

JAN 21 2026

A BILL FOR AN ACT

RELATING TO AIR POLLUTION.

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

SECTION 1. The legislature finds that toxic air pollution from waste incineration disproportionately impacts Native Hawaiian residents and is likely underestimated due to a lack of modern monitoring technology required of incineration facilities. The legislature further finds that, according to data from the United States Environmental Protection Agency (EPA), the Covanta Honolulu Resource Recovery Venture (H-Power), a waste incinerator located in Campbell Industrial Park on Oahu, is among the largest sources of industrial air pollution, impacting public health and the climate.

The legislature further finds that only four air pollutants are monitored on a continuous basis, while others, if tested for at all, are tested only once per year under optimal operating conditions. Even so, annual stack testing does not occur during startup, shutdown, and malfunction conditions, when certain pollutants are known to be released in higher amounts. The legislature further finds that during prolonged periods of



1 downtime, aging incinerators produce higher emissions from
2 startup and shutdown occurrences, which are not measured during
3 annual stack testing.

4 The legislature further finds that advances in technology
5 have enabled more effective methods to continuously monitor for
6 many toxic and otherwise harmful chemicals emitted by waste
7 combustion facilities. The legislature additionally finds that
8 the EPA has tested and verified the data from more advanced
9 continuous monitors between 2001 and 2007. Reworld, the
10 operator of H-Power, has been using continuous monitors at some
11 of their incinerators in other states, including continuous
12 monitoring and sampling for hydrochloric acid at certain
13 incinerators in New Jersey, New York, and Pennsylvania;
14 long-term sampling for dioxins and furans at an incinerator in
15 Ontario; and mercury, ammonia, and particulate matter at several
16 other incinerators. The legislature notes that under Oregon
17 state law, Reworld is required to continuously monitor for nine
18 different toxic metals and continuously sample for dioxins,
19 furans, and polychlorinated biphenyls. However, these
20 continuous monitors are not used, or required, in Hawaii.



1 The legislature further finds that the continuous
2 monitoring or sampling of emissions provides more accurate data
3 than annual stack testing. When annual stack testing data was
4 compared to the continuous monitoring of hydrochloric acid
5 emissions at the nation's largest waste incinerator, operated by
6 Reworld in Chester, Pennsylvania, it was found that the actual
7 emissions determined by continuous monitoring were sixty-two per
8 cent higher than that shown by annual stack testing, which is
9 the method used by Reworld at H-Power.

10 The legislature further finds that dioxins and furans are
11 the most toxic man-made chemicals known to science. According
12 to studies of incinerators in Europe, it was observed that
13 continuous sampling for dioxins at incinerators found the actual
14 emissions to be thirty-two to fifty-two times greater than those
15 reported in the United States, where testing is typically
16 performed on one burner at each incinerator per year, on a
17 rotating basis. Moreover, a more recent study concluded that
18 the failure to deploy continuous sampling technology in the
19 United States results in underestimating dioxin emissions by
20 four hundred sixty to 1,290 times.



1 The legislature further finds that the monitoring of
2 incinerators is critical in determining community exposure to
3 health hazards from toxic emissions. While many assume that
4 Hawaii's trade winds blow these emissions out to sea, Kona wind
5 conditions blow emissions toward population centers on an
6 average of about one day per week, allowing these harmful
7 chemicals to be released into nearby communities. Moreover,
8 wherever smokestack emissions occur, released chemicals return
9 to the earth with the rain, and when they are blown out to sea,
10 chemicals concentrate in the seafood that is then consumed.

11 Accordingly, the purpose of this Act is to implement
12 continuous monitoring and sampling technologies that have been
13 tested and verified by the EPA at waste combustion facilities to
14 ensure that the owners or operators of the facilities
15 continuously monitor, sample, and report the emissions of
16 contaminants.

17 SECTION 2. Chapter 342B, Hawaii Revised Statutes, is
18 amended by adding a new section to be appropriately designated
19 and to read as follows:

20 "§342B- Waste combustion facilities monitoring. (a)

21 The owner or operator of any waste combustion facility shall



1 develop a plan to continuously monitor or continuously sample
2 emissions of the following contaminants from each combustion
3 unit:

- 4 (1) Carbon dioxide;
- 5 (2) Ammonia;
- 6 (3) Hydrochloric acid;
- 7 (4) Hydrofluoric acid;
- 8 (5) Particulate matter (total, PM10, and PM2.5);
- 9 (6) Volatile organic compounds (VOCs);
- 10 (7) Polycyclic aromatic hydrocarbons (PAHs);
- 11 (8) Dioxins and furans;
- 12 (9) Polychlorinated biphenyls (PCBs);
- 13 (10) Perfluoroalkyl and polyfluoroalkyl substances (PFAS);
- 14 (11) Arsenic;
- 15 (12) Beryllium;
- 16 (13) Cadmium;
- 17 (14) Hexavalent chromium;
- 18 (15) Lead;
- 19 (16) Manganese;
- 20 (17) Mercury;
- 21 (18) Nickel;



1 (19) Selenium; and

2 (20) Zinc.

3 (b) For each air contaminant under subsection (a):

4 (1) Where it is technologically feasible and commercially
5 available to continuously monitor a contaminant, the
6 plan shall provide for the use of a continuous
7 emissions monitoring system to monitor the
8 contaminant. Measurements shall be made available
9 once per minute, where possible, but in no case may
10 the frequency of interval for monitoring samples be
11 less than once every two hours;

12 (2) If a continuous emissions monitoring system to monitor
13 a contaminant is not technologically feasible and
14 commercially available, the plan shall provide for the
15 use of a continuous automated sampling system to
16 continuously sample a contaminant. The long-term
17 sampling shall provide year-round monitoring through
18 back-to-back use of long-term monthly samples; and

19 (3) Under no circumstance shall calculated estimates based
20 on parametric monitoring be used in place of direct
21 monitoring or sampling.



1 (c) The department shall adopt rules requiring each owner
2 or operator of a waste combustion facility to submit a plan to
3 describe how the owner or operator will:

4 (1) Conduct continuous monitoring or sampling as required
5 by this section; and

6 (2) Make emissions data available to the department and
7 the public via a publicly accessible website.

8 (d) Emissions data shall be reported on a data disclosure
9 website hosted by the department. The department shall issue
10 protocols to be used by the owner or operator of the waste
11 combustion facility to report data in a timely manner. The
12 department may adjust any of the requirements of this subsection
13 if the department finds that the objectives can better be met in
14 another manner or format. The website shall be developed by a
15 consultant hired by the operator to meet the following
16 requirements:

17 (1) All continuous emissions monitoring systems data that
18 is available in a digital format shall be supplied in
19 real-time through an internet feed to the website.

20 Other data, including results from continuous
21 automated sampling systems and annual stack test data,



1 shall be submitted to the website no later than
2 twenty-four hours after the data is available to the
3 owner or operator, whichever party possesses the
4 information sooner. Data shall be provided in full
5 detail available from the monitoring devices, as well
6 as summary form, including total amounts of releases
7 of each chemical in pounds per day and per year. In
8 addition to numerical data, data shall be displayed in
9 line charts for each air contaminant and shall be
10 accompanied by lines displaying any local, state, and
11 federal emissions limits that apply. Where regulatory
12 limits are based on rolling averages, a calculated
13 line displaying those rolling averages shall be
14 displayed. The emissions limits displayed shall be
15 adjusted whenever permitted emissions limits change,
16 showing the proper limits that apply at a given time.
17 Emissions data that exceeds state or local emissions
18 limits shall appear on the website in red-colored text
19 so that violations are readily distinguishable from
20 the rest of the data;



1 (2) The data disclosure website shall be designed to
2 immediately alert, by electronic mail, the owner,
3 operator, the department, and any other parties who
4 enroll to be notified of any violations of data
5 availability requirements or exceedances of local,
6 state, or federal air pollution limitations. For both
7 types of violations, notices shall be available at the
8 frequency of the recipient's choosing: as they occur,
9 or on a daily, weekly, monthly, quarterly, or annual
10 basis;

11 (3) All data submitted to the website shall be archived
12 and maintained; provided that the history of data
13 shall be available for download in a commonly
14 available spreadsheet format;

15 (4) Dioxin and furan data shall be presented in both mass
16 emissions and in toxic equivalents calculated using
17 the most recent toxic equivalency factors used by the
18 World Health Organization or the United States
19 Environmental Protection Agency, and the choice of
20 factor shall be disclosed on the website;



- 1 (5) The website shall display summary charts listing all
2 violations of any applicable emissions limits per air
3 contaminant for each facility reporting under this
4 section. Daily, weekly, monthly, and yearly summaries
5 of emissions levels and violations shall be made
6 available in an easily understandable presentation
7 format. Emissions trend data shall be presented in
8 line charts, showing the totals for all reporting
9 facilities, as well as facility-specific trends from
10 the beginning of the reported set through the most
11 recent year. If the facility owner or operator has
12 provided any explanation for a violation, that
13 explanation shall also be listed on the website,
14 available from wherever the violation is displayed;
15 (6) Any gaps in continuous emissions monitoring system
16 data reporting shall be reported as null values, and
17 explanations shall be reported to the website as
18 separate comments associated with the data gaps or
19 violations. If a waste combustion facility has
20 multiple units or boilers, the data for each unit or
21 boiler shall be presented separately. The operating



1 status for each boiler shall be reported hourly by the
2 operator of any waste combustion facility and shall be
3 reported on the data disclosure website so that
4 emissions data can be displayed alongside information
5 stating whether certain boilers are operating or are
6 in a process of startup or shutdown; and

7 (7) In addition to the display of emissions data in
8 measurement units corresponding with state and local
9 emissions limits, monthly and annual totals for each
10 monitored air contaminant shall be presented in
11 pounds. The monthly and annual emissions of each air
12 contaminant, in pounds, shall be presented alongside
13 the state and local permit limits in the same units,
14 converted from the concentration limits. The waste
15 combustion facility owner shall disclose stack test
16 data for any air pollution stack test conducted at the
17 facility that is required by state or federal permits.
18 Beginning January 1, 2027, new stack test data for any
19 stack test conducted shall be submitted to the data
20 disclosure website no later than forty-eight hours



1 after the data is available to the owner of the waste
2 combustion facility.

3 (e) By October 1, 2026, the owner or operator of a waste
4 combustion facility shall submit the plan required by this
5 section to the department. Before approving the plan, the
6 department may make modifications to the plan as necessary to
7 ensure the quality and accuracy of sampling or monitoring data.
8 The owner or operator shall implement a plan approved by the
9 department no later than three months after the date of the
10 approval.

11 (f) Notwithstanding subsection (e), the department may, at
12 the department's discretion, for good cause shown, extend the
13 three-month deadline for submitting or implementing the plan
14 required by this section in three-month periods; provided that
15 the deadline extensions to the submission and implementation of
16 a plan shall not collectively exceed nine months.

17 (g) The data from continuous monitoring and sampling of
18 air contaminants not already required to be continuously
19 monitored shall not be used for enforcement purposes until the
20 time that the director determines that the data is reliable
21 enough for that purpose. On an annual basis starting twelve



1 months after the first use of new continuous monitoring and
2 sampling equipment established under this section, the director
3 shall issue a determination on whether the data is reliable for
4 use in the enforcement of permit limits, and whether the
5 necessary regulatory tools exist for enforcement, such as the
6 United States Environmental Protection Agency performance
7 standards; provided that, within twelve months of a
8 determination, the department shall publish rules for
9 enforcement, which shall start no later than twelve months after
10 the department's determination.

11 (h) Where existing permit limits for an air contaminant
12 are based on annual stack tests, new rules for permit limits
13 based on continuous monitoring or sampling shall closely match
14 the existing limits as much as possible, with averaging times
15 not to exceed twenty-four hours. Where permit limits do not
16 exist for an air contaminant required to be monitored by this
17 section, the department shall establish the most protective
18 permit limits based on the use of air pollution control devices
19 that are commercially available. The director may determine
20 that data on certain, but not all, air contaminants are reliable
21 and ready for enforcement. In subsequent years, determinations



1 shall be made on remaining contaminants for which that
2 reliability determination has not yet been made.

3 (i) The department shall submit a report of the results of
4 the continuous monitoring and sampling required by this section,
5 including any determination on the use of this data for
6 enforcement and proposed legislation, to the legislature no
7 later than twenty days prior to the convening of each regular
8 session."

9 SECTION 3. Section 342B-1, Hawaii Revised Statutes, is
10 amended by adding six new definitions to be appropriately
11 inserted and to read as follows:

12 "Continuous automated sampling system" means the total
13 equipment and procedures for automated sample collection, sample
14 recovery, and analysis to determine an air contaminant
15 concentration or emission rate by collecting a single sample or
16 multiple integrated samples of the air contaminant for
17 subsequent on- or off-site analysis.

18 "Continuous emissions monitoring system" means a pollution
19 monitoring system capable of on-site sampling, conditioning,
20 analyzing, and providing a record of emissions of an air
21 contaminant at frequent intervals and meets United States



1 Environmental Protection Agency or department of health data
2 acquisition and availability requirements, where applicable.

3 "Dioxin" or "furan" means tetra- through octa-chlorinated
4 dibenzo-p-dioxins and dibenzofurans.

5 "Technologically feasible and commercially available"
6 refers to a continuous automated sampling system or continuous
7 emissions monitoring system that is technically possible to
8 install, currently offered for purchase by equipment vendors for
9 the proposed application, and for which service contracts can be
10 obtained for a fee. A determination of commercial availability
11 does not include a cost analysis of the system.

12 "Waste" means any of the following, or combination of the
13 following:

14 (1) "Waste" as defined in section 342H-1;

15 (2) "Solid waste" as defined in section 342H-1;

16 (3) Plastics;

17 (4) Any material that has been source separated for
18 recycling or composting purposes;

19 (5) Disaster debris;

20 (6) "Hazardous waste" as defined in 11-261-3, Hawaii

21 Administrative Rules;



1 (7) Processed engineered fuel;

2 (8) Solid recovered fuel;

3 (9) Refuse-derived fuel; or

4 (10) Any material determined by the United States

5 Environmental Protection Agency or state agency to be

6 a non-hazardous secondary material.

7 "Waste combustion facility" means any non-residential

8 facility that:

9 (1) Disposes of waste, uses waste to heat an industrial

10 process, or uses waste to produce energy, including

11 heat, electricity, or a burnable fuel;

12 (2) Performs the actions specified in paragraph (1)

13 through the combustion of waste, or gases produced on-

14 site from the burning, gasification, or pyrolysis of

15 waste, or by producing a solid, liquid, or gaseous

16 fuel product through conversion of waste; and

17 (3) Is capable of processing at least five tons of waste

18 per day.

19 "Waste combustion facility" does not include landfills,

20 anaerobic digesters, or facilities burning landfill gas or gas



1 produced from anaerobic digestion; provided that these
2 facilities are not also burning waste."

3 SECTION 4. The department of health shall set annual fees
4 for the owner of each waste combustion facility to cover the
5 costs of developing and hosting the data disclosure website and
6 any other costs necessary to enforce this Act.

7 SECTION 5. New statutory material is underscored.

8 SECTION 6. This Act shall take effect upon its approval.

9

INTRODUCED BY: Mike Gabbard



S.B. NO. 2328

Report Title:

DOH; Waste Combustion Facilities; Monitoring and Sampling Plan;
Air Contaminants; Website; Report

Description:

Requires owners or operators of waste combustion facilities to develop a plan to implement continuous monitoring and sampling technologies at each combustion unit to monitor and sample for certain air contaminants. Requires a publicly available website hosted by the Department of Health to track and display the data collected on the air contaminants. Requires the Department of Health to adjust permit limits for air contaminants based on the data collected. Requires annual reports to the Legislature.

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

