



# RECYCLING CERTIFICATION INSTITUTE



DEM-CON RECOVERY & RECYCLING, LLC  
MIXED CONSTRUCTION & DEMOLITION  
(DCRR)

## CORR PROTOCOL EVALUATION REPORT

December 22, 2014  
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 the Dem-Con Recovery & Recycling, LLC, Mixed Construction & Demolition (DCRR) operation located at 3230 West 130<sup>th</sup> Street, Shakopee, MN. DCRR is owned and operated by Dem-Con Companies, LLC.

This Evaluation was conducted by RCI's Executive Director as no regionally located Evaluators were available at the time of the application. 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 General Reporting Protocol 1.0.1 (GRP), RCI General Evaluation Protocol 1.0.1 (GEP), RCI Evaluation Manual 1.1 (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 DCRR site. The Institute 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 DCRR was within the quantitative materiality threshold of 95% (less than 5% error) per EM Section 1.6.5.

As Dem-Con Companies operates a single-stream MRF, shingle recycling yard, municipal solid waste transfer station, and C&D landfill on the same property and utilize many of the same resources as DCRR, particular attention was given to determining the activities and accuracy of maintaining appropriate segregation of operations and requisite accuracy in reporting. The shingle recycling plant has also undergone Evaluation by RCI and those findings are issued in a separate report.

## **Overview of Dem-Con Mixed C&D Operations**

This Evaluation report pertains to the Dem-Con Recovery & Recycling Mixed Construction & Demolition (DCRR) facility located at 3230 West 130<sup>th</sup> Street, Shakopee, MN, currently owned and operated by Dem-Con Companies, LLC.

The DCRR facility is a 30,500 square foot C&D MRF that services the Twin Cities and greater Minnesota. Co-located in the same building is a 9,500 square foot MSW transfer station. Dem-Con's environmental campus also features a lined C&D landfill, shingle recycling facility, wood processing facility, and a single-stream MRF.

DCRR is permitted to process 750 tons per day of C&D debris. Currently, the facility is compliant in remaining at or below their permitted capacity. Volume arrives at DCRR's facility via roll-off boxes, dump trucks, and end dumps owned by third-party haulers.

DCRR operates a merchant model accepting all third-party haulers as well as residential debris from the Twin Cities. From April to October the facility is open M-F from 6:30am - 4:30pm and on Saturdays from 7am - noon. From November to March the facility is open Monday through Friday, 7am-4:30pm.

Each vehicle entering the facility first stops at the scale house where it is inspected and entered into DCRR's electronic environmental data management system (EMS) which is used to record the inbound and outbound activity on site.

Loads containing materials designated for processing in the C&D MRF are sent to the MRF facility located within Dem-Con's environmental campus. Once weighed on the inbound scale, the truck is directed to the appropriate location. Upon entering the MRF, the truck tips materials on the tipping floor where they are inspected by a load checker. The truck then weighs out on the outbound scale upon exiting the facility.

On the tipping floor, a wheel loader keeps the materials organized and continually pushes them toward the in-feed hopper. An excavator with a grapple attachment picks and feeds the material into the hopper to begin the separation process. DCRR features an Erin C&D processing system that was installed in 2008. Once in the system, the materials pass through a series of screens separating materials into three lines (2" minus, 2"-14", and 14" and above) while a magnet removes ferrous metals. Materials are evenly distributed on the belt to be manually sorted. The materials are hand sorted and dropped into the appropriate bunkers or fed directly into the wood processing facility. The following materials are recovered and the processing is described below each material.

**Wood (clean wood, does not include green-treated or painted material)** is fed directly into the hopper of a Rotochopper EC-266 grinder by batch feed or via conveyor. Once ground to 1 ½" minus, the material is conveyed to a 4,800 square foot building where walking floor trailers are live-loaded using an auger system. There is also a hammer mill secondary grind that loads trailers pneumatically. Once full, the trailers are pulled and weighed on the outbound scale before exiting the facility for various end markets. One truck bay of the wood building is for overflow storage of materials as needed. A dust suppression system captures any dust or residual created during grinding and non-wood-based material is disposed of in Dem-Con Landfill.

**Aggregates (Concrete, bricks, and block)** are picked from the sorting line and dropped into the appropriate bunker. Once in the bunker, aggregate is moved via bucket loader to the NW corner of facility where it is stockpiled until transferred to a facility to be ground and reused.

**Metals (ferrous & non-ferrous)** are removed from the line via mechanical (magnet) and manual separation. Non-ferrous metals are removed via manual separation. Both ferrous and non-ferrous materials are dropped into designated bunkers. They are then moved with a bucket loader to an 80-CY open top box. Once this box is full, the material is sent offsite to be processed.

**Cardboard (OCC)** is removed from the sorting line via manual separation and dropped into the appropriate bunker. Material is then loaded into a 40-CY open top box and transferred

to DCMRF (Dem-Con's single stream processing facility) where it is baled and stored before being sent to a paper mill for further processing.

**Residuals** from processing activities at the DCRR MRF consist of three different material streams: alternative daily cover (ADC), line residuals, and bulky trash. ADC is used beneficially at Dem-Con's landfill. Line residuals or fines--which is the material left after being sorted--is also disposed of in the Dem-Con Landfill. Trash is picked out early in the process and disposed of at Dem-Con Landfill. All three material streams are picked up via loader bucket and weighed via loader scale. Each bucket weight is recorded and entered into Dem-Con's EMS.

## Development of Evaluation Plan

DCRR Registered its Mixed C&D line 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 or not
- 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

Following completion and approval of the Registration process, DCRR completed and submitted the Application for Certification, available on [RCI's Resources page](#). RCI conducted an interview with DCRR 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 via the RCI website Resources page. RCI provided an overview of the Evaluation process and schedule of internal and external assessments to aid in the streamlining and completion of activities on the day of the site visit. On-site 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 the DCRR site to determine accuracy of the mass-balance calculations. DCRR provided Excel spreadsheets that allowed for calculations and data review as well as determination of random sampling, which occurred during the site visit and included weight tags, days, dates, materials, tons, etc. Based on risk assessment per the EM, RCI determined areas to discuss and check during the site audit.

## **SITE VISIT**

On November 17 and 18, 2014 RCI performed an on-site evaluation of the DCRR Mixed C&D line operations. Ben Wetzell (Waste Services Manager) conducted the tour of the facility. Mr. Wetzell served as DCRR's lead contact throughout the Evaluation process, submitted the initial Application, and was responsible for all communications between DCRR and RCI. RCI conducted a full walk-through of the facility, examining where materials enter, are measured, deposited, processed/sorted, and eventually leave the facility.

The review included the follow-up questions from the initial review of data. RCI conducted 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 DCRR's data. RCI also reviewed the training manuals 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**

*DCRR possesses the necessary permits to operate.*

DCRR has operated as a waste processing and disposal facility since 1965 under various permits and licenses issued by the Minnesota Pollution Control Agency. Scott County provides direct oversight and conducts regular inspections as provided by ordinance under authority established by Minnesota Statute Chapters 473; 400.08; 115A; 116 and 145. There have been no communications from regulatory agencies regarding non-compliance or significant issues with permitted operations or other regulations governing the operations of this facility in the last 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 DCRR recycling rates.

## **Use of Scales**

*RCI concludes that the facility satisfies the requirements for use of scales.*

The scale house is equipped with one inbound and one outbound truck scale. All inbound and outbound transactions are managed by certified weighmasters as verified by RCI. DCRR also maintains a third scale onsite at its single-stream MRF. This third scale is also connected to DCRR's EMS and can be used as a contingency scale in the event one of the existing scales is taken offline.

All Inbound and Outbound data is automatically entered into WasteWorks, DCRR's EMS scale operating system, which is connected to the main office also onsite. DCRR's scales receive, at a minimum, quarterly checks by a scale contractor licensed by the State of Minnesota, with calibration occurring at least once per year. DCRR's licensed contractor is connected to the Weights and Measures Division of the Minnesota Department of Commerce to whom the contractor reports the findings. Regular inspections are also performed by Scott County inspectors responsible for enforcing Scott County Ordinance. RCI reviewed a sample of weight tags in the main office to verify accuracy of the EMS as well as the process for any subsequent manual adjustments.

## **Supporting Data for Rate Estimates**

*RCI concludes DCRR maintains required supporting data as required by the GRP for recycling and recovery rate estimates.*

DCRR uses an EMS and retains hardcopy receipts for incoming and outgoing materials/markets. DCRR provided twelve months of electronic reports (mass balance) for RCI's inspection. RCI selected twelve months of transaction records for sampling to substantiate and crosscheck entries in the electronic reports with hard copies to ensure accuracy. A sampling of customers was selected to further confirm the disposition of materials recorded as having left DCRR.

## **Data Transcription and Management**

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

RCI interviewed DCRR's Waste Services and Data Managers regarding the EMS 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 by the Data Manager and a final cross-check is provided by the Waste Services Manager before submittal to RCI. Based on the critical need for accurate monthly spreadsheets for internal and customer accounting, DCRR's verified procedure, observed competencies of the individuals involved in the data entry,

and final crosscheck , RCI concludes that sufficient QC exists for data transcription and management per the GRP.

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

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

RCI reviewed the training schedules/modules as well as conducted interviews with key employees during the site visit. DCRR records of all training were extensive and well-organized.

Initial training and refresher courses occur as required to comply with federal, state, and internal requirements. Records documenting employee training are maintained for a minimum of three years, or for the duration of their employment, whichever is longer.

DCRR designates and trains inspectors and backup personnel to conduct random load-checking inspections. Employees involved in load-checking activities are trained in the program procedures and the health and physical hazards associated with hazardous and infectious waste. Load-checking personnel are trained in the identification of, and procedures for, handling hazardous and prohibited wastes.

Training records document key information on employees' training including successful completion. RCI observed these employees in the scale house and designated tipping areas. Materials were properly categorized and directed. The load checkers maintain contact with vehicle drivers and the scale house as appropriate. Employees were observed utilizing proper safety equipment and appropriate signage was posted.

Based on RCI's observations of staff, the work areas, and the initial and ongoing training of DCRR employees, RCI concludes that DCRR provides employees with the requisite training per the GRP.

### **Performance Standard Test**

*Reported reuse and recycling rates are within 5% allowed threshold.*

DCRR provided electronic copies of mass balance spreadsheets generated by DCRR's EMS before RCI's site visit. RCI reviewed the files and noted areas requiring clarification. Several phone meetings with DCRR's Waste Services Manager were conducted to review the twelve-month mass-balance and monthly entries, as well as to discuss how DCRR would upload the information into RCI's web-based reporting system. Formulas were reviewed and their validity tested. An additional spreadsheet of raw data for all transactions was created onsite and further review and sampling was conducted. The recycling and recovery rates information submitted by DCRR fell within the 5 percent tolerance threshold defined per the GRP. RCI concludes that DCRR's reported reuse and recycling rates satisfy the Performance Standard Test required per the GRP.

## Evaluation Statement Overview

Based on extensive review of data from DCRR's Mixed Construction & Demolition recycling operation, the findings according to RCI protocols via the evaluation process, and the on-site visit and interviews with key staff, RCI finds that DCRR'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 Reuse and Recycling rates submitted by DCRR as Real Rates as outlined in the GRP 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

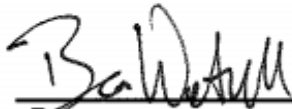
Executive Director

December 15, 2014

Title

Date

For Dem-Con Recovery & Recycling, LLC



Ben Wetzell

By

Print Name

Waste Services Manager

December 19, 2014

Title

Date