
A BILL FOR AN ACT

RELATING TO AIR POLLUTION CONTROL.

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

1 SECTION 1. The legislature finds that bunker fuel is a
2 particularly noxious heavy petroleum product that is used to
3 power some marine vessels and commonly contains relatively high
4 amounts of sulfur. Bunker fuel is the fuel oil that was spread
5 in harbor waters in the 2007 massive oil spills in the Black Sea
6 and San Francisco Bay. Concerned citizens note that bunker fuel
7 literally comes from the bottom of the oil barrel as an
8 "asphalt-like gunk" left behind after crude oil is refined into
9 gasoline and diesel.

10 Adverse health effects from inhaling fumes from the burning
11 of bunker fuel oil (according to the Material Safety Data Sheet,
12 United States Oil and Refining Company) include eye irritation,
13 skin irritation, nausea, vomiting, diarrhea, and restlessness.
14 Furthermore, materials containing a similar chemical ingredient
15 have been associated with causing skin cancer on test animals.
16 According to a recent study published in the *Journal of the*
17 *American Chemical Society*, air pollution from cargo ship exhaust



1 has been linked to the premature death of sixty thousand people
2 worldwide in 2002. Most of those deaths resulted from heart and
3 lung ailments.

4 Legislation is currently pending in the 110th Congress of
5 the United States identified as S. 1499: Marine Vessel
6 Emissions Reduction Act of 2007 that would reduce air pollution
7 from marine vessels, including marine vessel fuels containing
8 high amounts of sulfur.

9 Cruise ships generate large amounts of air pollution from
10 continuous burning, twenty-four hours per day and seven days a
11 week, as they provide power for air conditioning and electricity
12 to thousands of guest rooms. In effect, a cruise ship is a
13 virtual floating power plant.

14 The legislature further finds that the health of residents
15 in communities surrounding Nawiliwili harbor on the island of
16 Kauai, including the Niualu community, is particularly at risk
17 from the burning of bunker fuel by vessels because of prevailing
18 wind patterns and the proximity of the surrounding communities
19 to bunker fuel-burning vessels operating near or moored at
20 Nawiliwili harbor.

21 The purpose of this Act is to establish a three-year pilot
22 program to better understand the health and environmental



1 effects of bunker fuel-burning vessels docked in Nawiliwili
2 harbor and to determine the effect of replacing the bunker fuel
3 with .5 per cent sulfur fuel.

4 SECTION 2. (a) The director of health shall establish and
5 implement a three-year pilot program to determine the levels of
6 airborne pollutants in and the health and environmental impact
7 on the Niunalu community of air pollution caused by bunker fuel-
8 burning cruise ships docked in Nawiliwili harbor and to
9 determine the effect thereupon of requiring the cruise ships
10 docked in Nawiliwili Harbor to burn bunker fuel with .5 per cent
11 sulfur fuel. Accordingly, the department of health shall:

12 (1) Immediately conduct testing and evaluation to
13 determine the baseline level of airborne pollutants
14 (particulate) in the Niunalu community and the
15 environmental and health impact of the pollutants on
16 that community at that level. This phase of the
17 program shall last for one year; and

18 (2) For a period of two years subsequent to the first
19 phase of the program, require cruise ships to
20 exclusively use .5 per cent or lower sulfur fuels
21 while docked or moored in Nawiliwili harbor. The
22 department of health shall maintain periodic health



1 and environmental testing in the Niualu community for
2 the two years that this restriction is in place to
3 measure the effect on the level of air pollutants and
4 the health and environmental impact on the Niualu
5 community.

6 (b) The department of health shall plan, develop, and
7 implement the pilot program in a manner and timeframe such that
8 all work, as described in subsection (a), is fully completed in
9 time to meet the reporting deadline set forth in subsection (c).

10 (c) The department of health shall submit a report of its
11 findings and recommendations, including but not limited to
12 suggestions for legislative action, to the legislature no later
13 than twenty days prior to the convening of the 2011 regular
14 session.

15 (d) For the purposes of this pilot program:

16 "Bunker fuel oil" means oil that is burned in a furnace or
17 boiler to generate heat or used in an engine to generate power,
18 including, but not limited to, diesel oil. Bunker fuel oil
19 usually is the heaviest fuel that can be derived from crude oil.
20 Sometimes referred to as furnace fuel oil, its high viscosity
21 requires heating before use.



1 "Cruise ship" means a commercial passenger vessel that
2 carries passengers for hire; provided that "cruise ship" does
3 not include commercial passenger vessels that:

4 (1) Are authorized to carry fewer than fifty passengers;
5 or

6 (2) Do not provide overnight accommodations for at least
7 fifty passengers for hire, determined with reference
8 to the number of lower berths on an average of two
9 persons per cabin.

10 "Air pollutant" has the same meaning as in the Clean Air
11 Act, 42 United States Code section 7602 (g), and includes any
12 substance designated as such by the department of health.

13 SECTION 3. This Act shall take effect on July 1, 2050.



Report Title:

Air Pollution; Bunker Fuel Burning; Nawiliwili Harbor; Cruise Ships

Description:

Creates a three-year pilot program to be established and implemented by the department of health, with results to be reported to the legislature. Establishes that the findings of the program will determine the current level of and health and environmental impact of air pollution caused by bunker fuel-burning cruise vessels docked or moored in Nawiliwili harbor, and the effect of requiring cruise ships to switch to .5 per cent or lower sulfur fuels while docked or moored. (SD1)

