



STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378
doh.testimony@doh.hawaii.gov

In reply, please refer to:
File:

Testimony COMMENTING on SCR0076/SR0063
REQUESTING THE DIRECTOR OF HEALTH AND THE CHIEF ENERGY OFFICER TO
CONTINUOUSLY MONITOR AIR POLLUTANTS EMITTED BY WASTE
INCINERATION FACILITIES

SENATOR MIKE GABBARD, CHAIR
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

SENATOR JOY A. SAN BUENAVENTURA, CHAIR
SENATE COMMITTEE ON HEALTH AND HUMAN SERVICES

Hearing Date: 3/25/2024

Room Number: 224

1 **Fiscal Implications:** These resolutions may impact the priorities identified in the Governor's
2 Executive Budget Request for the Department of Health's (Department) appropriations and
3 personnel priorities. Proposed requirements will require additional staff time, effort, and
4 funding.

5 **Department Testimony:** These resolutions request the Director of Health and Chief Energy
6 Officer to continuously monitor air pollutants emitted by waste incineration facilities.

7 The Department recommends the Legislature allow the United States Environmental
8 Protection Agency (EPA) rules on large municipal waste combustors (MWC) be finalized before
9 adopting any measure requesting additional continuous monitoring and offers the following
10 additional comments on the resolutions.

11 The Department sees the potential value of monitoring more frequently and advocates
12 doing so with a clear understanding of the circumstances. The key points are:

13 1) It is essential to collect data that is defensible and useful by utilizing monitoring that has
14 both EPA-approved methods and performance specifications. These do not exist for the
15 large majority of the 22 pollutants mentioned in the resolutions.

- 1 2) Data collected should be evaluated against appropriate EPA established limits for
2 continuous monitoring to properly evaluate the impact on human health and the
3 environment. Most of the emission limits being used were established based on annual
4 stack testing, and per EPA, these limits may need to be adjusted when applied to
5 continuous emissions monitoring systems (CEMS).
- 6 3) EPA is currently updating its regulations for large MWCs, including evaluating CEMS
7 and performance specifications for additional pollutants, assessing appropriate emission
8 limits for continuous monitoring, and reducing key pollutant emissions from MWCs.
- 9 4) Upcoming EPA requirements will help accomplish the goals of adopting more extensive
10 monitoring and reducing pollutant emissions.

11 To ensure successful and accurate implementation of CEMS, the Department requires
12 both EPA-approved monitoring methods and performance specifications to ensure data quality.
13 The EPA has the expertise, experience, resources, and responsibility to evaluate measurement
14 technology like CEMS for regulatory purposes. Permit conditions requiring CEMS monitoring
15 without EPA-approved methodologies and performance specifications would bring into
16 question the quality and defensibility of the data, weaken compliance determinations and
17 enforcement actions if emission limits are exceeded, and put the state at risk of lawsuits.

18 In Hawaii, the waste combustion facility affected would be the Honolulu Program of
19 Waste Energy Recovery (H-POWER) MWC facility owned by the City and County of Honolulu.
20 As stated in the resolutions, continuous monitoring is currently done for four pollutants, as
21 required in its air pollution control permit with the Department. These 4 pollutants all have
22 EPA-approved CEMS methodologies and performance standards. Of the remaining 18
23 pollutants typically emitted at an MWC, the Department is aware of only two other CEMS
24 technologies that are both approved by the EPA for use at an MWC and have performance
25 standards: mercury and particulate matter (PM).

26 Other monitoring or sampling methods exist for some of the remaining pollutants, but
27 they are not currently approved by EPA and/or no EPA performance specifications exist for the
28 use of these methods to monitor the pollutant emissions. Of the 2 pollutants that do have both
29 EPA-approved methodologies and performance specifications, we are not aware of PM CEMS
30 having been demonstrated at municipal waste combustion facilities. A cost of up to \$500,000 is

1 estimated for purchasing the instrumentation and installing one mercury CEMS unit at an
2 existing facility. For three stacks at H-POWER, this would total \$1.5 million dollars, not
3 including annual maintenance and operating costs which are estimated at up to \$85,000/year.

4 In addition to EPA-approved continuous monitoring methodologies and performance
5 specifications, it is essential that EPA establish appropriate emission limits based on continuous
6 monitoring. For most pollutants, emission limits are based on current requirements for annual
7 stack test but not for continuous monitoring. Without appropriate emission limits, the
8 Department would not be able to utilize the data to properly evaluate the impact on human health
9 and the environment.

10 EPA is currently in the process of revising its regulations for large MWCs. This includes
11 proposals to incorporate additional performance specifications into the requirements. EPA is
12 also evaluating the use of optional CEMS for certain pollutants, but only after performance
13 specifications for these CEMS are adopted by EPA.

14 The EPA also notes that they must investigate whether the use of CEMS for compliance
15 testing requires adoption of alternative emission limits. In the proposed rule, EPA is evaluating
16 what alternative emission limits and averaging times would be appropriate for compliance with
17 CEMS.

18 EPA also addresses several relevant issues in its proposed rules, including imposing more
19 stringent emissions limits for cadmium, lead, mercury, dioxins/furans, hydrogen chloride,
20 particulate, sulfur dioxide, and nitrogen oxides. After the new rules are finalized, H-POWER
21 will very likely require additional air pollution control devices to reduce emissions to meet the
22 new emission limits.

23 The federal Clean Air Act requires extensive review of EPA's air pollution control
24 regulations every 8 years (5 years for solid waste combustion units) to determine if the emission
25 limits, monitoring, controls, and other requirements need to be revised. EPA must account for
26 improvements in practices, processes, and air pollution controls and/or prevention and assess
27 whether the existing regulations are protective of public health with an ample margin of safety.
28 If they are not, EPA must propose new requirements, as it is currently doing.

29 The resolutions, and similar measures, mention studies that indicate that stack tests done
30 only once per year underestimate emissions levels throughout the rest of the year. It is our

1 understanding that those studies were submitted to EPA during the current proposed rule revision
2 for large MWCs. The EPA, which concluded an intensive 5-year review of large MWCs in 2023
3 and issued proposed rules and began public review in 2024, is the agency that has the
4 responsibility, experience, and resources to develop stationary source air pollution standards,
5 which includes monitoring requirements and techniques, and emission limits.

6 One example that shows that annual stack test results can be an accurate indication of
7 emissions throughout the year comes from Florida. Of the handful of MWCs nationwide that
8 have implemented CEMS for any of the additional 18 pollutants, two separate facilities in
9 Florida that adopted CEMS for mercury were allowed by the Florida Department of
10 Environmental Protection to discontinue operating their CEMS because levels did not
11 significantly differ from those obtained in stack tests. Additionally, there were significant
12 reliability issues with the Mercury CEMS equipment, and the maintenance and repair costs were
13 prohibitively high.

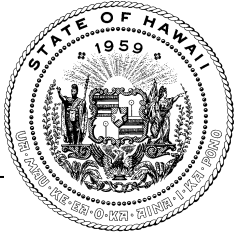
14 The Department's review on H-POWER's existing monitoring regime and ambient air
15 quality in nearby areas provided the following information. Actual CEMS and stack test data
16 (required for 13 pollutants) indicate that emissions from H-POWER consistently are within the
17 permitted limits. Emissions at H-POWER have been monitored for more than 20 years,
18 providing a representative sample that increases confidence in the accuracy of the monitoring
19 methods. The accuracy of this monitoring can also be evaluated with ambient air monitoring
20 data sources in the surrounding areas, including:

- 21 1) The Department's federally-mandated National Core (NCore) ambient air monitoring
22 station located approximately 1.6 miles from H-POWER, between the facility and the
23 neighboring Kapolei community, which includes data for 9 pollutants identified in the
24 bill (cadmium, lead, mercury, arsenic, hexavalent chromium, manganese, nickel,
25 selenium, and zinc). Sampling is collected once every three days for about 122 samples
26 per year.
- 27 2) In 2013, post-construction continuous ambient air monitoring was performed in the
28 immediate vicinity of the H-POWER facility for seven of the pollutants identified in the
29 bill: arsenic, cadmium, lead, manganese, mercury, nickel, and selenium.

1 Evaluation of the data indicates that concentrations of hazardous air pollutants from both the
2 ongoing NCore station and the 2013 post-construction ambient air monitoring were below the
3 significant ambient air concentration as defined in HAR §11-60.1-179 for these pollutants (i.e.,
4 ambient air concentrations were below levels that would endanger human health).

5 **Offered Amendments:** None

6 Thank you for the opportunity to testify.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone:
Web:

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

(808) 451-6648
energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
**SENATE COMMITTEES ON AGRICULTURE AND ENVIRONMENT
AND
HEALTH AND HUMAN SERVICES**

Monday, March 25, 2024
1:00 PM
State Capitol, Conference Room 224 & Videoconference

Providing Comments on
SCR 76 / SR 63

**REQUESTING THE DIRECTOR OF HEALTH AND THE CHIEF ENERGY OFFICER
TO CONTINUOUSLY MONITOR AIR POLLUTANTS EMITTED BY WASTE
INCINERATION FACILITIES.**

Chairs Gabbard and San Buenaventura, Vice Chairs Richards and Aquino, and members of the Committees, the Hawai'i State Energy Office (HSEO) provides comments on SCR 76 / SR 63, both of which request the Director of Health and the Chief Energy Officer to continuously monitor air pollutants emitted by waste incineration facilities.

HSEO strongly supports the intent of this resolution and recognizes the importance of monitoring air pollutants to protect public health; however, HSEO has neither the in-house expertise nor capacity to monitor for air pollution. While HSEO utilizes the information published by the Department of Health to inform our analysis, planning, and policy recommendations pursuant to Hawai'i Revised Statutes §196-71 and §196-72, HSEO does not monitor for these pollutants.

Therefore, HSEO respectfully requests the state Chief Energy Officer be removed from these resolutions and defers to the Department of Health on this measure.

Thank you for the opportunity to testify.

Comments before March 25, 2024
Senate Committee on Agriculture and Environment
& Senate Committee on Health and Human Services

IN SUPPORT OF
Senate Concurrent Resolution 76
& Senate Resolution 63

Relating to Incinerator Air Monitoring

Mike Ewall, Esq.
Founder & Director
Energy Justice Network
215-436-9511
mike@energyjustice.net
www.EnergyJustice.net

Aloha Honorable Committee members. Energy Justice Network is a national organization supporting grassroots groups working to transition their communities from polluting and harmful energy and waste management practices to clean energy and zero waste solutions. In Hawai'i, we've been working with residents who first sought our support in 2015. Since mid-2022, we have supported residents in forming the Hawai'i Clean Power Task Force and Kokua na Aina to address numerous energy and waste issues in the state.

We stand in support of the amendment sought by the Environmental Caucus of the Democratic Party of Hawai'i, to make these resolutions match the language in HCR 153, recently passed in the House Committee on Energy and Environmental Protection.

SCR 76 and SR 63 were unfortunately altered in the legislative drafting process to require that the Department of Health actually conduct the monitoring, without funding allocated for this purpose. The intent was to make the facility owners pay the costs of monitoring their own pollution, as was approved by this joint committee on February 9th with the passage of Senate Bill 2101, along with the matching House Bill 2123, approved in the House Committee on Energy and Environmental Protection.

Mahalo nui loa for your support for this important matter!



Environmental Caucus of The Democratic Party of Hawai‘i

March 24, 2024

To: Senate Committee on Agriculture and Environment
Hon. Mike Gabbard, Chair
Hon. Herbert M. “Tim” Richards, III, Vice Chair

Senate Committee on Health and Human Services
Hon. Joy A. San Buenaventura, Chair
Hon. Henry J.C. Aquino, Vice Chair

Re: SCR 76/SR 63 requesting DOH and State Energy Office to continuously monitor
air pollution from incinerators

Hearing: Monday, March 25, 2024, 1:00 p.m., Room 224 & videoconference

Position: Strong support

Aloha, Chairs Gabbard and San Buenaventura, Vice Chairs Richards and Aquino, and Members of the Committees:

The Environmental Caucus of the Democratic Party of Hawai‘i comprises some 7,500 politically active members of Hawai‘i’s majority political party. We strongly support this proposed resolution, which requests the Department of Health and the State Energy office to continuously monitor air pollution caused by incinerators.

As the proposed Concurrent Resolution and Senate Resolution note, of the twenty-two known pollutants that waste incineration facilities emit, only four are monitored continuously nine are monitored just once per year, the remaining nine, which include polyfluorinated substances (PFAS) and various toxic metals, are not monitored at all. Furthermore, monitoring pollutants once per year severely underestimates pollution levels. For example, the Covanta Delaware Valley waste incinerator in Chester, Pennsylvania, replaced annual monitoring with continuous monitoring and found that hydrochloric acid emissions were 62% percent higher than the figure that annual monitoring would identify.

This is critical with respect to dioxin emissions, which are monitored only once per year, although they are so toxic that the Environmental Protection Agency restricts dioxin levels to a ratio of thirty grams per one trillion liters of drinking water. Moreover, a recent study found that failure to use continuous monitoring technology at waste incineration facilities underestimates dioxin emissions by an alarming 460 to 1,290 times.

We need to move forward as soon as possible to improve our monitoring of air pollution produced by incinerators.



Environmental Caucus of
The Democratic Party of Hawai'i

Accordingly, we believe it is critical for the Legislature to pass this proposed Concurrent Resolution.

On behalf of the Environmental Caucus, we thank you very much in advance for your support of these requests. Thank you for the opportunity to testify on this important resolution.

Melodie Aauja legislativepriorities@gmail.com

Alan B. Burdick burdick808@gmail.com

Co-Chairs, Environmental Caucus

SCR-76

Submitted on: 3/24/2024 7:31:53 PM

Testimony for HHS on 3/25/2024 1:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Testify
Angela Melody Young	Testifying for CARES	Support	In Person

Comments:

CARES testifies in strong support.

March 25, 2024

Senator Joy A. San Buenaventura, Chair
Committee on Health and Human Services

Senator Mike Gabbard, Chair
Committee on Agriculture and Environment

Re: SCR 76 / SR 63 - REQUESTING THE DIRECTOR OF HEALTH AND THE CHIEF ENERGY OFFICER TO CONTINUOUSLY MONITOR AIR POLLUTANTS EMITTED BY WASTE INCINERATION FACILITIES.

Dear Chair San Buenaventura, Chair Gabbard and Members of the Joint Committees on Health and Human Services and Agriculture and Environment:

Covanta respectfully submits this testimony in opposition to SCR 76 SR 63, which requests that the Department of Health continuously monitor air pollutants emitted by waste incineration facilities. Covanta is the operator of the City and County of Honolulu's H-POWER facility.

SCR 76 / SR 63 state that "waste incineration facilities typically emit large amounts of pollutants into the air every day they operate; ... although waste incineration facilities are monitored for pollutants, the technology employed is typically dated, and advancements in technology have enabled modern methods to gather much more extensive data to determine, for example, the effects of pollutants on public health..." The HPOWER facility plays a vital role in managing the City and County's municipal solid waste and the plant's emissions are consistently well below Federal and State emission requirements. The emissions control technology is neither obsolete nor inaccurate.

The primary purpose of a WTE plant is to safely and efficiently manage municipal solid waste. The only other alternative for post-recycled waste is landfilling. According to the EPA and European Union, after we reuse, reduce and recycle, waste-to-energy is the next environmentally preferable option over landfilling and any emissions from the HPOWER facility must be judged on a lifecycle basis.

Air emissions from WTE facilities are heavily regulated by both the U.S. EPA and state environmental agencies. Emissions from EfW facilities are determined both through routine stack tests (performed at least once a year) and through continuous emissions monitors (CEMS). CEMS monitor flue gases continuously for carbon monoxide (CO),

nitrogen oxides (NO_x), sulfur dioxide (SO₂), opacity, and carbon dioxide and/or oxygen. Facility operators monitor these parameters and adjust as needed to ensure proper operation and compliance. For example, monitoring CO levels continuously allows operators to respond to changes in the waste (e.g. wetter than normal waste that may have been collected during a rainstorm) to ensure complete and efficient combustion.

Other regulated pollutants are checked through a rigorous stack testing program performed by a regulator-approved third party. This testing is required by the EPA and state agency to be conducted under representative operating conditions and at >90% of the unit's operating capacity. Additionally, the operating parameters under which the stack test is conducted (e.g. activated carbon addition rate, steam flow rate) set the standard for the facility's operation until the next stack test is completed. Operating the combustion process and air pollution control equipment in accordance with these standards ensures compliance throughout the year, not just during test campaigns. Furthermore, the air pollution control systems in place at HPOWER must run anytime waste is being processed. We cannot bypass or turn-off air pollution control equipment.

In prior legislative hearings on bills on this subject, the Department of Health indicated that implementing continuous monitoring, even if feasible, would cost many millions of dollars to implement. **No funding is provided with this resolution, and it would be inappropriate to pass the resolution with a requirement that cannot be implemented.**

We respectfully request that the committee defer SCR 76/ SR 63. Thank you for the opportunity to provide our testimony.

Frazier Blaylock
Senior Director
Government Relations



**Covanta Honolulu Resource
Recovery Venture, LLC**
*91-174 Hanua Street
Kapolei, HI 96707
Tel: 808.682.2099
Fax: 808.682.5203*

We respectfully request the committee defer SCR 76 / SR 63. Thank you for the opportunity to provide our testimony.

Frazier Blaylock
Senior Director
Government Relations

SCR-76

Submitted on: 3/22/2024 10:53:47 AM

Testimony for HHS on 3/25/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jacqueline S. Ambrose	Individual	Support	Written Testimony Only

Comments:

Aloha,

Yes to; REQUESTING THE DIRECTOR OF HEALTH AND THE CHIEF ENERGY OFFICER TO CONTINUOUSLY MONITOR AIR POLLUTANTS EMITTED BY WASTE INCINERATION FACILITIES

SCR-76

Submitted on: 3/24/2024 8:31:12 PM
Testimony for HHS on 3/25/2024 1:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Testify
Sherry Pollack	Individual	Support	Written Testimony Only

Comments:

I am in strong support SCR76 and SR63. Monitoring once a year is inadequate because it may severely underestimate the pollution levels. To protect our health, we must implement efforts toward continuously monitoring air pollutants emitted by waste incineration facilities. The cost to conduct the monitoring should be covered by the incineration facility owners as it is only right that they take responsibility for their own pollution.

Mahalo for the opportunity to testify.