



RECYCLING CERTIFICATION INSTITUTE



Greenway Recycling, LLC.

CORR PROTOCOL EVALUATION REPORT

August 18, 2020
Evaluation Body: RCI



Executive Summary

This report corresponds to the evaluation of the application for CORR Certification submitted to the Recycling Certification Institute (RCI or Institute) by Greenway Recycling, LLC (Greenway) on behalf of its Mixed Construction & Demolition (C&D) recovery facility located at 4135 NW St Helens Road, Portland, OR 97210. Greenway offers a variety of services to contractors, builders, haulers, and businesses and this evaluation focuses on the services related to the recovery of C&D brought to the facility by third-party customers, though is not open to the public. The operation consists of several distinct areas where materials are processed mechanically and manually on a tiered property. The three process areas include roofing, recoverable waste, and non-recoverable waste.

This Evaluation was conducted by RCI and represents an independent review of Greenway's data, operations, and other 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 CORR Protocol 1.91 were used to guide the evaluation process as is standard practice for all Evaluations. This evaluation was conducted onsite during Covid-19. Prior to the evaluation, both Greenway and RCI reviewed and agreed to follow industry accepted protocols to maintain safe distancing and sanitization to prevent the spread of Covid-19.

The evaluation found neither material or immaterial misstatements nor deviations from the described process train for the operations at the Greenway site. RCI uses a 95% confidence level as its Minimum Quality standard when calculating recovery or recycling rates using the weights of materials recovered and recycled. The twelve months of recovery and recycling data submitted by Greenway was within the quantitative materiality threshold of 95% (less than 5% error) per EM Section 2.5.

Overview of Greenway Recycling, LLC's Operations

The Greenway Recycling C&D Material Recovery Facility is located at 4135 NW St Helens Rd, Portland, OR 97210 and is owned by Chris and Terrell Garrett of Milwaukie OR. The facility maintains solid waste, air, and water permits and licenses issued by the Oregon State Department of Environmental Quality, Portland Metro, and the City of Portland Environmental Services Department, and has been in operation since 2002.

The Greenway Recycling MRF operates six days per week, 4:00am to 5:00pm Monday through Friday, 8:00am – 12 noon Saturday, and is closed Sunday. Greenway receives loads primarily from a known established customer base and is not open to the public. Greenway has three processing lines: Roofing, Recoverable Waste which includes Concrete and Wood, and Non-Recoverable Waste. The processing activities occur in three different buildings. The Wood building houses the General Kinematics screen and West Salem wood grinder. Recoverable waste is deposited in the Recoverables building. The Non-Recoverables receiving building also houses a sorting line and

Action Dense Out screen for processing of materials received via feed belt following preprocessing in the Recoverables building. Greenway also utilizes two Unitec truck scales, both tied directly into Greenway's software system, SMS Turbo. One scale is 12' x 70' and the other is 12' x 35'. These scales are calibrated quarterly.

Description of Process Train and Semi-Automated Ticketing Process

Drivers enter the facility from a gate on St Helens Road and proceed to the appropriate tipping area, dispatch their loads, and go to either the 70' or the 35' scale. The scale system defaults to Recoverable Waste and the driver informs the wheel loader operator if the load is something other than Recoverable Waste. The drivers and wheel loader operator are in regular communication. The wheel loader operator can change commodities as necessary using an onboard tablet. At scale out, the driver receives a small unpriced ticket while a priced invoice with two pictures of the driver and truck are emailed to the customer.

Roofing

Due to the current lack of markets, roofing is cleaned and sent to Wasco County Landfill for use in roadways and landings. Roofing is not recovered from the Recoverable Waste stream. The small amount of material cleaned from roofing is directed to the Recoverable Waste barn. This amount is insignificant in weight compared to the Recoverable Waste flow.

Non-Recoverable Waste

Non-recoverable waste is accepted in the lower barn and immediately loaded out as residual. The non-recoverable waste is primarily from commercial/industrial drop boxes that have very little if any recoverable content. Added to this material is the residual from Recoverable Waste sorting. Due to facility size and layout, a maximum of 100 tons of this material can be stored on site at any time.

Recoverable Waste

Recoverable Waste is located to three places depending on content:

Clean Wood is sent to the wood yard and mixed with wood recovered from the waste sorting line. That wood is run through the wood sorting line and ground for use as a wood-derived fuel.

Clean Concrete is tipped with the concrete gathered from the waste sorting line, cleaned by hand, and currently is delivered to Landfill for use in landings and roadways.

Recoverable waste is tipped in the upper barn where a small excavator "pre-picks" the material, gathering the easily recovered items as well as the easily discarded items for disposition. The cleaned material is then loaded onto the waste sorting line consisting of an Action 1" Taper-Slot screen and an 8-person Krause sorting line. The screen and pick process recovers metals, large pieces of concrete, wood,

gypsum, and ADC. Materials continue down the line to the Action Dense-Out screen which removes additional concrete/brick/rock/glass that passes a single sorting station to clean the material. The remainder of the material is residual and sent as Trash to the Landfill.

Ferrous and Non-Ferrous Metals are delivered to local metal recyclers.

Concrete is moved to the clean concrete pile and handled as described above.

Wood is moved to the wood yard and handled as described above.

Gypsum is sent to a local gypsum recycling company.

ADC is delivered to a landfill for use as ADC.

Development of Evaluation Plan

Greenway initiated the Certification process by registering its Mixed C&D line on RCI's Registration webpage <https://www.recyclingcertification.org/registration/> and following a lengthy consultation with RCI, then subsequently submitted its Application for Certification. The application included twelve months of load level data, lists of markets (material recipients and their contact info), and a variety of other background documents. Other information provided through the intake review 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 (required)
- Permits – indication of state/local Registration or state/local permit
- Hours of facility operation
- Current tons of Inbound and Outbound materials
- Name of company contact person, their position/title, and contact information
- Website address

Mr. Terrell Garrett (Owner) was responsible for submittal of the Application for Certification and was lead in communications with RCI and in preparation of documents for and throughout the Evaluation. Key elements of this information can be found in the CORR Protocol Edition 1.9, Appendices A and B, viewable on the RCI website Resources page. RCI provided a Draft Agenda with overview of the Evaluation process to aid in the streamlining and completion of activities on the day of the site visit. On-site review would include:

- Tour of the facility
- Verify process train of materials as stated in Application for Certification
- Verify proper sorting and storage of the materials
- Verify use and calibration frequency of certified scales
- Observe and verify weighing of materials and electronic storage of information
- Observation and verification of load/material sorting and accuracy

- Observe and verify QC measures are in place to ensure accuracy in recovery and uploading of facility data
- Review of recyclables sales records
- Confirmation of permits
- 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.

Greenway submitted twelve prior months' data for RCI's review to determine accuracy of the mass-balance calculations. The spreadsheets allowed for calculations and data review as well as determination of random sampling including weight tags, days, dates, materials, tons, etc. RCI noted areas of potential risk on which to follow-up during the site visit.

SITE VISIT

RCI performed an on-site evaluation of the Greenway Recycling MRF following agreed upon strict Covid-19 safety protocols on August 17th and 18th, 2020. Mr. Garrett conducted the tour of the facility.

RCI performed its walk-through examining where materials enter, are measured, deposited, processed/sorted, stockpiled, and eventually leave the facility.

The review included follow-up questions from the initial review of data. Key areas of the operations the authority and responsibility for maintaining, reviewing, and overall integrity of Greenway's data, were discussed with Mr. Garrett. Because of the size of the facility and limited staff, these functions are performed by Mr. Garrett. RCI also discussed the training courses and records 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.

The facility and work site appeared well-organized and maintained. Construction of new bunkers was underway during the site visit as well as pouring new concrete walls and elevated walkway inside one of the sorting buildings. Adequate signage was observed at the entrance to the facility and throughout the property regarding safety, material identification, and storage. A reasonable flow of materials and equipment was observed despite the challenges presented by its small size and vertical (tiered levels). Ingress/egress was clear. Material piles were kept separate and were easily identifiable. Personnel were observed to be wearing appropriate personal safety equipment. A sweeper was observed in operation for onsite dust control.

Regulatory Compliance Test

Greenway Recycling, LLC possesses the necessary permits to operate.

Greenway operated under several permits and licenses issued by the Oregon State Department of environmental Quality, Portland Metro, and City of Portland Environmental for Services Department for handling solid waste as well as air and water discharge.

There has been no substantiated non-compliance with permitted operations or other regulations governing the operations of this facility in the past twelve months. No irregularities were found involving management or employees who have a significant role in internal controls, or that could have a material effect on the reporting of Greenway's recovery and recycling rates.

Use of Scales

RCI concludes that Greenway Recycling, LLC satisfies the requirements for use of scales.

Greenway utilizes two Unitech scales, one is 12' x 35' and the other 12' x 70', to accommodate and record inbound and outbound loads. These scales are calibrated quarterly with testing and approval oversight by the Oregon State Department of Agriculture Weights & Measures.

Each scale ticket contains truck company, order number, date, time, load type, tare, gross and net weights, and measurement units (tons, cubic yard, each, etc.). The driver receives a blank bill receipt while an invoice and two pictures of the vehicle are sent to the company responsible for the load. Greenway utilizes SMS Turbo for its scale and reporting operations.

RCI verified the scale inspection, service, and calibration and confirmed the scale had been certified within the past twelve months.

Supporting Data for Rate Estimates

RCI concludes Greenway Recycling, LLC, Inc. maintains required supporting data as required by the EM for recycling and recovery rate estimates.

Greenway utilizes an EMS and retains electronic receipts for incoming and outgoing materials/markets and produces hardcopy receipts for customers. RCI observed Greenway's customers as well as a Greenway employee using the system at the scale to observe the system's simplicity and capability. Greenway provided twelve months of electronic reports (mass balance) for RCI's inspection. RCI sampled from twelve months of transaction records to substantiate and crosscheck entries in the electronic reports to ensure accuracy.

Data Transcription and Management

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

RCI discussed with Mr. Garrett Greenway's computer and scale system, as well as the generation of RCI reports and 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 hand enter and/or correct any manual adjustments as determined through the normal course of business.

Mr. Garrett made available for review Greenway's recently updated comprehensive Operations Plan. Greenway also maintains a record keeping and reporting plan in accordance with its State permit. Mr. Garrett demonstrated how the information is entered and managed in the system and how reports are developed to provide information to be uploaded to the RCI monthly report, communicating enhanced data control and accuracy.

Individuals Properly Trained for Functions They Perform

Greenway's employees receive adequate in-house initial and recurring training including services from an independent consulting firm.

Greenway conducts safety and training meetings on various topics such as Lock Out - Tag Out procedures, Hand/Eye/Ear Protection and PPE, various equipment and vehicle operations, and the company's safety plan. Staff are also trained on load inspections and material handling to ensure no unidentifiable material is accepted. When hazardous waste is identified, employees know how to react appropriate to the situation and an outside firm is contacted to handle and promptly abate the waste. Any volatiles are dealt with swiftly. Greenway conducts FIT testing per OSHA, strictly enforces certain safety rules.

RCI reviewed Greenway's trainings with Mr. Garrett. Adequate signage was observed for traffic flow, material identification and stockpiling, safety, hazards, and all personnel were observed to be utilizing appropriate personal safety equipment. Based on the observations of staff, the work areas, and the initial and ongoing training of Greenway employees, RCI concludes that Greenway provides employees with adequate training per the EM.

Performance Standard Test

Reported recovery and recycling rates are within 5% allowed threshold.

Greenway provided electronic copies of mass balance spreadsheets which RCI reviewed before scheduling its site visit. Several communications with Mr. Garrett were conducted to review RCI's questions related to the twelve-month mass-balance and monthly entries, as well as to discuss how Greenway determines the appropriate information to upload into RCI's web-based reporting system. This process was verified onsite and through review of Greenway's procedure.


Formulas were reviewed and their validity tested. The recycling and recovery rates information submitted by Greenway fell within the Quantitative Materiality threshold (95 percent or better accuracy) as defined in the EM. RCI concludes that Greenway's reported reuse and recycling rates satisfy the Performance Standard Test required per the EM.

Evaluation Statement Overview


RCI's extensive review of data from Greenway's Mixed C&D Recycling operation, the findings according to RCI protocols via the evaluation process, and the on-site visit, RCI finds that Greenway's Mixed C&D Recycling operation meets RCI's eligibility requirements, is in compliance with all measurement and record-keeping requirements, and has no existing material or significant immaterial non-conformances or misstatements in its reported data. RCI hereby certifies the Recovery and Recycling rates submitted by Greenway as Real Rates as outlined in the EM and 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 are 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:

	Executive Director
By	Title
Stephen M Bantillo	October 28, 2020
Print Name	Date

For Greenway Recycling, LLC:

	Owner
By	Title
Terrell Garrett	October 29, 2020
Print Name	Date