
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. The program has since been expanded statewide.



1 The legislature further finds that the State currently does
2 not have an adequate regulatory structure in place to monitor
3 the human health impacts of pesticide drift near sensitive
4 populations. Moreover, the direct, indirect, and cumulative
5 impacts on the environment and public health related to long-
6 term intensive commercial use of pesticides have yet to be
7 properly or independently evaluated.

8 Children can be exposed to pesticides applied on school
9 grounds, pesticides that drift onto school grounds, or pesticide
10 residues. Of greatest concern are restricted use pesticides
11 such as chlorpyrifos, which scientists have definitively linked
12 to developmental delays in children, and other toxic exposure to
13 pesticides during fetal, neonatal, and infant life that may
14 disrupt critical development processes. Life-long pesticide
15 exposure for those living in exposed areas has been linked to
16 long-term health effects, including cancer and other serious
17 diseases, decreased cognitive function, and behavioral problems.

18 The legislature finds that children, the elderly, and other
19 sensitive residents have no choice but to live, work, and
20 commute daily in close proximity to areas where restricted use
21 pesticides are being sprayed. Pesticides may volatilize, or



1 change from a solid or liquid state into a vapor state, into the
2 lower atmosphere for days, weeks, or months after the
3 application. Accordingly, drift from restricted use pesticides
4 may have lingering effects on the environment long after the
5 initial exposure.

6 The legislature further finds that the study entitled,
7 "Pesticide Use by Large Agribusinesses on Kaua'i," published by
8 the independent Joint Fact Finding Study Group and issued in May
9 2016, confirms that the State lacks sufficient data on pesticide
10 use and human and environmental exposure. Specifically, the
11 Joint Fact Finding Study Group recommended the implementation of
12 "green screens," or vegetation within buffer zones, as further
13 mitigation measures to address drift concerns of pesticide-laden
14 dust particles.

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



1 The purpose of this Act is to protect the State's children
2 from the unintended impacts of large-scale agricultural
3 restricted use pesticide use by requiring the department of
4 agriculture to:

- 5 (1) Establish a pilot program for vegetative buffer zones,
6 as recommended by the Joint Fact Finding Study Group,
7 around selected schools within the State; and
- 8 (2) Develop and implement a pesticide drift monitoring
9 study at three schools selected to participate in the
10 pilot program for vegetative buffer zones.

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

14 **"PART . VEGETATIVE BUFFER ZONES PILOT PROGRAM**

15 **§149A-A Definitions.** As used in this part:

16 "Candidate pilot farm" means any commercial agricultural
17 entity that has been determined by the department, based upon a
18 review of records of purchases of restricted use pesticides, to
19 be among the top five agricultural users of restricted use
20 pesticides on each of the islands of Oahu, Kauai, Maui, Hawaii,
21 and Molokai.



1 "Commercial agricultural entity" means any individual,
2 partnership, association, corporation, limited liability
3 company, or organized group of persons, regardless of whether
4 incorporated, that is engaged in commercial agricultural
5 production.

6 "Commercial agricultural production" means:

7 (1) Commercial production of any seed, crop, plant,
8 timber, livestock, poultry, fish, bees, or apiary
9 products; or

10 (2) Testing or experimental production of any seed, crop,
11 plant, timber, livestock, poultry, fish, bees, or
12 apiary products.

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

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 "Pilot farm" means each commercial agricultural entity from
5 the group of candidate pilot farms on each island that is
6 designated by the department to participate in the vegetative
7 buffer zone pilot program by virtue of its location relative to
8 a participating school.

9 **§149A-B Selection of pilot centers and pilot farm.** Within
10 six months following the effective date of this Act, the
11 department shall designate ten individual schools, including one
12 on each of the islands of Oahu, Kauai, Maui, Hawaii, and
13 Molokai, as pilot centers for vegetative buffer zones. The
14 selected schools shall be chosen by the department based on the
15 schools' close proximity to one or more candidate pilot farms.
16 The department shall review the list of candidate pilot farms
17 and shall designate for participation as a pilot farm those most
18 likely to impact the selected schools.

19 **§149A-C Acceptable vegetation for vegetative buffer zones.**

20 (a) Within one year following the effective date of this Act,
21 the department, in consultation with the University of Hawaii



1 college of tropical agriculture and human resources, shall
2 establish a list of acceptable plants to be cultivated in
3 vegetative buffer zones under the pilot program established
4 pursuant to section 149A-B.

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

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

14 **§149A-D Restrictions on restricted use pesticide**
 15 **applications in buffer zones.** (a) Within one year of the
 16 effective date of this Act, the department shall establish
 17 minimum distances from any school designated as a pilot center
 18 under 149A-B within which a pilot farm shall be prohibited from
 19 making an outdoor application of a restricted use pesticide.
 20 The specified distances shall be established by the department
 21 based upon the formulation and toxicity category of the



1 restricted use pesticide, the method of application, and other
2 relevant factors.

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

8 **§149A-E Continuous vegetative buffer zones required.** (a)
9 Effective one year following the designation of the ten schools
10 pursuant to section 149A-B, any pilot farm shall maintain a
11 continuous buffer zone that is cultivated with acceptable
12 perennially-rooted vegetation, derived from the list of plants
13 designated by the department pursuant to section 149A-C, in the
14 buffer zone around school grounds where no pesticide application
15 is allowed, as described in section 149A-D(a). The continuous
16 buffer zone shall be maintained for a period of no less than one
17 year after being established or for the duration of the pilot
18 program, whichever is longer.

19 (b) The restrictions in subsection (a) shall be a minimum
20 standard. If this section, or any part thereof, is determined
21 to conflict with any information contained in the labels of the



1 pesticide or other regulation, the more restrictive standard on
2 pesticide application shall apply.

3 (c) The department shall annually report to the
4 legislature no later than twenty days prior to the convening of
5 each regular session on the effectiveness of the pilot program
6 and whether the pilot program should be discontinued, extended
7 for a fixed period of time, or made permanent.

8 **§149A-F Identification of pilot farm application site and**
9 **provision of site plan.** (a) Any pilot farm that is subject to
10 this part shall ensure that, prior to any outdoor application of
11 restricted use pesticides, the application site is positively
12 identified using a unique and verifiable method, including:

13 (1) An onboard, geo-referenced electronic mapping and
14 navigation system;

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

17 (3) Other methods approved by the department.

18 (b) Any pilot farm that is subject to this part, prior to
19 any application of restricted use pesticides, shall provide the
20 certified pesticide applicator, commercial pesticide applicator,



1 private pesticide applicator, or pest control operator with a
2 site plan that includes a site map that:

- 3 (1) Delineates the boundaries of the application area and
4 the property lines;
- 5 (2) Depicts the locations of school grounds of any school
6 designated under section 149A-B; and
- 7 (3) Depicts the buffer zones around school grounds where
8 no pesticide application is allowed.

9 **§149A-G Exemptions.** (a) Notwithstanding sections 149A-D
10 and 149A-E to the contrary any pilot farm may obtain from the
11 department a single use exemption from the prohibition on
12 outdoor applications of restricted use pesticides in vegetative
13 buffer zones around school grounds, as provided in subsection
14 (b).

15 (b) The department shall issue a single use exemption
16 under this section if it determines that:

- 17 (1) The pest situation poses an immediate threat to human
18 health and the environment, the vegetation growing
19 within the vegetative buffer zone, or severe loss to
20 the pilot farm;



- 1 (2) There is no viable alternative to the use of the
- 2 proposed pesticide; and
- 3 (3) Acceptable measures will be implemented to minimize
- 4 the potential for pesticide drift from the
- 5 application.

6 **§149A-H Structural or termite application of pesticides.**

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

11 **§149A-I Drift study.** Within one year of the effective
12 date of this Act, the department shall develop and implement a
13 pesticide drift monitoring study to evaluate pesticide drift at
14 three of the schools participating in the pilot program. The
15 department shall submit a report of its findings and
16 recommendations, including any proposed legislation, to the
17 legislature no later than twenty days prior to the convening of
18 the regular session of 2020."

19 SECTION 3. There is appropriated out of the general
20 revenues of the State of Hawaii the sum of \$ or so
21 much thereof as may be necessary for fiscal year 2018-2019 for



1 the pesticide drift monitoring study to be implemented pursuant
2 to section 149A-I, Hawaii Revised Statutes, as established
3 pursuant to section 2 of this Act.

4 The sum appropriated shall be expended by the department of
5 agriculture for the purposes of this Act.

6 SECTION 4. This Act does not affect rights and duties that
7 matured, penalties that were incurred, and proceedings that were
8 begun before its effective date.

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

15 SECTION 6. In codifying the new sections added by section
16 2 of this Act, the revisor of statutes shall substitute
17 appropriate section numbers for the letters used in designating
18 the new sections in this Act.

19 SECTION 7. This Act shall take effect on July 1, 2018.

20



Report Title:

Agriculture; Large-scale Agricultural Operations; Pilot Program;
Vegetative Buffer Zone; Appropriation

Description:

Establishes a pilot program that creates a vegetative buffer zone around ten selected schools near a commercial agricultural production area. Requires the department of agriculture to develop and implement a pesticide drift monitoring study. Makes an appropriation. (SD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

