



# RECYCLING CERTIFICATION INSTITUTE



**GREENWASTE ZANKER RESOURCE RECOVERY FACILITY – SITE 1**  
**CORR PROTOCOL EVALUATION REPORT**

**June 3, 2024**  
**Evaluation Body: RCI**



## **Executive Summary**

This report corresponds to the evaluation of the Application for CORR Certification by Zanker Road Resource Management, LLC (ZRRML), owner and operator of the GreenWaste Zanker Resource Recovery Facility – Site 1 Facility (GWZRRS1 or Site 1) located at 705 Los Esteros Road, San Jose, California, submitted to the Recycling Certification Institute (RCI or Institute). This Evaluation represents an independent review of data and information provided to the Institute. Due diligence was followed to ensure Duty of Care and Duty of Loyalty to the Institute and to manage any Conflict of Interest.

RCI Evaluators Manual 2.0 (EM) and RCI General CORR Protocol 1.9 (GCP) guided the evaluation process per standard practice. There are multiple lines onsite that had previously undergone individual certifications. However, this Evaluation reviews the individual lines operating together as a consolidated processing operation much as RCI has conducted at other similar large operations handling Mixed C&D and Source Separated materials.

RCI uses a 97% confidence level as its Minimum Quality standard when calculating recovery or recycling rates for facilities receiving/processing at least 1,000 tons/day. The evaluation found neither material nor immaterial misstatements nor deviations from the described process train for the operations at the GWZRRS1 operation. The twelve months of recovery and recycling data submitted by GWZRRS1 was within the quantitative materiality threshold of 97% (less than 3% error) per EM Section 2.2.3. The onsite Evaluation was conducted on May 20, 2024.

## **Overview of GreenWaste Zanker Resource Recovery Facility-Site 1 Operations**

Zanker Road Resource Management, LLC. (ZRRML) currently owns and operates the GreenWaste Zanker Resource Recovery Facility – Site 1, located at 705 Los Esteros Road, San Jose, California. The Facility has operated as a resource recovery facility and disposal site since 1992 under various Planned Development Permits issued by the City of San Jose Planning Department, a Solid Waste Facilities Permit (SWFP) issued by the City of San Jose Local Enforcement Agency (LEA), the California Integrated Waste Management Board (CIWMB, now CalRecycle), Waste Discharge Requirements (WDRs) issued by the San Francisco Regional Water Quality Control Board (RWQCB), and various Permits to Operate (PTO) issued by the Bay Area Air Quality Management Board (BAAQMD). GWZRRS1 is a fully permitted solid waste disposal site and a large volume transfer/processing facility (Solid Waste Facility Permit Number 43-AN-0007).

As currently permitted under the SWFP, Site 1 may accept up to 2,600 tons per day (tpd) of materials. Although permitted as a Class III landfill, the Facility is not currently allowed to accept putrescible garbage and solid waste (i.e., wet household garbage), green/yard waste, liquid waste sludge, designated wastes, and hazardous wastes. The primary wastes received at Site 1 include construction and demolition debris, wood waste, mixed debris, asphalt shingles, and soil generated from throughout the San Francisco Bay Area.

Residuals from the recycling operations are transported to the Marina Landfill in Monterey California or another nearby disposal option.

The Facility is open to the public from 6:00 a.m. to 4:45 p.m. Monday through Friday and 8:00 a.m. to 3:45 p.m. on Saturdays. The site is closed on Sundays and major holidays. The Facility has received materials from most jurisdictions within the Bay Area since 1997.

Site 1 has five distinct resource recovery operations that each serve a specific function in the overall operation. They are: Concrete Processing, Wood Processing, Asphalt Shingle Processing, Soil Processing, and Demolition Material Processing, and are the focus of this Evaluation.

## **Description of Plants and Process Flow:**

### ***Concrete Processing Plant (400 Plant)***

Concrete rubble is typically delivered to Site 1 by demolition/construction contractors and private individuals. Incoming loads composed primarily of concrete rubble are directed to the concrete stockpile area for unloading. Concrete rubble separated at the other onsite recycling plants is also regularly transferred to the concrete stockpile. The concrete rubble stockpile is maintained in a stable configuration and with full perimeter access.

#### Process Description:

In the recycling process at Site 1 the concrete rubble is converted into rock of various sizes that is suitable for various construction purposes, including base rock, engineered fill material, drain rock, pea gravel, and sand and erosion control material. Most of the recycled rock generated at Site 1 is used as “base rock” (i.e., gravel) in various construction and landscaping projects.

To create the rock, concrete rubble is taken from the stockpile with an excavator and placed directly into a jaw crusher. The jaw crusher is designed to reduce the large and odd-sized pieces of concrete rubble into smaller, more manageable-sized chunks and pieces. The processed concrete from the jaw crusher is then transferred onto a conveyor belt and passed under a magnet that removes metals and passes two sorting stations to manually remove nonmetallic items such as wood, paper, and plastic. The cleaned jaw-crushed concrete is then sent through a screening plant to separate the oversized material. The oversized material separated at the screen is conveyed into a secondary crusher to be further reduced and then routed back through the screening process. All the smaller materials that pass through the screening process are conveyed to a stockpile for temporary storage at Site 1. The finished product rock stockpile will be maintained in a stable configuration and for easy accessibility.

All the existing concrete processing equipment is electrically powered. Because this equipment is electrically powered there are no adverse air emissions associated with the equipment’s operation. To control fugitive dust emissions during material handling and

crushing operations, the concrete stockpile is watered by hand before the material is loaded into the crusher, and the crusher and conveyor systems are outfitted with water jets to keep the material moist and prevent dust. Water is also applied to the on-site material stockpiles as necessary to minimize dust generation during material transfer and loading operations.

The basic concrete crushing process and equipment described above are used to process non-recyclable ceramics and bricks into a sand-like product for use in bathroom tile, and 3/8-inch pea gravel, sand, and 1/2-inch and 3/4-inch drain rock for use in landscaping and construction products. The plant is permitted through the BAAQMD.

### ***Wood Waste Processing & Wood Grinding Plant (600 Plant)***

Landscape contractors, demolition/construction contractors, and private individuals deliver wood waste and brush to Site 1. Incoming loads composed primarily of brush, tree trimmings, and wood waste are directed to the wood waste stockpile area for unloading. Wood waste separated at the other on-site recycling plants (especially the Construction waste sorting line) is also regularly transferred to the incoming wood waste stockpile.

#### Process Description:

The wood waste is ultimately ground and then screened to create wood chips and wood fines. The wood chips (3/8-inch plus) are temporarily stockpiled on-site and then hauled off-site and used primarily as co-generation fuel and secondarily as mulch for various landscaping and agricultural purposes. The wood fines (3/8-inch minus) are also temporarily stockpiled on-site and then hauled off-site and used in landscaping projects or as soil amendment.

The Wood Waste plant consists of an electric Peterson Pacific grinder, an electrically powered trommel screen, and a series of electrically powered feed, transfer, and stacking conveyors. To control fugitive dust emissions in the conveying and screening operations the wood waste stockpile is watered by hand before material is loaded into the screen. The nearby water tank is also equipped with a hose to make it available for immediate fire suppression if ever necessary. The plant is permitted through the BAAQMD.

### ***Asphalt Shingle Processing***

Site 1 accepts and processes clean, separated loads of composite asphalt roofing shingles removed from residential buildings.

#### Process Description:

The facility sorts and cleans the old shingles and transports them to Oakland where they are processed into dry, granular asphalt that is shipped to other East Bay manufacturers to make "hot mix asphalt" used to build or patch roads throughout the region or a local landfill as alternative daily cover (ADC).

The plant also accepts commercial tear-off and tar and gravel roofing. These materials are stockpiled and made into ADC.

## ***Soil Processing***

Site 1 accepts clean soil from public residential C&D projects and small municipality C&D Improvement projects.

### Process Description:

The soil is stockpiled and is then screened, if necessary, via a 2-deck shaker screen. Three products are created from this screening process, a 3/8-inch minus clean soil, 1/2-inch to 6-inch overs, and a 6-inch plus overs. The 3/8-inch minus clean soil is stockpiled for use in our Zanker Landscape Materials' soil blends, fill dirt, or landfill cover. The 1/2-inch to 6-inch is transferred to local recycling / onsite usage facilities, and 6-inch plus is transferred to our concrete recycling plant for processing into base rock and other recycled aggregate products.

## ***Demolition Processing Plant (525 Plant)***

The Demolition Processing Plant (Demo Plant) mainly accepts demolition debris, but since this site is open six days a week it may also receive minor amounts of other materials such as construction waste. These materials are off-loaded in a specific stockpile area located on top of Site 1. The primary material categories from this line are Aggregates, Wood, Metals, Alternate Daily Cover (ADC), and Landfill. Fiber (cardboard and paper), Soil, and Screen Fines make up an incidental amount of material recovered from this plant.

### Process Description:

From the unloading area, materials are pushed to one of two excavators near the feed conveyor. Large pieces of metal, concrete, and non-recyclable products, such as carpeting and fabric, are removed with an excavator before loading the in-feed conveyor. The second excavator loads the in-feed conveyor, which transports the materials to the Demo Plant.

The excavator operator then loads the in-feed conveyer that transports the materials into a large finger screen that removes the 12-inch minus fraction materials.

The larger materials pass over the screen and head up to sorting stations, where concrete, metals, and residuals are removed. The remaining material on the sort line is lumber, which is directed to Zanker's wood recycling operations.

The smaller fraction from the large finger screen (the 12-inch minus materials), travels up a conveyer past a magnet removing ferrous metals and into a debris roll screen, which removes the 2-inch minus fraction. This material is then transported to a stockpile, where it is shipped to another landfill to use as ADC.

The larger fraction of materials from the debris roll screen, primarily wood waste and concrete, are then conveyed into two air systems that separate the material by density.

The lighter material from the separation, usually wood waste and residual materials, falls on another conveyor and in front of sorting stations, where employees remove contamination (such as plastics). This leaves mainly wood waste on the conveyors.

The heavier materials, mainly concrete, fall onto a sorting conveyor. This conveyor passes in front of a sorter who removes the unwanted items; thus, the concrete is clean enough to be used in base rock production.

Materials leaving the Demo Processing Plant are weighed, excluding the wood waste, which is weighed in the processing area and then tipped at the wood waste recycling operation.

### ***Description of Weight Tag and Ticketing System:***

The ticket system at Site 1 follows a stringent process of recording information from the customers, follows the vehicle through the operation with multiple areas for load checking and correcting weight tags for accuracy based on the materials brought to the facility.

Every truck that is sent to the tipping area must have a TICKET, which is designated as COMPLETED or OPEN. Trucks with stored tare weights or small loads where payment is taken can use a completed ticket. Otherwise, trucks such as roll-offs or those needing a tare weight must have a ticket to present at the dumping area. A ticket printed before closing it out will read 'OPEN TICKET!!!!' across the front and accompanies the truck to the tipping area and is returned to the scale operator once the ticket is completed. The procedures for small loads and loads needing a tare weight, which includes Roll-Off trucks and trailers, is as follows:

Operators enter truck license plate; type of material and records a gross weight from the appropriate scale. The operator prints 'OPEN TICKET' and informs customers to present the ticket to the load checker and to return the ticket to the scale house when they weigh out.

Load checkers examine tickets to ensure proper matching license plate number, the current date, and that the type of material is correct. In the event any information is incorrect, the load checker contacts the scale house immediately for correction. An incorrect date or plate number should be reported to a supervisor, whereas a material type that needs correcting is performed via radio contact from the load-checker to the scale house operator.

The Customer returns to the scalehouse to weigh out and presents the OPEN TICKET to scale house operator. The scale operator completes the transaction by finalizing payment and issuing the completed version of the same ticket that was started upon entry.

## Development of Evaluation Plan

ZRRML initiated the Certification process by first Registering the GreenWaste Zanker Resource Recovery Facility – Site 1 on RCI's Registration webpage: <https://www.recyclingcertification.org/registration/>. The Registration process requires facilities to submit facility and contact information which provides RCI with a general understanding of the on-site operation(s) and what additional information may be needed in preparation for an Evaluation. A sample of information provided through the Registration process includes:

- Name of the facility
- Street address of the facility (P.O. Box not acceptable)
- Name of the city/state where the facility is located
- Facility type
- Scale(s) certified
- Permits – state/local Registration Number or state/local permit number
- Hours of facility operation
- Current tons of Inbound and Outbound materials
- Name of company contact person, position/title, and contact information
- Website address

Upon ZRRML's completion of the Registration process and in preparation for the Evaluation, RCI requested further documentation as expressed in the CORR guidance documents. RCI also provided an overview of the Evaluation process to aid in the streamlining and completion of activities on the day of the site visit. On-and Offsite review would include:

- Review of recyclables sales records
- Sales contacts to verify facility sales and other off-site movement of materials
- Confirmation of permits
- Verification of use and accuracy of scales including calibration frequency
- Observation and verification of load/material sorting and accuracy
- Interviews with key personnel
- Review of employee training/safety manuals
- Calculation of variance in recovery and recycling rates
- Other materials/documentation that may aid in preparation of a Facility Evaluation Report and Evaluation Opinion.

RCI reviewed twelve prior months' data for Site 1 to determine accuracy of the mass-balance calculations. GWZRRS1 provided data in a format that allowed random sampling and review of all aspects of data including customers, weight tags, days, dates, materials, tons, etc. RCI noted areas of potential risk to follow up on during the site visit.

## **SITE VISIT**

RCI performed an on-site evaluation of the GreenWaste Zanker Resource Recovery Facility – Site 1 on May 24, 2024. Spencer Morgan, General Manager, conducted the tour of the facility, with accompaniment and additional information provided by Kevin Lord, Accounts Manager, and Rafael Perez, Operations Manager. Jerame Renteria, Director of Marketing joined the onsite Evaluation during the administrative and records review portion of the site visit. Mr. Renteria served as GWZRRS1’s lead contact throughout the Evaluation process and was responsible for submitting the initial applications and responding to subsequent inquiries as well. Mr. Lord coordinated the data elements of the Evaluation. RCI completed a drive and walk-through of the facility, examining where materials enter, are measured, deposited, processed/sorted, and eventually leave the facility, in verifying information provided in the Application for Certification.

Interviews were conducted of staff associated with the key areas of the operations, particularly those staff who have access authority and responsibility for maintaining, reviewing, and overall integrity of Site 1’s data. RCI also reviewed the training logs and procedures to determine if adequate QC existed for those staff with the potential to directly affect the recycling and recovery rates reported by the facility and determined adequate and ongoing training exists in these key positions to maintain QC of processes and data.

### **Regulatory Compliance Test**

*GWZRRS1 possesses the necessary permits to operate.*

Zanker Road Resource Management, LLC. currently owns and operates the GreenWaste Zanker Resource Recovery Facility (Site 1), located at 705 Los Esteros Road, San Jose, California. The Facility has operated as a resource recovery facility and disposal site since 1997 under various Planned Development Permits issued by the City of San Jose Planning Department, a Solid Waste Facilities Permit (SWFP) issued by the City of San Jose Local Enforcement Agency (LEA), the California Integrated Waste Management Board (CIWMB, now CalRecycle), Waste Discharge Requirements (WDRs) issued by the San Francisco Regional Water Quality Control Board (RWQCB), and various Permits to Operate (PTO) issued by the Bay Area Air Quality Management Board (BAAQMD).

### **Use of Scales**

*GWZRRS1 satisfies the requirements for use of scales.*

GWZRRS1 meets the scales requirement for Certification, with its scales inspected and certified at least once per year by the local oversight agency, Santa Clara County Weights and Measures. Further review of records indicates GWZRRS1 scales undergo servicing, calibration, and certification at frequencies exceeding this requirement.

### **Materials In**

Scales are located at the entrance to the facility. Each hauling vehicle with a load of materials drives across the scales where it is weighed, and the driver proceeds to the

appropriate location in the facility to empty the vehicle. Site 1's load checking program confirms the materials as they are deposited in the tipping area and notifies the driver and scale house if corrections must be made due to a mismatch between the driver's tag and the materials. The driver returns to the scales and re-weighs before exiting. The data is automatically entered into Site 1's electronic data management system (EMS) connected to the main office also onsite.

### Materials Out

Many of the vehicles arriving to pick up materials have been weighed previously and their empty tare weights are stored in the EMS. Trucks without stored tare weights drive across the scales for an initial weight. The vehicles are weighed again after loading out and the customer/scale information is automatically entered into the EMS as described above.

## **Supporting Data for Rate Estimates**

*GWZRRS1 maintains required supporting data as required by the EM for recycling and recovery rate estimates.*

Site 1 uses an EMS system and retains hardcopy receipts for incoming and outgoing materials/ markets. Site 1 provided twelve months of electronic reports with load-level data for RCI rate recovery calculation accuracy and mass-balance analysis. The data included information on customers, weight tags, dates, materials, tons, etc. Random samples were selected to substantiate and crosscheck entries in the electronic reports with hard copies to ensure accuracy. RCI reviewed digital weight tags from the EMS source to verify the accuracy of Site 1's reporting as well as the process for any subsequent adjustments. Mr. Lord explained how reports are generated, and from those reports, how the data is entered into RCI's monthly reporting system. Mr. Lord also provided a copy of Site 1's reporting procedure to ensure continuity of accurate reporting.

## **Data Transcription and Management**

*Sufficient QC exists for creation of reuse and recycling rate tables from EMS data.*

RCI discussed Site 1 reporting and the EMS with Mr. Lord, who explained the generation of reports as well as supporting mass balance spreadsheets. Material data is automatically entered into the system for accounting purposes. These reports are reviewed to verify accuracy as well as manually enter and/or correct any manual adjustments as determined through the normal course of business.

The spreadsheets are reviewed for a final crosscheck before uploading to RCI's monthly reporting system. RCI also reviewed the written procedures against the observed processes as well as various phases where data is generated and recorded. Based on the critical need for accurate monthly spreadsheets for internal and customer accounting, observed competencies, as well as ongoing training of the individuals involved in data entry, RCI concludes that sufficient QC exists for data transcription and management per the EM.

## **Individuals Properly Trained for Functions They Perform**

*GWZRRS1 employees receive adequate in-house initial and recurring training.*

Staff training generally emphasizes on-the-job training under the supervision of Facility employees experienced in the skills and knowledge required. Potential hazards and safety procedures are stressed. Training includes hazardous materials recognition and screening and heavy equipment operations, with emphasis on safety, health, environmental controls, and emergency procedures (in accordance with 27 CCR 20610). Records of the training are included in the operating record. Sufficient personnel are trained in each job category to provide necessary backup and standby capability.

Key operating personnel at Site 1 undergo training that includes initial and refresher training in the following areas:

- First aid, health, and cardiopulmonary resuscitation (CPR)
- Hazard recognition and communication
- Hazardous, infectious, and prohibited waste identification and handling procedures:
  - Occupational safety
  - Regulatory compliance
  - Job-specific cross-training
  - Right-to-know training.
  - Environmental controls
  - Spill prevention control and countermeasures plan
  - Stormwater and groundwater monitoring
  - Internal notification and external emergency response

ZRRML has a full-time Environmental Health and Safety Engineer to specifically address employee and customer safety at its facilities. As per OSHA and CalRecycle regulations, training logs and safety records are maintained in the office and can be reviewed upon request. Site 1 requires a full complement of training and testing for all employees working at the facility. Training and testing occur regularly, and inspections occur on a weekly to daily basis. Samples of training/testing modules include:

- PPE Basic Training
- Confined Space
- Storm Water Pollution Prevention Plan (the facility borders San Francisco Bay)
- Machine Safety Basic Maintenance
- Lock Out/Tag Out
- Fall Protection
- Fire Extinguisher
- Heat Stress
- Fatigue in the Workplace

- Various other personal safety, fire, hazard identification, and communication training. Log sheets are created for each training course, and most are maintained for at least three years or longer if the staff remains employed at GreenWaste Zanker Resource Recovery.

RCI reviewed the training schedules and modules/materials as well as conducted interviews with key employees during the site visit. RCI observed employees in the scale house and designated tipping areas at Site 1. Materials were properly categorized and directed, and the load checker-maintained contact with vehicle drivers and the scale house as appropriate. Employees were observed utilizing proper safety equipment and appropriate signage was posted in numerous worker locations as required by Cal/OSHA.

Based on the observations of staff and work areas, the initial and ongoing training of Site 1 employees, and a review of the training modules and logs, RCI concludes that ZRRML provides employees at Site 1 with the requisite training per the EM.

### **Performance Standard Test**

*Reported reuse and recycling rates are within the 3% allowed threshold.*


RCI requested electronic copies of mass balance spreadsheets for review and analysis before scheduling a site visit at GWZRRS1. RCI initiated its review noting areas requiring clarification or correction. Several phone and Zoom meetings were conducted to review RCI's questions related to the twelve-month mass-balance and monthly entries, as well as to discuss how GWZRRS1 selected and uploaded information into RCI's web-based reporting system. Formulas and material codes were inspected, and their validity tested, with potential areas of risk identified for review during the site visit. The recycling and recovery rates information submitted by GWZRRS1 fell within the three-percent tolerance threshold defined per the EM for facilities receiving/processing over 1,000 tpd. RCI concludes that GWZRRS1's reported reuse and recycling rates satisfy the Performance Standard Test required per the EM.

## Evaluation Statement Overview


Based on an extensive review of data from GreenWaste/Zanker Resource Recovery's Site 1 operations, the findings according to RCI protocols via the evaluation process, and the on-site visit and interviews with key staff, RCI finds that GWZRRS1 meets RCI's eligibility requirements, complies with all measurement and record-keeping requirements, and has no existing material or significant immaterial non-conformances or misstatements in their reported data. RCI hereby certifies the Reuse and Recycling rates submitted by GWZRRS1 as Real Rates as outlined in the EM per RCI CORR protocol.

The undersigned hereby certify that the information provided herein is true, complete, and accurate; they have read and understand the protocols developed by RCI and are familiar with the requirements of RCI. Furthermore, they also certify that any signatories duly elected, qualified, and acting officers of their respective organizations and that their organizations agree to be bound to the protocols of RCI.

For Recycling Certification Institute:

 _____	Stephen M Bantillo _____
By	Print Name
Executive Director _____	June 3, 2024 _____
Title	Date

For GreenWaste Zanker Resource Recovery -- Site1:

 _____	Director of Marketing _____
By	Title
Jerame Renteria _____	6.6.2024 _____
Print Name	Date