



RECYCLING CERTIFICATION INSTITUTE



CORR PROTOCOL EVALUATION REPORT

ReEnergy Roxbury
111 Gerard Street
Roxbury, MA 02119

May 7, 2017

Evaluation Body: ESMG, Inc.

Executive Summary

This report corresponds to the evaluation of the application for CORR Certification submitted to the Recycling Certification Institute (RCI) by the ReEnergy Roxbury construction and demolition material processing facility located at 111 Gerard Street (formerly 47 Kemble Street in Boston Massachusetts, 02119.) The ReEnergy Roxbury, Inc. facility is owned by ReEnergy Holdings, LLC.

This evaluation was conducted by Environmental Service Management Group, Inc. (ESMG) which is a certified evaluating body of RCI and 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) were used to guide the evaluation process as is standard practice for all Evaluations.

The evaluation found neither material or immaterial misstatements nor deviations from the described process train for the operations at the ReEnergy Roxbury facility. 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 was within the quantitative materiality threshold of 95% (less than 5% error) per EM Section 2.2.3.

Overview of the ReEnergy Roxbury Facility and Operations

The ReEnergy Roxbury facility operates at 47 Kemble Street in Boston Massachusetts, 02119. The current Solid Waste Recycling Facility Permit issued by the Boston Public Health Commission Environment Health Office (2013) identifies operational hours from 4:00 AM to 9:00 PM on weekdays and 5:00 AM to 12:00 PM on Saturdays; maintenance and office work can be conducted during any hour. According to stipulations set for existing permits, the facility is allowed to accept 750 tons per day (tpd) of construction and demolition debris material. The facility is a fully operational C&D material handling facility located within approximately 3.5 acres of land of which approximately 32,400 square feet is Site Assigned. Currently, the C&D handling activities are conducted within an approximate 27,800 square foot building. In addition to the "Site Assigned" area, the facility also has areas where other recyclable commodities are stored. The commodities are depicted on the site plan (i.e. clean concrete), metals, etc. and are regulated by the Boston Public Health Commission Environment Health Office Recycling Permit.

Mixed C&D Sorting and Processing

At the processing line feeding stockpile, an operator using an excavator with a grapple attachment will remove incidental bulky materials, large pieces of metal or other materials that do not properly flow through the on-site processing line. Following pre-sorting the material is loaded into a large in-feed hopper that feeds a vibratory screener. During this process the C&D fines are generated through the a vibratory screen. This minus material is transported via a conveyor system that incorporates overhead magnets to remove ferrous metals. This material is then directed into a trommel screen which separates material by size. The minus material is redirected onto a conveyor which discharges the C&D Fines into a storage bin.

The screen overs are conveyed to a destoner and are divided into heavy and light fractions. The heavy fraction is sent to a bunker where non-recyclable and other recyclables (ferrous and non-ferrous metals) are removed manually. Light fraction generally includes off spec wood and incidental paper, cardboard, and plastic. These are sent to the grinder for additional processing or added to the C&D residual storage bin.

The overs material from the vibratory screener are directed to a picking station where facility personnel sort the materials into bunkers. This material consists of recyclables such as metals, aggregate, cardboard, plastic and clean wood as well as oversized bulky waste. The non-recyclable items remaining at the end of the picking line are fed into a grinder. This material includes wood which is not acceptable for use as fuel or other beneficial re-use (pressure treated wood, painted wood, etc.), paper and plastic which is too small to pick and other construction materials. The grinder consolidates this non-recyclable material onto a conveyor which passes under an overhead magnet. Metal material removed is dropped out into a bin. The material is then directed to a storage bin which consist of C&D Residuals.

The clean wood picked out from the picking station as well as from presort is redirected to an outdoor storage bunker. Once this bunker is full, the C&D processing line is temporarily stopped in order to batch grind clean wood. The clean wood is then loaded directly into the grinder. This material is directed to a storage bin, which consist of clean wood chips and are then sold to various markets for recycling.

Asphalt/Brick/Concrete ABC is sorted and sent to a recycler or sent to a processing/recycling facility for other diversionary uses.

Metals Metal is picked out of the waste stream and sent off-site for recycling.

C&D Wood C&D wood is sorted for fuel or other approved uses (recycling/diversion.)

Wood Waste (exempt) Waste wood is sorted and sent to a wood reclamation facility.

NON CFC White Goods Non CFC white goods are separated from the waste stream and sent to an off-site location for recycling.

Cardboard Cardboard is separated from the waste stream and sent off-site for recycling.

Leaves and Yard Waste Leaves and yard waste are accepted if pre-sorted. If the materials are mixed with waste, the load is recorded as failed. If materials are pre-sorted, they are sent off-site for recycling.

Lead Acid Batteries Batteries are accepted if pre-sorted and undamaged. If practical, they can also be picked from the waste stream (failed load) and sent off-site for recycling.

Cathode Ray Tubes CRTs are accepted if pre-sorted and undamaged. If practical, they can also be picked from the waste stream and sent off-site for recycling.

Scrap Tires Tires are collected and sent to approved/licensed tire recyclers.

CFC Containing White Goods CFC white goods are accepted if pre-sorted and undamaged. If practical, they can also be picked from the waste stream (failed load) and sent off-site for recycling.

Clean Gypsum Wallboard is separated from the waste stream and sent off-site for recycling.

Plastic is separated from the waste stream and sent off-site for recycling.

Development of Evaluation Plan

The ReEnergy Roxbury facility initiated the Certification process by first Registering its Mixed C&D line on RCI's Registration webpage: <https://www.recyclingcertification.org/registration/> and subsequently submitted an Application for Certification. The application included monthly and annually detailed and summarized tonnage reports, lists of markets (material recipients and their contact info), and a variety of other background documents. Other information provided through the intake 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 – 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, their position/title, and contact information
- Website address

ESMG conducted an interview with Frederic Bruneau (Environmental Compliance Manager) regarding submittal of documents that would be used in preparation for the Evaluation. Key elements of this information can be found in the CORR Protocols Edition 1.9, Appendices A and B, viewable on the RCI website Resources page. ESGM 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-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.

The ReEnergy Roxbury facility submitted twelve months' data for ESGM's review to determine accuracy of the mass-balance calculations. The facility provided spreadsheets derived from their software that allowed for calculations and data review as well as determination of random sampling to occur during the site visit including weight tags, dates, materials, tons, etc. ESGM noted areas of potential risk to follow up on during the next site visit.

SITE VISIT

ESMG, Inc., a certified RCI evaluating body, performed an on-site evaluation of the ReEnergy Roxbury facility. Frederic Bruneau (Environmental Compliance Manager) served as lead contact for the facility throughout the evaluation process. Mr. Bruneau was responsible for submitting the initial Application for Certification and responding to subsequent inquiries as well. Frederic Bruneau conducted the tour of the facility. ESGM, Inc., conducted a full walk-through of the facility, examining where materials enter,

where they are measured, deposited, processed/sorted, and eventually leave the facility.

The review included follow-up questions from the initial review of data. Interviews of staff associated with the key areas of the operations, in particular, those staff who have access authority and responsibility for maintaining, reviewing, and overall integrity of the ReEnergy Roxbury facility data, were conducted. ESMG also reviewed the facility training materials 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

The ReEnergy facility possesses the necessary permits to operate.

The ReEnergy facility has operated as a resource recovery facility since 1978 with reconstruction of the processing facility in 2012/2013. It operates under various permits (including a Mass DEP Operation Modification permit) issued by the state of Massachusetts. There have been no communications from regulatory agencies in the past twelve months regarding noncompliance with permitted operations or other regulations governing the operations of this facility. 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 the ReEnergy Roxbury facility's recycling rates.

Use of Scales

ESMG concludes that this facility satisfies the requirements for use of scales.

The scale house is equipped with two truck scales (one inbound and one outbound.) All inbound and outbound transactions are tracked through the ReEnergy Roxbury facility's scale operating system and managed by trained weighmasters as verified by ESMG, Inc.

ReEnergy Roxbury uses two 60-ton capacity truck scales to weigh all inbound and outbound materials. The facility complies with 310 CMR 19.205 (3) Weighing Facilities, and is required to maintain scales.

All inbound and outbound materials cross the scales and their values are both manually and electronically recorded. This method provides verification at the end of each day for accuracy in reporting.

Materials In

Information gathered on incoming material consists of:

1. Customer name
2. County of origin
3. Scale ticket number (generated upon checkout)
4. Description of vehicle
5. Scale attendant's name
6. Inbound material type
7. Date in
8. Gross Weight

Materials Out

Information collected on outgoing trucks consists of:

1. Time out
2. Tare Weight
3. Tons

For outbound materials, much of the same information is compiled but listed here below for transparency:

1. Customer number assigned to each destination
2. Truck information
3. Commodity code
4. Destination/Customer name
5. Date and time out
6. Ticket number
7. Gross weight
8. Tare weight
9. Total tons

All Inbound and Outbound data is automatically entered into ReEnergy Roxbury's software system for purposes of reporting and data collection.

Supporting Data for Rate Estimates

ESMG, Inc. concludes ReEnergy Roxbury maintains required supporting data as required for recycling and recovery rate estimates.

ReEnergy Roxbury provided twelve months of electronic reports (mass balance) for inspection. ESGM randomly selected transaction records for sampling to substantiate

and cross-check entries in the electronic reports to ensure accuracy. A sampling of outbound loads was selected to further confirm the disposition of materials recorded as having left the facility.

Data Transcription and Management

Sufficient QC exists for creation of reuse and recycling rate tables from SMS Database.

ESMG, Inc. interviewed ReEnergy Roxbury's Environmental Compliance Manager (Frederic Bruneau) regarding their electronic data collection and the generation of all 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 hand enter and/or correct any manual adjustments as determined through the normal course of business.

The spreadsheets are generated and reviewed by Mr. Bruneau before submittal (uploading) to the evaluator. Based on the critical need for accurate monthly spreadsheets for internal and customer accounting, ReEnergy Roxbury's verified procedure, observed competencies, as well as ongoing training of the individuals involved in the data entry, and final crosscheck, ESGM concludes that sufficient QC exists for data transcription and management per the EM 4.7.

Individuals Properly Trained for Functions They Perform

ReEnergy Roxbury employees receive adequate in-house initial and recurring training, including training from outside sources.

ESMG, Inc. reviewed the training schedules and modules/materials as well as conducted interviews with key employees during the site visit. ReEnergy Roxbury conducts training for employees involved in lift truck operation, load-checking, sorting, and inspection.

Inspectors must pass a 24-hour asbestos inspector initial training (or similarly approved training class.) Inspectors must have the proper field experience (generally 2 months under a licensed inspector or 6 months practical experience in a similar field.) They must be properly licensed and possess a Massachusetts Division of Occupational Safety Asbestos Inspector Certification Card. They must also have 40 hours of an other job training that is specific to the identification of suspect ACM within waste materials.

Training records identify all key information on employees' training including documentation by the trainer of successful completion. ESGM, Inc. observed these employees in the scale house and designated tipping and sorting areas. Employees were observed utilizing proper safety equipment and appropriate signage was posted.

Based on the observations of staff, the work areas, and the initial and ongoing training of ReEnergy Roxbury employees, ESGM concludes that ReEnergy Roxbury provides employees with the requisite training.

Performance Standard Test

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

ESMG requested electronic copies of mass balance spreadsheets for ReEnergy Roxbury before scheduling a site visit. ESGM reviewed the files and noted areas requiring clarification. Several phone meetings with ReEnergy Roxbury's Environmental Compliance Manager (Frederic Bruneau) were conducted to review ESGM's questions related to the twelve month mass-balance and monthly entries, as well as to discuss how ReEnergy Roxbury would upload the information into RCI's web-based reporting system. Formulas were reviewed and their validity tested and select transactions were identified for further review during the site visit. The recycling and recovery rates information submitted by ReEnergy Roxbury fell within the 5 percent tolerance threshold defined per the EM. ESGM concludes that ReEnergy's reported reuse and recycling rates satisfy the Performance Standard Test required per the EM.

Evaluation Statement Overview

ESMG finds that the ReEnergy Roxbury facility's operation meets RCI's eligibility requirements, based on the following factors:


- Review of the data from the ReEnergy Roxbury facility's operation.
- Findings according to RCI protocols via the Evaluation process.
- On-site visit and interviews with staff.

It is in compliance with all measurement and record-keeping requirements, and has no existing material or significant immaterial nonconformance or misstatements in its reported data.


ESMG hereby recommends that the Recovery and Recycling rates submitted by the ReEnergy Roxbury facility be certified 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 (Evaluator Company):

 _____	_____
By	By
Michael D. Buono _____	_____
Print Name	Print Name
Certified RCI Evaluator _____	_____
Title	Title
5/24/18 _____	_____
Date	Date

For (Company/Facility Name)

 _____	_____
By	Environmental Compliance Manager _____
Frederic Bruneau _____	Title
Print Name	6/1/18 _____
	Date