

JAN 20 2023

A BILL FOR AN ACT

RELATING TO CLIMATE CHANGE MITIGATION.

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

1 SECTION 1. The legislature finds that hydrofluorocarbons
2 (HFCs) are chemicals commonly used in air conditioning and
3 refrigeration, in insulating foam, and as propellants. HFCs
4 were designed to replace ozone depleting substances that were
5 harming the planet's protective ozone layer. However, HFCs are
6 now quickly building up in Earth's atmosphere, where they act as
7 greenhouse gases that can have very high global warming
8 potentials that are thousands of times more potent than carbon
9 dioxide in contributing to climate change. If HFCs continue to
10 be used, it is estimated that they could account for up to
11 twenty per cent of global greenhouse gas emissions by 2050.

12 The legislature further finds that the United States
13 Congress enacted the American Innovation and Manufacturing Act
14 to limit HFC production and to phase out the use of HFCs by
15 eighty-five per cent over the next fifteen years. This action
16 will support the transition to refrigeration and air
17 conditioning systems that use less damaging HFCs or suitable



1 substitutes with zero to low potential for global warming. As
2 part of the transition to low global warming potential
3 alternative refrigerants, existing systems and their
4 refrigerants must be carefully managed to minimize the impacts
5 on the environment.

6 The legislature finds that California has implemented a
7 successful refrigerant management program to monitor and reduce
8 emissions of refrigerants with high global warming potential and
9 ozone depleting substances. The California refrigerant
10 management program requires registration, leak inspection, and
11 leak repair requirements for their non-residential stationary
12 appliances, including stationary refrigeration systems and air
13 conditioning systems.

14 The legislature also finds that a similar state level
15 refrigerant management program in Hawaii would support state
16 greenhouse gas reduction goals and prevent leakage of these
17 harmful chemicals into the atmosphere.

18 Therefore, the purpose of this Act is to establish a Hawaii
19 refrigerant management program designed to:

20 (1) Reduce emissions of high global warming potential
21 refrigerants and any refrigerant that is an ozone



1 § **-1 Definitions.** As used in this chapter:

2 "Air conditioning system" means any stationary air
3 conditioning equipment. "Air conditioning system" does not mean
4 mobile air conditioning, including those used in motor vehicles,
5 rail and trains, aircraft, watercraft, recreational vehicles,
6 recreational trailers, and campers.

7 "Chlorofluorocarbon" or "CFC" means a class of greenhouse
8 gases that are compounds consisting of chlorine, fluorine, and
9 carbon.

10 "Department" means the department of health.

11 "High-GWP refrigerant" means a compound used as a heat
12 transfer fluid or gas that is a chlorofluorocarbon, a
13 hydrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon,
14 or any compound or blend of compounds with global warming
15 potential values that meet or exceed the global warming
16 potential applicability thresholds established by the
17 department.

18 "Hydrofluorocarbon" or "HFC" means a class of greenhouse
19 gases that are saturated organic compounds containing hydrogen,
20 fluorine, and carbon.



1 "Refrigeration system" or "refrigeration equipment" means
2 any stationary device that is designed to contain and use
3 refrigerant, including equipment used in retail food, cold
4 storage, and industrial process refrigeration and cooling that
5 does not use a chiller, ice rinks, and other refrigeration
6 applications.

7 § -2 **Refrigerant management program; establishment;**
8 **exemptions.** (a) The department shall establish a refrigerant
9 management program designed to reduce emissions of high-GWP
10 refrigerants and ozone depleting substance refrigerants from
11 activities or equipment responsible for significant volumes of
12 such emissions, including the operation of stationary commercial
13 and industrial large refrigeration systems and activities to
14 install, service, repair, and dispose of stationary
15 refrigeration and air conditioning appliances.

16 (b) The refrigerant management program shall require
17 regular leak inspections and reporting for stationary commercial
18 and industrial refrigeration systems that are not equipped with
19 automatic leak detection.

20 (c) A commercial and industrial refrigeration system with
21 a de minimis charging capacity in a single system shall be



1 exempt from the registration, leak inspection, and reporting
2 requirements of this chapter.

3 (d) Refrigeration and air conditioning operations that use
4 refrigerants with a global warming potential less than the
5 global warming potential thresholds established by the
6 department and that are not ozone depleting substances shall be
7 exempt from the registration, leak inspection, and reporting
8 requirements of this chapter.

9 (e) The refrigerant management program shall require
10 service practices for the installation, servicing, repair, and
11 disposal of stationary refrigeration and air conditioning
12 appliances.

13 (f) The department may require compliance with the
14 provisions of this chapter no earlier than January 1, 2025.

15 (g) The department may exempt refrigeration systems
16 associated with de minimis emissions from the requirements of
17 this chapter.

18 § -3 Rules. (a) The department shall adopt rules
19 necessary for the purposes of this chapter.



1 (b) The rules shall apply to operations that utilize high-
2 GWP refrigerants and refrigerants that are ozone depleting
3 substances.

4 (c) The rules shall include the following:

5 (1) Establishment of:

6 (A) De minimis charging capacity level;

7 (B) Global warming potential threshold values;

8 (C) Leak rate thresholds;

9 (2) Annual registration requirements for each owner or
10 operator of a stationary commercial and industrial
11 refrigeration system that utilizes a high-GWP
12 refrigerant or ozone depletion substance refrigerant
13 and exceeds the de minimis charging capacity level;

14 (3) Refrigerant leak detection, monitoring, and reporting
15 requirements for stationary commercial and industrial
16 refrigeration system that utilizes a high-GWP
17 refrigerant or ozone depletion substance refrigerant
18 and exceeds the de minimis charging capacity level;

19 (4) Requirements for reporting leaks above the applicable
20 leak rate threshold and submitting the leak repair
21 verification test results, or submitting a retrofit or



1 retirement plan, including a timeline for the retrofit
2 or retirement and disposal of retired refrigeration
3 equipment;

4 (5) Record retention requirements for owners and operators
5 of facilities and technicians servicing equipment that
6 contain and use refrigerant;

7 (6) Service practices for the installation, servicing,
8 repair, and disposal of stationary appliances
9 including both stationary refrigeration and air
10 conditioning systems; and

11 (7) Implementation and enforcement of the refrigerant
12 management program, including penalties for violations
13 of the chapter.

14 (d) The department may establish by rule annual fees that
15 adequately cover the direct and indirect cost to develop,
16 support, and administer the refrigerant management program."

17 SECTION 3. Chapter 107, Hawaii Revised Statutes, is
18 amended by adding a new section to be appropriately designated
19 and to read as follows:

20 "§107- _____ State building code; hydrofluorocarbons; update.

21 When adopting, amending, or updating the codes and standards



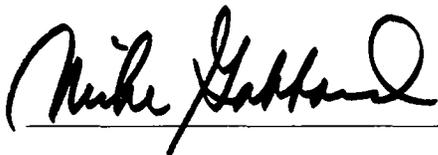
1 identified in section 107-25, the council shall establish codes
2 and standards that are consistent with the goal of reducing
3 greenhouse gas emissions associated with hydrofluorocarbons."

4 SECTION 4. There is appropriated out of the general
5 revenues of the State of Hawaii the sum of \$ _____ or so
6 much thereof as may be necessary for fiscal year 2023-2024 and
7 the same sum or so much thereof as may be necessary for fiscal
8 year 2024-2025 for the establishment of a refrigerant management
9 program to reduce emissions of hydrofluorocarbon refrigerants
10 and chlorofluorocarbon cooling agents from activities or
11 equipment responsible for significant volumes of such emissions.

12 The sums appropriated shall be expended by the department
13 of health for the purposes of this Act.

14 SECTION 5. This Act shall take effect on July 1, 2023.

15

INTRODUCED BY: 



S.B. NO. 503

Report Title:

Refrigerant Management Program; High Global Warming Potential Refrigerants; Ozone Depletion Substances; Greenhouse Gas Emissions Reduction; State Building Code; Appropriation

Description:

Requires the department of health to establish a refrigerant management program to reduce emissions of high global warming potential refrigerants and any refrigerant that is an ozone depleting substance from operation of stationary, commercial, and industrial refrigeration equipment responsible and adopt rules for the regulation of the use of such refrigerants. Requires the state building code council to establish codes and standards consistent with the goal of reducing greenhouse gas emissions associated with hydrofluorocarbons when updating the state building code. Appropriates funds.

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