HONOLULU CITY COUNCIL

KE KANIHELA O KE KALANA O HONOLULU

CITY AND COUNTY OF HONOLULU

No. 26-189

RESOLUTION

URGING THE CITY ADMINISTRATION TO ADOPT SUSTAINABLE ROAD CONSTRUCTION AND REPAIR PRACTICES THROUGH THE INTEGRATION OF RECYCLED ASH AND ENHANCED METAL RECOVERY.

WHEREAS, the City and County of Honolulu ("City") is committed to sustainable waste management and the reduction of environmental impacts associated with traditional landfilling and resource importation; and

WHEREAS, the City maintains critical roadway infrastructure that students, families, and young people rely upon daily for transportation to schools, jobs, and community activities; and

WHEREAS, young people will inherit the long-term environmental and financial consequences of today's infrastructure decisions, including greenhouse gas emissions, climate change impacts, and public spending priorities; and

WHEREAS, traditional road construction relies on carbon-intensive materials and imported resources that contribute to environmental degradation and increase the State of Hawai'i's ("State") dependence on external supply chains; and

WHEREAS, the City's H-POWER waste-to-energy facility generates energy in a manner similar to coal or oil plants through the processing of municipal solid waste, including residential "gray cart" waste and bulky items such as mattresses and chairs; and

WHEREAS, the combustion process at H-POWER will, in the future, use the Honolulu Advanced Recovery and Recycling of Ash ("HARRA") process, an advanced treatment technology that processes and separates combined ash from waste-to-energy facilities into its component parts for recovery and reuse; and

WHEREAS, the resulting bottom ash byproduct produced by HARRA can reduce the volume of ash by approximately 50 percent, diverting further waste from the City's only permitted public municipal solid waste landfill; and

WHEREAS, bottom ash has significant potential as a sustainable construction material, particularly for road asphalt, that would directly reduce the need to import expensive, finite resources like construction sand; and

HONOLULU CITY COUNCIL

KE KANIHELA O KE KALANA O HONOLULU

CITY AND COUNTY OF HONOLULU

No. 26-189

RESOLUTION

WHEREAS, while current processing methods involve cooling ash in water chambers to produce "wet ash," HARRA is far more effective on "dry ash," allowing for significantly easier sifting, separation, and purification of materials; and

WHEREAS, metal recovery is critical to sustainability, as discarded metals account for approximately 4 percent of waste weight that could be recovered more efficiently by processing dry ash; and

WHEREAS, modern safety protocols, such as the encapsulation tactic, use phosphoric acid and limestone to neutralize the acidity of fly ash to ensure heavy metals are chemically locked within a protective shell, requiring rigorous lab analysis to meet the State's strict tiered safety standards (including limits on eight specific metals and a maximum lead level of 300 mg/kg); and

WHEREAS, while the State is currently approximately 10 years ahead of the continental United States in waste-to-energy implementation, it remains 10 years behind global leaders such as Japan, Germany, and the United Kingdom, who have successfully used ash in road materials for over two decades; and

WHEREAS, international and domestic acceleration in ash reuse is occurring in China and states like Florida, Pennsylvania, and New York, signaling a proven global shift toward circular economies; and

WHEREAS, the potential exists not only for current ash production but also for "landfill mining" to recover and repurpose previously disposed ash, further extending the life of the City's landfills; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that it urges the City Administration, specifically the Department of Environmental Services, the Department of Facility Maintenance, and the Department of Transportation Services, to develop a framework for incorporating recycled bottom ash into City and County of Honolulu road construction and repair projects; and

BE IT FURTHER RESOLVED that the Council expresses its support for the:

1. Transition toward dry ash processing and the Honolulu Advanced Recovery and Recycling of Ash process to maximize metal recovery and material purity; and

RESOLUTION

2. Research into the safe encapsulation and reuse of fly ash, recognizing that while bottom ash is ready for immediate application, fly ash may have sustainable resource potential; and

BE IT FINALLY RESOLVED that copies of this resolution be transmitted to the Mayor, the Director of the Department of Environmental Services, the Chief Engineer of the Department of Facility Maintenance, the Director of Transportation Services, and the Facility Manager of Reworld Honolulu, LLC.

INTRODUCED BY:

DATE OF INTRODUCTION:

AUG 18 2026

Honolulu, Hawai'i

Councilmembers

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

CERTIFICATE

RESOLUTION 26-189

Introduced: 08/18/26 By: AUGIE TULBA Committee: ENERGY, ENVIRONMENT & SUSTAINABILITY (EES)

Title: URGING THE CITY ADMINISTRATION TO ADOPT SUSTAINABLE ROAD CONSTRUCTION AND REPAIR PRACTICES THROUGH THE INTEGRATION OF RECYCLED ASH AND ENHANCED METAL RECOVERY.

Voting Legend: * = Aye w/Reservations

08/18/26	INTRO	Introduced.
08/25/26	EES	Reported out for adoption. CR-223(26) 3 AYES: TULBA, TUPOLA, WEYER 1 ABSENT: DOS SANTOS-TAM
09/09/26	CCL	Committee report and Resolution were adopted. 9 AYES: CORDERO, DOS SANTOS-TAM, KIA'ĀINA, NISHIMOTO, OKIMOTO, TULBA, TUPOLA, WATERS, WEYER

I hereby certify that the above is a true record of action by the Council of the City and County of Honolulu on this RESOLUTION.

CHADD KADOTA, ACTING CITY CLERK

TOMMY WATERS, CHAIR AND PRESIDING OFFICER