

California Coastal Commission and staff
California Department of Fish and Wildlife, regional office

March 7, 2025

Dear Coastal Commissioners and staff, and the California Department of Fish and Wildlife:

I'm a Morro Bay resident and I support the efforts of the Never Again Moss Landing group. I am unable to appear for general public comment for your Santa Cruz meeting so I am submitting comments in writing. I live in a coastal community myself, and am concerned about the degradation of the environment and impacts to human health due to the repeated fires at battery storage facilities. I am writing to request that the Executive Director of the Commission issue the appropriate Administrative Orders for restoration of the now contaminated Elkhorn Slough and surrounding area, and appoint a team of scientists to oversee the environmental remediation work at Moss Landing to protect the wildlife and surrounding communities from further impacts.

The Vistra fire created an ecological disaster and human health crisis on Monterey Bay. The fire that burned for several days in Moss Landing and continued to smolder thereafter, left high levels of heavy metals in the soil. Field surveys, conducted by San Jose State University within a radius of about two miles from the power plant, measured a dramatic increase in marsh soil surface concentration (hundreds to thousand-fold) of the three heavy metals Nickel, Manganese and Cobalt.¹

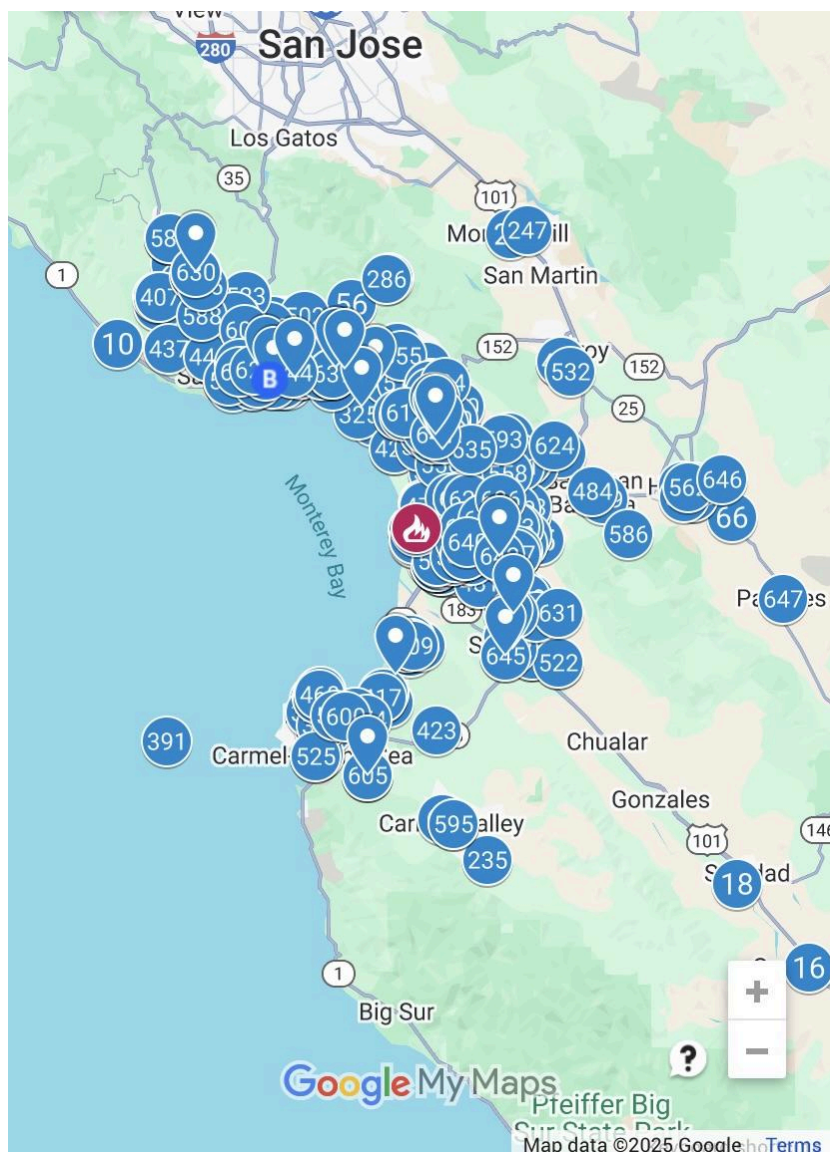
The soils are now contaminated, so what does this mean for the local residents' homes, their lungs and health and for the thousands of species of wildlife that live in the estuary, streams, harbor, dunes and trees? ² Residents of Moss Landing, Prunedale, Watsonville, Santa Cruz, Seaside and surrounding areas have been getting sick. Symptoms include a metallic taste, skin rashes and burns, respiratory distress, bloody noses, severe headaches and more. A grassroots movement of citizens is working together to document their symptoms and seek help. ³ Long term impacts to health are unknown but can be serious. The following image is a map created from 647 individuals who reported unusual and often severe symptoms from the Vistra fire in response to a social media inquiry.

¹  SJSU heavy metals report Moss Landing.pdf , [Heavy Metals LA Times](#)

² [Monterey County Battery Fire Linked to Surge of Heavy Metals in Nature Reserve's Soil | KQED](#)

³ [Never Again Moss Landing](#) (community website)

A second group reported symptoms after the fire reignited one month later. It is not clear whether the first fire ever stopped burning. Many people had symptoms for that entire month, and continue to be sick.

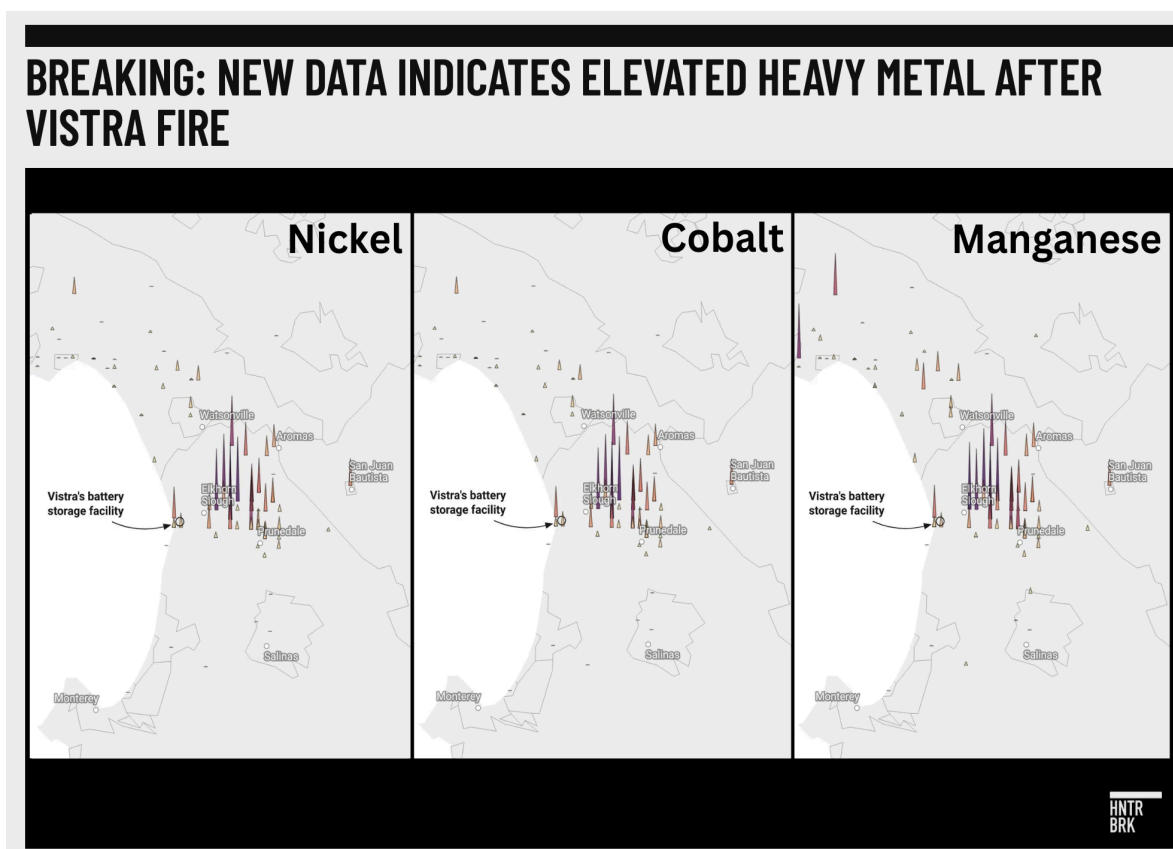


INDIVIDUALS REPORTING SYMPTOMS FROM VISTRA FIRE

Surface wipe sampling was also done with trained volunteers who collected samples across the Monterey Bay area. In this Hunterbrook study, approximately 150 trained volunteers collected surface wipe samples and sent them to a lab for testing. ⁴

⁴ [BREAKING: New Data Indicates Elevated Heavy Metal After Vistra Fire - HUNTERBROOK](#)

The Hunterbrook results revealed that samples taken within 20 miles of Vistra's Moss Landing facility on average have nickel and cobalt concentrations that are about 34 times higher than the levels found in samples collected further away from the plant.



A. The Industry Repeatedly Fails To Inform the Public of the Hazards of Lithium-Ion Battery Storage.

In its Moss Landing Initial Study and “Mitigated Negative Declaration,” (MND) Vistra and its consultants never mentioned the potential for release of hazardous toxic fumes released after a thermal runaway event. The MND, dated January 25, 2019, states: *THIS PROPOSED PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AS IT HAS BEEN FOUND:*

- a) *That said project will not have the potential to significantly degrade the quality of the environment.*
- b) *That said project will have no significant impact on long-term environmental goals.*
- c) *That said project will have no significant cumulative effect upon the environment.*
- d) *That said project will not cause substantial adverse effects on human beings, either directly or indirectly.*⁵

⁵ [County of Monterey - File #: PC 19-019](#)

The representations were false, but these MNDs appear to be common practice, despite the many reported BESS failures around the world. There are 93 reported events, mostly in the last five years while Moss Landing has had several incidents of its own.⁶ This amounts to about one fire per month in the last few years.

Material Safety Data Sheets show the severe impacts to human health from exposure to the toxic, corrosive gasses of thermal runaway that include hydrogen fluoride,⁷ hydrogen chloride,⁸ hydrogen cyanide,⁹ carbon monoxide.¹⁰ What are the impacts to wildlife from exposure to these gases and heavy metals?

None of this information was in the Moss Landing Phase I Mitigated Negative Declaration. Residents of those communities are just now learning about it from their own tragic experiences.

B. The California Department of Fish and Wildlife (CDFW) Cannot Do Its Job To Protect Sensitive Species If BESS Facilities Operate On The Coast.

In 2019 when the Moss Landing Vistra BESS project was under review, CDFW submitted comments as a “Trustee” and “Responsible” Agency pursuant to CEQA §15381 and §15386. The CDFW wrote a comment letter in response to the Mitigated Negative Declaration for the battery storage project, indicating that there were potentially significant impacts to the California Tiger Salamander, the Santa Cruz Long-Toed Salamander and the Peregrine Falcon from the project that could result in burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health, and direct mortality.¹¹ Later, as indicated below, CDFW became involved in a project to improve the habitat of the snowy plover. It is unclear how the CDFW overlooked the presence of the endangered southern sea otter in Elkhorn Slough.

Prior to the January 2025 Vistra BESS fire, agencies and the public had been uninformed regarding the frequency of BESS fires and their widespread toxic impacts. This is clear from the CDFW recommended “no disturbance” buffers of 50 feet, 100 feet, and a half mile from the project site, respectively for the above species, as a mitigation

⁶ [BESS Failure Incident Database - EPRI Storage Wiki](#)

⁷ [Hydrofluoric Acid MSDS.pdf](#)

⁸ [Hydrochloric acid MSDS](#)

⁹ [Hydrogen Cyanide MSDS](#)

¹⁰ [Carbon Monoxide MSDS](#)

¹¹ [County of Monterey - File #: PC 19-019](#)

measure. Yet the data collected shows impacts to human health and heavy metal spikes 30 miles away from the fire. Setbacks need to be miles, not feet, away.

There are about 150 endangered southern sea otters in the Elkhorn Slough. They have successfully reestablished substantial populations and they are predators for the invasive green crabs in the slough. It is also the only estuary in the state invaded by green crabs where crab populations have remained so low.¹²

The industry fails to reveal dangers that have been known for years. There must be consequences. Have violations of the Coastal Act been reported yet? Permitting agencies have been accepting these assertions of “said project will have no significant impact” on the environment but it is time to wake up to the reality. Projects must be denied and trustee and responsible agencies should oppose them until they revise their buffers based upon the information gathered from Moss Landing, including the community data. In addition to the protected salamanders, peregrine falcons, snowy plovers and sea otters, there are many other sensitive species and their habitats that will likely suffer adverse impacts from the fire(s) at Moss Landing. This is unacceptable.

Now that this Vistra fire bell cannot be unringed, how is it possible to protect these species, with high levels of nickel, manganese and cobalt in the soil and on surfaces throughout the Monterey Bay? Can the CCC be involved in overseeing demolition and cleanup? It will take decades for the environment to recover from the contamination. What is the plan of action for the CDFW to manage this situation? Will the impacts including reproductive success of the protected species, be followed and reported? This should include sea otters, who only have one pup every other year when they are healthy.

C. Battery Storage Is Not Coastal Dependent, And Is Not Compatible With The Environmentally Sensitive Habitat Areas (ESHA).

Elkhorn Slough provides habitat for more than 550 species of invertebrates, 100 species of fish, and 135 species of birds, including six species listed as threatened or endangered. Located on the Pacific Flyway, the reserve and the surrounding area are renowned for outstanding birding opportunities.¹³ It was a travesty that lithium-ion battery storage was ever approved for a site adjacent to Elkhorn Slough.

In Banning Ranch Conservancy v. the City of Newport Beach, 2 Cal.5th 918, 216

¹² [News Release: Endangered sea otters keep invasive green crabs in check at Elkhorn Slough](#)

¹³ [Elkhorn Slough National Estuarine Research Reserve](#)

Cal. Rptr. 3d 306, 392 P.3d 455 (Cal. 2017), the California Supreme Court addressed treatment of ESHAs in an environmental review, holding that under the Coastal Act, development must avoid impacts to ESHA, and that CEQA §30240 does not permit “non-resource dependent impacts to an ESHA area.” §30240 states that development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. Battery storage at Moss Landing, with its frequent toxic fires, is a violation of CEQA §30240.

CEQA guideline §15125(c) states: Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project.

It appears the battery storage project was initially approved based on the lies in the Mitigated Negative Declaration. The truth is out now; accordingly there should be no rebuild or any continued BESS operations at Moss Landing.

D. The Coastal Commission Cannot Do Its Job If BESS Operate On The Coast.

On August 18, 2023 The Coastal Commission approved a project application to “construct a new, 920-foot-long setback levee topped by a 14-foot-wide ADA accessible trail; recontour an 850-foot-long section of the Elkhorn Slough bank; restore marsh and eelgrass; maintain/improve former salt ponds; enhance parking lot, add signage, and make other related public access improvements.”¹⁴

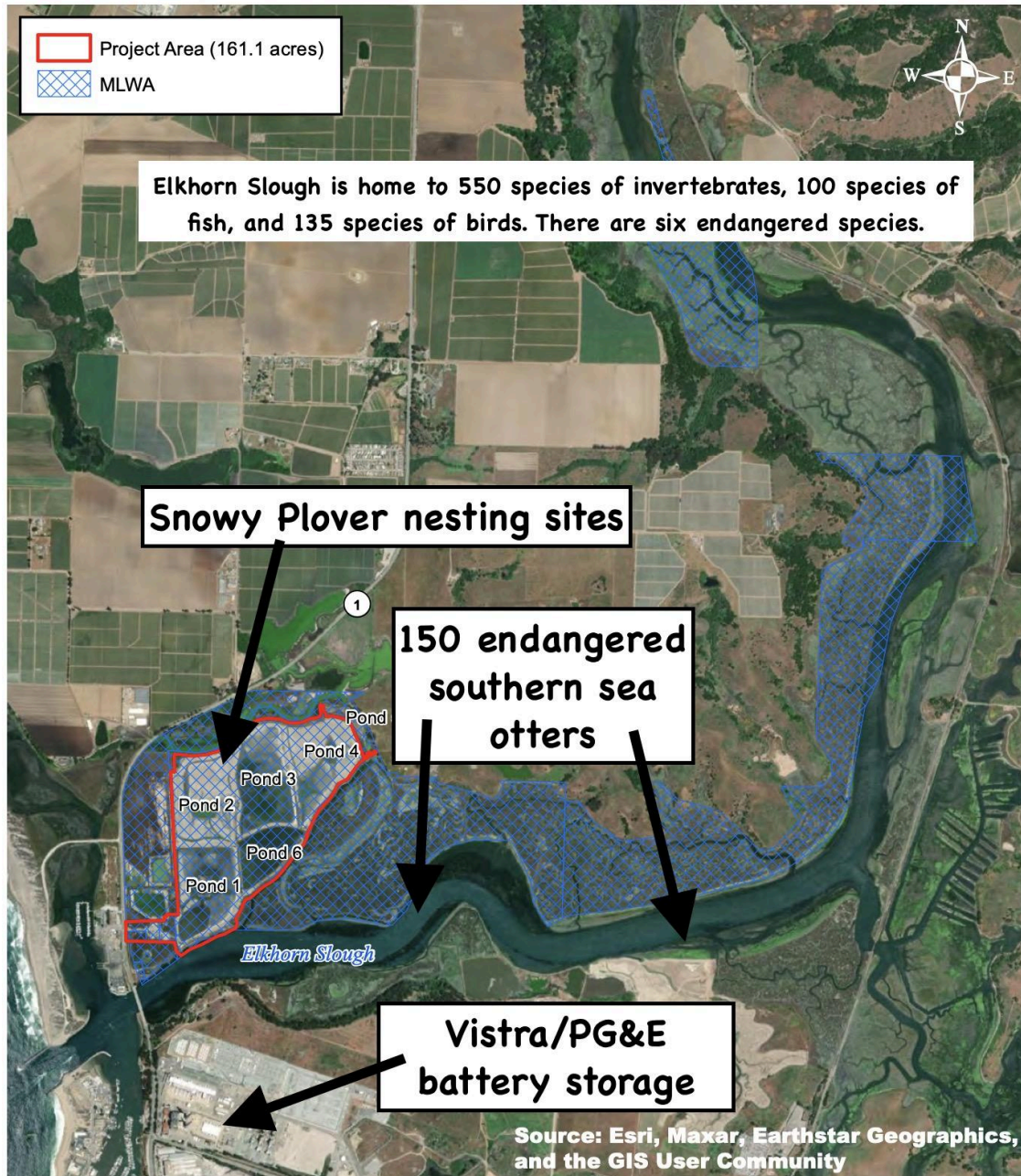
The Coastal Development Permit (CDP) 3-23-0176 for this Habitat Resiliency and Access Enhancement Project, indicated that the project was intended to “meet multiple Coastal Act objectives, including improving ecological resilience for critical plover habitat in the face of climate change and sea level rise, as well as significantly upgrading public access and recreation amenities, which will result in a much more visible, functional, and enjoyable public recreational experience for all.

That CDP was for a worthy project to improve access to the coast and protect a vulnerable species. But after the Vistra fire, the Elkhorn Slough and salt ponds are contaminated and it will take many years to determine the full extent of the damage. What is the Coastal Commission’s plan for restoration and cleanup of the area, and for

¹⁴ [CCC Snowy Plover project Moss Landing](#)

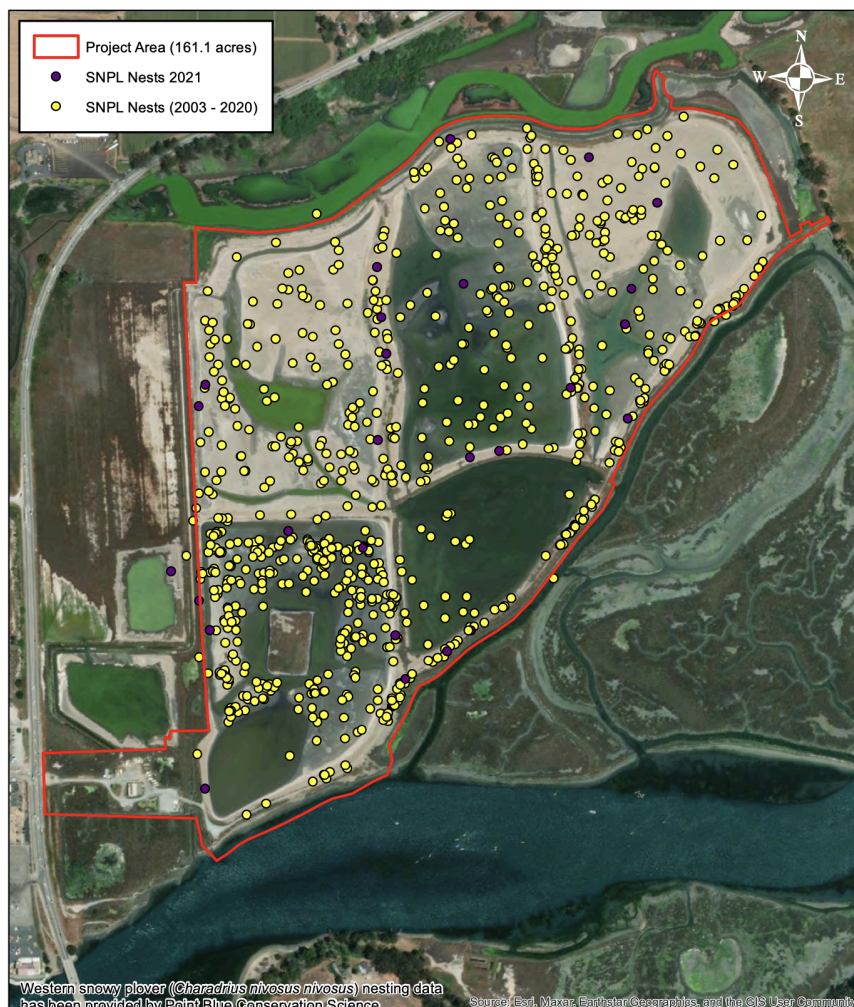
protecting human life and the wildlife? What steps can be taken to be sure this never happens again?

Project Area Map: Coastal Development Permit (CDP) 3-23-0176:
Habitat Resiliency and Access Enhancement Project (June 4, 2023).



Project Area Map

Exhibit 1
3-23-0176
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Snowy Plover Nesting Sites 2003-2021

Exhibit 4
3-23-0176
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E. Industry Claims That Containerized Batteries Are Safe, But They Are Not.

Safety measures for the hazards from containerized batteries are not what they are claimed to be. Industry officials now propose containerized systems that allow heat and flames to shoot out the top through “M-dampers” that release heat and gas to minimize propagation, and “deflagration panels” that automatically open with predetermined pressure to prevent explosion.¹⁵ These features are not mitigation; they are another significant and unmitigable impact, dumping more toxins into the air.

¹⁵ [Protecting Battery Energy Storage Systems from Fire and Explosion Hazards](#)



2. Explosion vent panels are installed on the top of battery energy storage system shipping containers to safely direct an explosion upward, away from people and property. Courtesy: Fike Corp.

A July 20, 2021 article from Powermag.com, *Protecting Battery Energy Storage Systems from Fire and Explosion Hazards*, acknowledged that “[t]here are serious risks associated with lithium-ion battery storage systems” but indicated the container design contains vents on the top to “safely direct an explosion upward...” What? This proposed release of gasses is unsafe and would likely require an EPA permit. The photo above, disturbing on its own, is unrealistic as it shows no smoke. Those fires actually release plumes of toxic gasses and heavy metals as they did in the Escondido BESS fire.



Fire at battery facility in Escondido prompts...

[Visit >](#)

There are many of these BESS container fires. The containers may be smaller than the warehouses, but they are all still ticking time bombs. Upon an investigation of the July 30, 2021 fire in Australia, it was determined that wind caused the fire to jump

from one Megapack of batteries to the neighboring Megapack. The problem is not the size of the storage unit, it is that lithium-ion batteries are inherently unsafe.

F. Industry Will Claim That LFP Batteries Are Safer than MNC, But They Are Not.

The battery storage industry argues that LFP (Lithium Ion Phosphate) batteries are safer than MNC (Manganese Nickel Cobalt), but recent research and reported battery fires indicates this is not the case.

Researchers in the United Kingdom analyzed lithium-ion thermal runaway off-gas and have found that nickel manganese cobalt (NMC) batteries generate larger specific off-gas volumes, while lithium iron phosphate (LFP) batteries are a greater flammability hazard and show greater toxicity, depending on relative state of charge.¹⁶

In addition, the BESS fire database indicates there have been numerous reported fires with LFP batteries in the last five years.¹⁷ The conclusion is that any type of lithium battery storage is not safe enough to be in proximity to people, wildlife, and agriculture. And the BESS industry, self-policed yet riddled with conflicts of interest, cannot be trusted to prioritize safety.

The BESS industry continues to gaslight the public when it comes to safety developments. In an EPRI Journal article written May 16, 2024, industry officials claim a high profile BESS fire in Arizona in April, 2019 that caused permanent injuries to firefighters led the industry to “*prioritize BESS safety in a way it hadn’t been before.*”¹⁸ If industry officials involved in the Moss Landing BESS proposal had acted on the information from the Arizona fire, safety could have been prioritized. But that didn’t happen. Now, as then, Vistra officials are saying they’ve learned their lesson. It is clear they haven’t learned enough lessons to stop using our communities and wildlife as guinea pigs in their quest for subsidies and profits. We need help from you and the other agencies tasked with protecting the environment. Thank you for your consideration.

Respectfully,

Jeanne Marie Colby

¹⁶ [How safe are lithium iron phosphate batteries? – pv magazine International](#)

¹⁷ https://storagewiki.epri.com/index.php/BESS_Failure_Incident_Database

¹⁸ [An Untold Success Story - EPRI Journal](#)