 #7, 1/28/2025

Hand-delivered 1/28/2025 please include in record Becky steinbruner

High Levels of Metals Detected in Elkhorn Slough Reserve

From: Becky Steinbruner (ki6tkb@yahoo.com)

To: boardofsupervisors@santacruzcountyca.gov; justin.cummings@santacruzcountyca.gov; felipe.hernandez@santacruzcountyca.gov

Cc: david.reid@santacruzcountyca.gov; ann@farmworkerfamily.org; ki6tkb@yahoo.com

Bcc: b.wiser@k6rmw.net; nlyellin@comcast.net; rosie@santacruzvoice.com; bill@santacruzvoice.com; michael@santacruzvoice.com

Date: Monday, January 27, 2025 at 07:12 PM PST

Dear Supervisors,
I want to make sure you are aware of the information that became available today by the Moss Landing Marine Laboratories that shows very high levels of metals in soils around the Elkhorn Slough Reserve against records of baseline soil sampling levels.

What is Santa Cruz County doing to test agricultural soils in the Pajaro Valley following the Moss Landing Vistra Battery Energy Storage System (BESS) Fire?

Are farmworkers still being expected to work in these areas of unknown contamination?

Please respond.
Sincerely,
Becky Steinbruner
****
https://www.indybay.org/uploads/2025/01/27/moss_landing_marine_lab_vistra_fire_press_release.jpg

High Concentrations of Heavy Metals Found in Elkhorn Slough Following Vistra Fire

by via Moss Landing Marine Laboratories
Mon, Jan 27, 2025 4:17PM
MOSS LANDING, Calif. — Research scientists at San José State University's Moss Landing Marine Laboratories (MLML) have detected unusually high concentrations of heavy-metal nanoparticles in marsh soils at Elkhorn Slough Reserve following the recent fire at the nearby Vistra Power Plant's lithium-ion battery storage facility.

original image (5184x3456)

As part of a decade-long monitoring program of the Elkhorn Slough estuary, Dr. Ivano Aiello's research team analyzed the marsh soil properties, including the composition of major and trace elements, in the days immediately following the Vistra battery fire that began on Thursday, January 16. The fire burned for several days, causing road closures, evacuation of the area and air quality concerns.

The field surveys, conducted within a radius of approximately 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. This dramatic increase relates to both the shallow subsurface and the baseline measurements conducted in the area before the fire. Samples of the heavy-metal layer were examined at high magnification and reveal that these metals are contained in nanoparticles that range in diameter between about 1 and 20 microns.

These nanoparticles are used in cathode materials for lithium-ion batteries, commonly referred to as "NMC" (Nickel Manganese Cobalt), clearly connecting the occurrence of the heavy metals to airborne cathode material from the Vistra battery fire. These heavy metals will chemically transform as they move through the environments and potentially through the food web, affecting local aquatic and terrestrial ecosystems.

Monterey County officials have been made aware of the team's findings.

"These findings and the research that follows are crucial not only to the impacted community but to the national and international community because of the need to store more power and thus build more and larger battery storage facilities," said Dr. Aiello, marine geology professor and department chair at MLML. "This is a new and fast-growing technology, and we must understand

the ecological impacts in the event that accidents like this happen again."

Dr. Aiello's team and colleagues at SJSU and the Elkhorn Slough Reserve will continue monitoring the soils and waterways on a short—and long-term basis.

[Photo: Elkhorn Slough with view of Moss Landing Power Plant in the distance (Photo Taken November 2016). Credit: Susan Gerbic]
§Press Release

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SJSU SAN JOSÉ STATE UNIVERSITY

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FOR IMMEDIATE RELEASE

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