

SANTA BARBARA COUNTY

**Resource Recovery &**

**Waste Management Division**

*Innovative Environmental Solutions*



**Regular Variance Petition**  
**for the Tajiguas Resource Center**  
July 3, 2024

# Resource Center Description

- Located at the Tajiguas Landfill
- MSB Investors, LLC to develop and operate in 2016
- Revised Tajiguas Resource Recovery Project (ReSource Center) approved in 2017
- Pending completion of development and transition to full operations

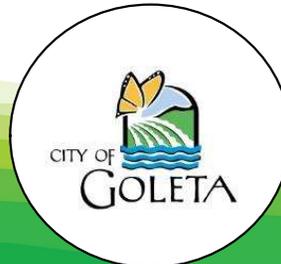


# Communities Served

- 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



one  
COUNTY  
one  
FUTURE



# Material Recovery Facility

- Facility Production
  - Municipal Solid Waste (~140,000 tons annually)
  - Source Separated Recyclables (~39,000 tons annually)
- MRF operations subcontracted to third-party contractors
- Landfill gas is treated and combusted in an enclosed flare or in two CHP engines for onsite energy needs



# Anaerobic Digestion Facility

- Facility Production
  - Organics produced from MRF (~57,000 tons annually)
  - Source separated organics from restaurants, schools, hotels, etc. (~3,300 tons annually)
  - Energy derived from biogas (~0.9 MW last year)
- ADF flare, water and wastewater treatment systems subcontracted to third-party contractors
- Engines are equipped with a continuous emissions monitoring system and data is telemetered to the District via the Data Acquisition System



# Compost Management Unit

- Facility Production:
  - Organics from the Anaerobic Digestion Facility (~60,000 tons last fiscal year)
  - Finished Compost (~640 tons last fiscal year)
  - Best management practices are utilized to control ROC emissions and odors, including Gore® covers and forced static aeration



# Recent Developments

- MSB had exclusive control under former operating Agreement
- MSB to comply with all federal, state, and local regulatory requirements
- Agreement with MSB partially terminated on December 12, 2023 and fully terminated on January 3, 2024
- County has taken over contracts with key subcontractors/operators to return the facility to compliance



# Reason for Variance Request

- Without coverage, the County will be in violation of:
  - Operating two ADF CHP engines without emission controls and CEMS
  - Operating two MRF CHP engines without emission controls and CEMS
  - Exceeding Best Available Control Technology emissions limits
  - Failing to comply with source testing requirements for the ADF CHP engines

# Six Findings

# Finding Number 1

- Without variance coverage, the County would be in violation of the same rules and conditions as those stated in the initial interim variance granted on May 31, 2024
  - District Rules 328.C.2, C.4, G and I.1
  - District Rule 206
  - Authority to Construct 14500, Modification 10
    - Conditions 9.B.12, 9.C.9.a.i, 9.C.9.a.v., 9.C.9.b.ii, 9.C.9.b.xvii, 9.C.9.b.xviii, 9.C.9.c.xiii (ADF CHP IC engines only), 9.C.19.a (ADF CHP IC engines only), 9.C.21 (ADF and MRF CHP IC engines only), 9.C.22 and 9.C.23.

## Finding Number 2

- The ReSource is a major utility provider, closing the facility is not economically feasible
  - The fiscal burden of transporting waste to nearby landfills would be approximately \$13.4 million dollars per year
- Once the County assumed operation of the facilities, the County acted quickly to improve operational shortcomings and experienced challenges to bring the facility into compliance

# Finding Number 3

- Closing the ReSource Center would result in the landfilling of organics and fill up the Tajiguas Landfill before March 2026
- If the landfill were to reach capacity, waste would be sent to Chiquita Canyon Landfill and would be a significant increase in hauling distance and an increase in transportation related greenhouse gases
- In addition, 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

# Finding Number 4

- Reducing operation of the MRF or ADF CHP engines would halt several beneficial aspects:
  - At the ADF, it is critical to use residual heat from the engines in order to maintain a temperature that sustains the microorganisms that are responsible for the breakdown of waste within the anaerobic digester
  - By keeping the ADF engines at full operation, staff are better able to track improvements in Biogas production while adjustments to the system are made
  - At the MRF the engines residual heat is also used for condensate evaporation and recycled paper drying
  - Both the MRF and ADF engines generate electricity for use onsite and export to the grid, offsetting greenhouse gases that are generated by using other fossil fuel sources

# Finding Number 5

- By operating the MRF and ADF engines to their best extent and maximizing the benefits described in Finding 4, the County has been allowed to control excess emissions to the maximum extent feasible
- More progress towards reducing excess emissions will be achieved by:
  - Completion of CEMS work for the ADF and MRF engines
  - Parts for completing the maintenance and repairs to the SCR system have been procured and work scheduled to begin on July 22
  - Once maintenance has been completed, meeting other all other conditions listed including BACT and source testing requirements will commence

# Finding Number 6

- All existing reporting and recordkeeping requirements will be implemented as required by the permit and this variance
  - The County will monitor the volume of gas combusted in the ADF and MRF CHP engines daily
  - Conduct monthly portable emissions analyzer monitoring on the engine stacks
- At this time, excess emissions are not known

# Summary of Variance Petition

- Interim Variance Order 2024- 05-I, granted on May 31, 2024
- Variance Order 2024-05-I provides relief from:
  - Source testing requirements for the ADF CHP engines
  - BACT emissions limits for ADF and MRF CHP engines
  - Emissions controls and maintenance for the ADF and MRF CHP engines
  - CEMS requirements and data telemetry for the ADF and MRF CHP engines
  - CEMS excursions
- Variance Order 2024-06-R, would allow relief through March 21, 2025, or the date compliance is achieved, whichever occurs first

# Thank you!



*one*  
**COUNTY**  

---

*one*  
**FUTURE**



**SANTA BARBARA COUNTY**  

---

*Innovative Environmental Solutions*

[www.LessIsMore.org/ReSourceCenter](http://www.LessIsMore.org/ReSourceCenter)