

**From:** [Bruce Albrecht](#)  
**To:** [DLNR.BLNR.Testimony](#)  
**Subject:** [EXTERNAL] 25 April 2025 Agenda Item D-5 Testimony  
**Date:** Tuesday, April 22, 2025 5:30:58 PM

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Aloha,

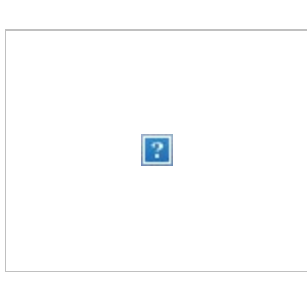
I'm submitting our Sustainability Report as testimony for the Board's review on item D-5. It's too large a file to attach so I have to send you a Dropbox link to download it. Should you have any concerns or issues, please let me know as soon as possible.

[Link to Sustainability Report](#)

Please also sign me up for video testimony via Zoom.

Mahalo,

Bruce



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HAWAII EXPLOSIVES & PYROTECHNICS, INC.

# 2024-2025 SUSTAINABILITY REPORT

INFORMATION AND UPDATES  
APRIL 2025







# 2025 MESSAGE

The live events industry continued its recovery in 2024, with many mainland production companies exceeding pre-pandemic revenue. However, Hawaii faces ongoing economic challenges due to the Lahaina disaster's effects and reduced international travel.

2025 presents further challenges. Given that over 90% of professional display fireworks originate from China, current trade disputes between the U.S. and China may impede collaborative development of eco-friendly devices.

Rising production costs and economic uncertainty necessitate scaling back capital-intensive initiatives. Our 2025 focus shifts to projects aimed at lowering operating expenses, improving diversification, standardizing procedures, enhancing training, and strengthening community relationships. We will also intensify efforts to model industry sustainability.





## OUR 30 BY 30 INITIATIVE

By 2030:

- A 30% reduction in the emissions and combustion by-products produced through product selection and innovations in chemistry
- A 30% reduction in the inert debris generated by the aerial fireworks we use
- A 30% reduction in the subsidiary waste generated by our operations such as packing materials and production supplies
- A 30% increase in our recycling and waste diversion initiatives
- A 30% decrease in energy use at our baseyard and office locations
- A 30% decrease in emissions related to transportation of equipment and crew



# CURRENT INITIATIVES

Hawaii Explosives & Pyrotechnics, Inc. is committed to obtaining ISO 14001 certification. ISO 14001 mandates the establishment of a structured Environmental Management System (EMS), subject to external audits. The implementation of an EMS comprises six distinct phases: Identification, Commitment, Drafting, Execution, Evaluation, and Improvement.

Currently, we are progressing through the initial three phases, which involve cataloging all pertinent internal and external factors, delineating the EMS scope, and appropriating necessary financial and personnel resources to achieve the system's objectives.

Following the preliminary implementation, the subsequent procedures will entail measuring EMS outcomes, assessing its effectiveness, and pinpointing areas requiring optimization. Notably, prior initiatives in accountability and risk mitigation have provided a substantial portion of the existing EMS infrastructure.



# WASTE REDUCTION



# 200

Gallons of beachgoer (non-fireworks) trash removed from the area.

# 20%

Reduction in fireworks debris collected as a result of product changes.

Our post-display cleanup efforts for the weekly show have demonstrated a positive impact. Our measurements indicate we are currently recovering over 98% of debris generated by our displays. Additionally, changes in the types of effects we are utilizing have reduced the amount of cardboard waste by approximately 20%. Most significantly over the last year, our crews have removed over 200 gallons of non-fireworks inorganic debris from the beach and nearshore waters of Duke Kahanamoku Beach.



# WASTE DIVERSION EFFORTS

Safety is the top priority when packaging hazardous materials for transport, which means reducing packaging materials is not a viable option. Instead, we are focusing on reusing and recycling packaging whenever possible without compromising safety. By collaborating with our waste disposal provider, we've been able to improve our recycling efforts and reduce the amount of waste we send to landfills by roughly 30% last year.

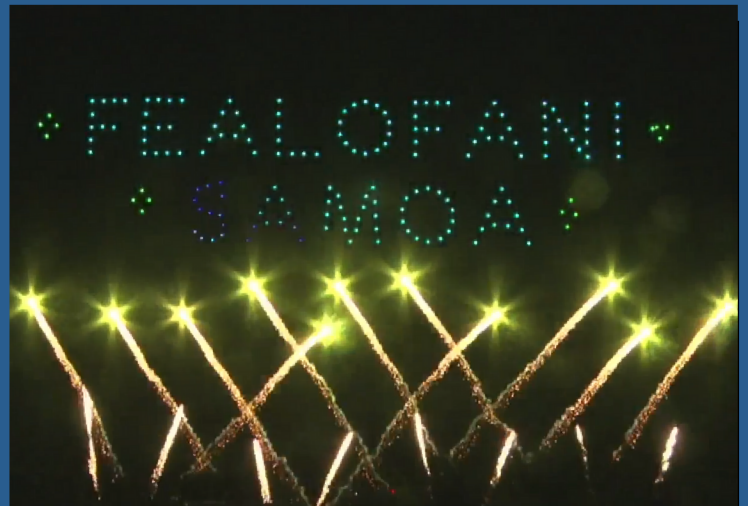




# FIREWORKS ALTERNATIVES

The Drone light show industry continues to demonstrate rapid innovation, but we are still seeing some significant barriers to adoption in terms of cost and value. Improvements in safety and reliability are imperative, as demonstrated by several prominent incidents within the preceding year.

Close observation of the theatrical pyrotechnics sector is ongoing, given its leadership in emissions and debris mitigation. Particular interest is directed towards reusable devices that are progressively replacing single-use counterparts, and innovations suitable for successful integration into standard aerial displays are being sought.





# COMMUNITY INVOLVEMENT

The tragedy on December 31st in Aliamanu initiated a strong examination of public policy regarding the use of fireworks within our community. Numerous bills were introduced in the State Legislature in an attempt to reduce the illicit fireworks trade. Hawaii Explosives & Pyrotechnics has been working with the Department of Law Enforcement, the Attorney General's office, and legislators to assist in these efforts.

Additionally, we are exploring ways we can assist with the serious problem of fireworks disposal. By partnering with government officials, we hope to lend our expertise in this field working towards the goal of public safety and enjoyment of fireworks.

We still strongly believe that commercial public fireworks displays offer a much safer and environmentally-friendly alternative to unregulated "backyard" displays using illicit fireworks.



# COMMUNITY INVOLVEMENT

Hawaii Explosives & Pyrotechnics, Inc. continues to partner with a variety of organizations that focus on environmental stewardship. Over the past year, our staff has volunteered with groups such as Sustainable Coastlines Hawaii and Travel With Purpose on various cleanup projects around the islands. We have also held our own cleanup events at Duke Kahanamoku Beach as part of our informal stewardship of the area.



# INDUSTRY-LEVEL UPDATES

In 2024, Hawaii Explosives & Pyrotechnics, Inc. joined the American Pyrotechnics Association's Environmental Committee. The committee's primary agenda for the last 9 months has been to develop industry-wide guidance on environmental best management practices for conducting fireworks displays over bodies of water. The primary goal in producing these guidelines is to encourage all fireworks display providers to develop specific, actionable policies focused on reducing their environmental impact.

The document contains numerous elements of the Best Practices that were developed and refined as part of the Right of Entry process for using unencumbered State Lands for fireworks shows in Hawaii. Some examples include:

- Integrating environmental considerations into display risk assessments and planning. Environmental protections and sustainability practices should be integrated into the planning process to include environmental factors like nearby bodies of water, wildlife presence, and sensitive ecosystems.
- Plan sites and specify equipment and procedures that balance safety and audience visibility with debris recovery and environmental stewardship
- Along with standard display safety practices, provide clear documented training on BMP implementation to personnel, focusing on their roles and responsibilities. This ensures consistent adherence to safety, operational, and environmental practices.
- Conduct and document post-display event meetings to review BMP and cleanup efforts and identify potential areas for improvement. Prepare and retain post-display reports that include the effectiveness of BMPs and inform future practices.

Professional fireworks display companies already have a lot of experience with developing planning and management practices that focus on safety and regulatory compliance. It is our intention to encourage them to proactively incorporate environmental management policies into their workflow. Recent political developments have delayed the document's release to member companies, as the document is currently undergoing legal review. We hope to release it to the membership by this summer.



# 2025 AND BEYOND

As 2025 progresses, we will continue to make progress on our 30 by 30 initiative.

## Compliance

- We will continue to work on our ISO 14001 compliance with a goal of implementation in 2026.
- We are implementing new display site risk assessment documentation to better assess environmental concerns.

## By-Products

- Manufacturers continue investigating alternative chemistry for pyrotechnics. For example, researchers are experimenting with nitrogen-based oxidizers as a substitute for perchlorates.
- Our company continues working with our manufacturers to create formulations that produce lower emissions and less debris, with a particular focus on eliminating plastic components.
- We continue to refine our production design to reduce the quantity of debris generated.
- Our Best Practices program identifies methods of retrieval that can improve the amount of debris collected post-display.

## Subsidiary Waste

- Our company will continue monitoring and quantifying the amount of trash segregated into categories to optimize recycling and diversion efforts.
- We continue to work with our suppliers to reduce the amount of plastic used in packaging.
- We continue to review operational methods to determine methods to improve material reuse, increase efficiency, and reduce waste.

## Conservation Initiatives

- Through partnerships with community organizations, our company will continue to pursue opportunities to offset our carbon footprint and meaningfully contribute to the mitigation of climate change.
- By participating in industry-level environmental initiatives, we hope to participate in environmental initiatives, promote change, and encourage the adoption of our best practices.
- We continue to monitor operational methods to determine methods to improve material reuse, increase efficiency, and reduce waste.
- We continue to monitor market innovations and will invest in equipment that provides greater energy efficiency as it becomes viable.







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## MEMORANDUM

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DATE: February 14, 2025  
TO: Stephanie Pascual, VP Hawaii Explosives and Pyrotechnic, Inc.  
FROM: Sea Engineering, Inc.  
PROJECT: 14339 HiPyro Hilton Beach Debris Inspection – Findings Memo

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### Introduction:

On February 14, 2025, Sea Engineering, Inc. (SEI) conducted in-water inspection and debris clean up outside Hilton hotel in Waikiki, Honolulu, HI. The main task was to document and recover debris from fireworks, with a secondary task to recover non-firework related debris. The area outlined in yellow shown below was the specified boundary for the debris inspection work.



Figure 1: Debris inspection boundary shown in yellow.

SEI utilized a four (4) person team to accomplish the inspection work. Dive method was surface swimming using mask and snorkel and SCUBA for the deeper water areas. Divers were equipped with lobster bags to recover found debris and one diver was equipped with an underwater camera for photo documentation. Visibility was approximately 2-4ft at the time of



inspection. Due to this low visibility, divers spent the entire inspection on SCUBA, swimming just above the bottom to ensure good visibility of the bottom.

### **Inspection Findings:**

In general, most debris were found inside the orange boundary shown in Figure 1, similar to previous inspection findings. Debris found outside of the orange boundary was largely non-firework related debris. The highest concentration of firework related debris was found in the red circle shown in Figure 1, which was determined to be no significant change to the previous inspection. This area also appeared to be the deepest inside the orange boundary and is likely the area where material settles.

Firework related debris were cardboard remnants, many of which were beginning to decay. SEI divers did not observe or recover any plastic, wire or metal debris that could be directly related to fireworks.

The dive team conducted the inspection for four (4) hours and determined that the majority of found debris was recovered.

In terms of debris breakdown, it was similar to previous inspection, with approximately 15% or less firework related and the majority non-firework related. Then divers recovered a significant amount of beachgoer related garbage, including water bottles, sunscreen, bottle caps, take-out lunch bins and snorkel masks. The total cardboard debris was less than 2 gallons when put in a bucket

### **Photos:**



**Photo 1: Firework related debris was made of cardboard.**



**Photo 2: Remaining Debris Collected from Survey.**