SANTA BARBARA COUNTY

# Resource Recovery & Waste Management Division

Innovative Environmental Solutions

# Regular Variance Petition for the Tajiguas Resource Center July 2, 2025

### **Resource Center Description**

- Co-located at the Tajiguas Landfill
- Consists of a material recovery facility (MRF), an anaerobic digestion facility (ADF), and a compost management unit (CMU)
- Pending completion of development and transition to full operations



#### **Communities Served**

- The ReSource Center serves:
  - City of Santa Barbara
  - · City of Goleta
  - City of Solvang
  - City of Buellton
  - Unincorporated County of Santa Barbara areas
- Crucial in managing regional waste and recycling processing, greenhouse gas reduction, and organic diversion goals set locally and by the State











# **Material Recovery Facility**

- Processes ~138,600 tons of Municipal Solid Waste and ~35,400 tons of Source Separated Recyclables annually
- Emissions controlled by two baghouse filters
- Landfill gas is combusted in an enclosed flare and two CHP engines
- Engines are equipped with a continuous emissions monitory system (CEMS) and data is telemetered via the Data Acquisition System (DAS)



# **Anaerobic Digestion Facility**

- ~40,000 tons of organics annually
- A Guaranteed Energy Production of biogas is sold to Southern California Edison
- Emissions at the ADF are controlled by a biofilter, flare, and two CHP engines
- Engines are equipped with CEMS and data is telemetered to the District via the DAS



# **Compost Management Unit**

- ~5,500 tons of compost was produced over the past year
- Emissions and odors at the CMU are controlled by a Covered Aerated Static Pile system with Gore® blankets



# Six Findings

HSC § 42352: The petitioner for a variance is, or will be, in violation of Section 41701 or of any rule, regulation, or order of the district

- Rule 206 Conditional Approval of Authority to Construct or Permit to Operate
  - Resource Center Throughput Operational Limits
  - CHP Engines Emission and Operational Limits
  - ADF Operational and Monitoring Conditions
  - ADF Enclosed Flare Emission and Operational Limits
  - Biofilter Operating Parameters
  - Biogas Treatment System Operations
  - Monitoring Conditions and Plans
- Rule 328 Continous Emission Monitoring
  - CEMS Plan and the Continuous Emissions Monitoring System

HSC § 42352 - Due to conditions beyond the reasonable control of the petitioner, requiring compliance would result in either (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and elimination of a lawful business. In making those findings where the petitioner is a public agency, the hearing board shall consider whether or not requiring immediate compliance would impose an unreasonable burden upon an essential public service. For purposes of this paragraph, "essential public service" means a prison, detention facility, police or firefighting facility, school, health care facility, landfill gas control or processing facility, sewage treatment works, or water delivery operation, if owned and operated by a public agency.

- The Resource Center (MRF, ADF, CMU) is an essential public service that has a net positive impact on the environment and the community.
- Immediate compliance cannot be achieved without a new permit revision, air model update, and health risk assessment update.



HSC § 42352: The closing or taking would be without a corresponding benefit in reducing air contaminants.



There would be a net increase in air pollution through the closure of this facility.

Increase methane surface emissions (vs combustion of methane rich biogas). Methane has up to 100x more global warming potential compared to Carbon Dioxide

Increased truck trips to divert organic waste after capacity is reached.



Landfilling of organics would fill up the Tajiguas Landfill prior to its newly anticipated closure date of 2038.



If organics were to be placed in the landfill and not processed by the ADF, the ReSource Center would be in violation of diversion requirements in accordance with Senate Bill 1383.

HSC § 42352: The applicant has given consideration to curtailing operations of the source in lieu of obtaining a variance.



The Resource Center facilities (MRF, ADF, CMU) and the landfill operations are interconnected by the flow of waste inputs and outputs.

Operational changes and waste profiles change regularly, requiring additional operating limitation flexibility.



Waste management services must be provided for County residents and businesses, outsourcing this would have substantial economic impacts.

Impacts include diverting waste outside the County at a cost of more than 13 Million dollars



Curtailment of operations will not lead to compliance, as permit revisions are required to adequately characterize how the facility should operate in compliance with all requirements.

SB 1383 Waste Diversion Requirements

Non-routine Maintenance and Safety Scenarios

Renewable Energy Requirements and Power Purchase Agreement

# HSC § 42352 – Finding Number 5

Compost heaps built with drier material

Removal of woodchipper

CHP engines will not run at full load

ADF Flare emissions reduced through consistent biogas production

# HSC § 42352 – Finding Number 6

During the period the variance is in effect, the applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the district, and report these emission levels to the district pursuant to a schedule established by the district.



ADF Flare will continue to be monitored, and excess emissions will be calculated.



Excess Emissions and compliance status will be documented through monthly reporting to the District



Continuous Emissions Monitoring Systems will continue to telemeter emissions data to the District

# **Current Status and Next Steps**

- Changes were made to staffing, budgets, contracts, and operational procedures since taking over environmental compliance of the Resource Center and Operations of the ADF and CMU in 2024
  - Changes to the facility Authority to Construct 14500-10 <u>must occur</u> to reflect these changes and come into compliance with District requirements.

Since the last variance, repairs have been made and all equipment successfully passed source testing requirements.



# **Timeline & Summary of Variance**

June 2025

Interim Variance Order 2025-08-I, granted on June 9, 2025 – provides relief through August 27th, 2025

**Aug. 2025** 

New Application for permit mod to be submitted for air model dependent changes June 2026

Final Compliance Report submitted to District

Response to Incompleteness Letter removing air model dependent changes to ATC 14500-14

July 2025

**End of Regular Variance** 

May 2026

# Thank you!





SANTA BARBARA COUNTY

Innovative Environmental Solutions