commercial agricultural entity that
19 purchases or uses in excess of a total of ten pounds or ten
20 gallons of restricted use pesticides annually.



1 **§149A-G Acceptable vegetation for vegetative buffer zones.**

2 (a) Within six months following the effective date of Act ,
3 Session Laws of Hawaii 2017, the department, in consultation
4 with the University of Hawaii college of tropical agriculture
5 and human resources, shall adopt rules pursuant to chapter 91 to
6 establish a list of acceptable plants to be cultivated in
7 vegetative buffer zones established under the pilot program.

8 (b) Plants that may be included in the list of acceptable
9 plants may have the following qualities:

- 10 (1) Are known to be native to the State of Hawaii;
- 11 (2) Are known to have remediation or filtering properties
12 to improve air, water, or soil quality;
- 13 (3) Are known to have beneficial properties for improving
14 air, water, or soil quality; or
- 15 (4) Are shrubs or trees of such density that their growth
16 and cultivation will likely create a windbreak effect.

17 **§149A-H Restrictions on pesticide use around school**
18 **grounds selected for pilot program.** (a) Effective one year
19 following the designation of the five schools described in
20 section 149A-F, any commercial agricultural entity that
21 purchases or uses in excess of a total of ten pounds or ten



1 gallons of restricted use pesticides annually shall restrict the
2 outdoor application of all pesticides, including restricted use,
3 general use, and experimental use pesticides, so that no
4 pesticide may be used within feet of any school grounds of
5 any school designated under section 149A-F.

6 (b) The restriction in subsection (a) shall be minimum
7 standards. If this section, or any part thereof, is determined
8 to conflict with any information contained in the labels of the
9 pesticide or other regulation, the more restrictive standard on
10 pesticide application shall apply.

11 **§149A-I Vegetative buffer zones around school grounds**
12 **selected for pilot program.** (a) Effective one year following
13 the designation of the five schools described in section 149A-F,
14 any commercial agricultural entity that purchases or uses in
15 excess of a total of ten pounds or ten gallons of restricted use
16 pesticides annually shall maintain a continuous buffer zone that
17 is cultivated with acceptable perennially-rooted vegetation,
18 derived from the list of plants designated by the department
19 pursuant to section 149A-G, including those that would create a
20 windbreak effect, in the buffer zone around school grounds where
21 no pesticide application is allowed, as described in section



1 149A-H(a). The continuous buffer zone shall be maintained for a
2 period of not less than years commencing after the
3 designation of the five schools described in section 149A-F and
4 ending on .

5 (b) The restrictions in subsection (a) shall be minimum
6 standards. If this section, or any part thereof, is determined
7 to conflict with any information contained in the labels of the
8 pesticide or other regulation, the more restrictive standard on
9 pesticide application shall apply.

10 (c) The department shall annually report to the
11 legislature not later than twenty days prior to the convening of
12 each regular session on the efficacy of the vegetative buffer
13 zones and whether the pilot program should be discontinued,
14 extended for a fixed period of time, or made permanent.

15 **§149A-J Identification of application site and provision**
16 **of site plan.** (a) Any commercial agricultural entity that is
17 subject to this part shall ensure that, prior to any outdoor
18 application of pesticides, the application site is positively
19 identified using a unique and verifiable method, including:

20 (1) An onboard, geo-referenced electronic mapping and
21 navigation system;



1 (2) Effective site markings visible to the pesticide
2 applicator; or

3 (3) Other methods approved by the department.

4 (b) Any commercial agricultural entity that is subject to
5 this part, prior to any application of pesticides, shall provide
6 the certified pesticide applicator, commercial pesticide
7 applicator, private pesticide applicator, or pest control
8 operator with a site plan that includes a site map that:

9 (1) Delineates the boundaries of the application area and
10 the property lines;

11 (2) Depicts the locations of school grounds within
12 feet of the application area; and

13 (3) Depicts the buffer zones around school grounds where
14 no pesticide application is allowed.

15 **§149A-K Exemptions.** (a) Notwithstanding sections 149A-H
16 and 149A-I, any commercial agricultural entity may obtain from
17 the department a single use exemption from the prohibition on
18 outdoor applications of pesticides in buffer zones around school
19 grounds, as provided in subsection (b).



1 (b) In accordance with rules adopted by the department,
2 the department shall issue a single use exemption under this
3 section if it determines that:

4 (1) The pest situation poses an immediate threat to human
5 health and the environment; and

6 (2) There is no viable alternative to the use of the
7 proposed pesticide.

8 **§149A-L Structural or termite application of pesticides.**

9 Nothing in this part shall be construed to prohibit the use of
10 structural or termite application of pesticides, regardless of
11 whether the applications are applied in or outside of a building
12 or enclosed structure.

13 **§149A-M Penalties and citizen suits.** (a) The department
14 may bring an action in a court of competent jurisdiction to
15 enjoin any person or entity from violating this part.

16 (b) The department may assess a fine for any violation of
17 this part, as follows:

18 (1) \$ for a first violation;

19 (2) \$ for a second violation; and

20 (3) \$ for a third or subsequent violation.

21 Each day of violation shall be considered a separate violation.



1 (c) Any injured citizen of the State who acts in the
2 public interest, at least sixty days after first giving notice
3 of the alleged violation to the department and the alleged
4 violator, may bring an action to enjoin violation of this part
5 in any court of competent jurisdiction. The court may award to
6 a prevailing plaintiff reasonable costs and attorney's fees
7 incurred in investigating and prosecuting an action to enforce
8 this part. An award may not include monetary damages, but only
9 fee and cost recovery.

10 **§149A-N Authority of local government.** Nothing in this
11 part shall be construed to preempt or prohibit the authority of
12 a unit of local government in the State, to regulate pesticide
13 disclosure, notification, and use, including the establishment
14 of buffer zones against pesticides, in a manner that is
15 equivalent to, or more stringent than, the provisions contained
16 in this part.

17 **§149A-O Rules.** The department shall adopt rules pursuant
18 to chapter 91 to implement this part; provided that the
19 department may not establish exemptions not expressly authorized
20 in this part."



1 SECTION 3. This Act does not affect rights and duties that
2 matured, penalties that were incurred, and proceedings that were
3 begun before its effective date.

4 SECTION 4. If any provision of this Act, or the
5 application thereof to any person or circumstance, is held
6 invalid, the invalidity does not affect other provisions or
7 applications of the Act that can be given effect without the
8 invalid provision or application, and to this end the provisions
9 of this Act are severable.

10 SECTION 5. In codifying the new sections added by section
11 2 of this Act, the revisor of statutes shall substitute
12 appropriate section numbers for the letters used in designating
13 the new sections in this Act.

14 SECTION 6. This Act shall take effect on July 31, 2150.



Report Title:

Agriculture; Reporting of Pesticide Use; Large-scale
Agricultural Operations; Pilot Program; Vegetative Buffer Zone

Description:

Establishes disclosure and public notification requirements for outdoor application of pesticides in various sensitive areas or by large-scale, outdoor commercial agricultural operations. Establishes a pilot program that creates a vegetative buffer zone around five selected schools near a commercial agricultural production area. Effective July 31, 2150. (HB1571 HD1)

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