



RECYCLING CERTIFICATION INSTITUTE



CORR PROTOCOL EVALUATION REPORT



DeFeo Associates



August 25, 2015
Evaluation Body: DeFeo Associates

Executive Summary

This report is the evaluation of an application by Cooper Tank & Welding Corp., Cooper Tank Recycling and Cooper Recycling, hereby known as “Cooper” for the purposes of this report, for CORR certification by the Recycling Certification Institute (RCI) through the evaluation body, DeFeo Associates.

The company operates a Mixed Construction and Demolition Recycling Facility (Transfer/Materials Recovery Facility) located at 222 Maspeth Avenue, Brooklyn, New York, 11211

DeFeo Associates evaluated Cooper per the guidelines outlined in the RCI Evaluation Manual 2.0 (EM), and RCI General CORR Protocol 1.9 (CRR).

RCI utilizes a mass balance calculation to determine the recycling rates of the facility. The quantitative materiality threshold applied to the recovery and recycling data submitted by Cooper for the purposes of this evaluation was 95% (less than 5% error) per EM Section 2.2.3. This information is based on twelve (12) months of recovery and recycling data submitted by Cooper and reviewed by the Evaluation Body.

Overview of Cooper Operations:

Cooper operates a 40,000-ft² construction and demolition debris (C&D) transfer station MRF located in Brooklyn, New York. The facility is permitted to process 1875 tons per day (tpd) of mixed C&D material. The facility services the greater New York City area.

Every vehicle that enters the facility backs onto the incoming truck scale. The scale operator, via a camera system, observes the scales and the facility utilizes the Scale Management Software Turbo (SMS) system to record gross vehicle weights.

After gross vehicle weights are recorded, the scale operator directs the vehicle to back up towards the unloading area. At this point, the yard foreman guides the vehicle to a location where the material can be inspected as it is emptied.

After the truck is emptied, and the contents are confirmed as acceptable for either processing or transfer, the vehicle is directed to drive onto the same scale that was used to determine their gross vehicle weight. The scale operator then records the tare weight of each vehicle.

The SMS system is used to store all weight data and produce a gross/tare receipt that is reviewed and signed by the driver.

After determining the gross contents of the load (whether or not the load is primarily a single source of material such as concrete, whether it is acceptable but not processable solid waste, or if it is comprised of a processable C&D load capable of further recycling, an excavator takes the material and moves it to the appropriate location.

That material which can be processed to have recyclable material removed via the facility’s processing equipment is placed on a large conveyor belt where it is sent to the processing machinery for separation by vibratory screening machines, magnets, density separators and additional manual separation of plastic film/rigid plastic, fiber, wood, metal and brick and concrete.

Discrete loads of material that arrive such as wood or concrete are repositioned by front load equipment or excavators and placed in their respective staging areas. This avoids the need to

pass such loads through the sorting equipment but allows them to be prepared for market. Wood is further processed utilizing a Komptech horizontal grinder and prepared as a biofuel. Finally, material loads of product are loaded onto vehicles for delivery to market. These vehicles leave the facility on a separate scale located on the opposite side of the property from the incoming loads of materials.

Development of Evaluation Plan

In support of their application, Cooper supplied completed an RCI Application for CORR Certification on RCI's webpage: <https://www.recyclingcertification.org/registration/>. It provided Monthly Recycling Charts, Monthly Ticket Reports, Lists of Markets and Disposal Sites and a Facility Contact List to RCI.

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

These documents were made available to DeFeo Associates for review:

In order to properly evaluate the application of Cooper, DeFeo Associates reviewed the data provided by Cooper and arranged a site visit in order to:

1. Tour the facility
2. Verify that Cooper holds all applicable required permits.
3. Verify accuracy of the scales by verifying the calibration frequency of the scales used.
4. Verify that are loads are sorted accurately.
5. Verify the process train and determine whether or not the narrative provided is an accurate representation of that process train.
6. Determine the method used to transfer data from the scale to the reporting spreadsheets.
7. Identify and verify that quality control (QC) procedures are in place and being followed.
8. Check the accuracy of the formulas contained on the spreadsheets.
9. Cross - reference the market data provided with actual markets being utilized.

Additionally, in order to comply with the CORR requirements for evaluation protocols, the following items were confirmed for this report:

- a. Presence of scales. Regular recalibration schedule (quarterly preferred).
- b. Existence of supporting data for rate estimates (weight tickets, summary spreadsheet summaries).
- c. Data and quality control operational plan requirements.
- d. Data transcription, management, quality control meets protocol requirements.

- e. Calculations and equations are applied in accordance with protocol requirements .
- f. All individuals are properly trained for the functions they perform.
- g. Accuracy of calculated recovery and recycling quantities and rates.

Site Visit

On July 15, 2015 DeFeo Associates completed an on-site evaluation of the Cooper facility. After an initial meeting with Ms. Naomi Cooper, Director of Business Development, Mr. Ray Kvedaras, General Manager, conducted a tour of the facility, introduced DeFeo Associates to his operating staff, and gave a verbal description of daily operations.

DeFeo Associates conducted a complete inspection of the physical plant associated with the Cooper facility. This included:

1. Observations of the scale house including observations of actual loads being entered to the system and vehicle entry and egress from the scale.
2. Observations of vehicles being weighed in for gross weight.
3. Observations of vehicles dumping loads to the tipping floor.
4. Observations of the entering vehicle leaving to determine tare weight.
5. A complete walk through tour of the sorting lines from loading the feed conveyor to observing the sorting system.
6. Observations of loads being sorted for solid waste disposition as well as pre-sorting of large- scale acceptable loads being separated to discrete storage areas.
7. Reviews of data entry methods.
8. Confirmation of training protocols.
9. Document review.

In order to record the inspection, a photographic journal of key operations was recorded and submitted with this report to RCI.

After the tour, DeFeo Associates was allowed to interview Cooper staff as necessary. DeFeo Associates interviewed select staff and questioned them on Inspection Procedures, Training Procedures (both operational and safety related), Quality Control Procedures and Records Procedures.

DeFeo Associates was allowed to examine the original required permits held by Cooper. DeFeo Associates confirmed that the facility has proper permits as issued by the New York City Department of Sanitation, Permit #105 and the New York State Department of Environmental Conservation, Permit # 2-6101-00061-00001. Both permits confirm a permit capacity of 1875 tons per day.

Additionally, DeFeo Associates reviewed random hard copies of market sales receipts and invoices to cross-reference with material sales used to calculate the reported recycling and recovery rates. Finally, telephone cross - references for select markets were conducted to confirm the status of these markets.

Regulatory Compliance Test

Cooper Tank Recycling possesses the necessary permits to operate

DeFeo Associates reviewed the required permits for the facility. As indicated within this report, both permits, as issued by the New York City Department of Sanitation, Permit #105
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and the New York State Department of Environmental Conservation, Permit # 2-6101-00061-00001 confirm a permit capacity of 1875 tons per day and the operation conformed to the requirements of those permits.

These requirements include, but are not limited to:

1. Permit Capacity
2. Dust Control
3. Operational Hours
4. Procedural requirements
5. Safety

Accordingly, the facility is operating within the compliance requirements of its operating permits.

Use of Scales

DeFeo Associates concludes that the facility satisfies the requirements for use of scales.

During the site visit, DeFeo Associates confirmed that scales are used to establish gross and tare weights for all loads entering and leaving the facility. The weight information is recorded using a Scale Management Software Turbo (SMS) system to record those weights.

Cooper has scales calibrated on a quarterly basis. This is the preferred frequency of calibration under the CORR protocol.

Additionally, the facility requires gross and tare weight recording for each load as it enters and leaves the facility. There is no exception for this procedure and therefore, all vehicles are recorded for each load that is delivered. This removes any error, however minor for specific load issues that might effect the gross or tare weights of the vehicles entering or leaving the facility.

Finally, printed weight receipts are maintained at both the facility and are provided to the driver of the vehicle for cross - reference and verification.

Supporting Data for Rate Estimates

DeFeo Associates concludes that Cooper Tank Recycling maintains required supporting data as required by the GRP for recycling and recovery rates.

Having reviewed the monthly mass balance tables and computed recovery and recycling rates provided by Cooper in support of their application, DeFeo Associates sought to substantiate the data contained therein. DeFeo Associates reviewed random sales invoices and receipts from back-end markets to further determine that the materials reported as leaving the facility matched the outbound weights on the calculation spreadsheets.

During and after the site visit, DeFeo Associates conducted random phone interviews with recycling markets to further verify the legitimacy of the recorded outbound material. Based on this review, DeFeo Associates concludes the existence of the required supporting data for rate estimates as required within the CORR protocols.

Data Transcription and Management

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

During the site visit, DeFeo Associates reviewed the method by which daily weight data is verified and corrected for each of the incoming and outgoing loads of materials. Staff reviews each incoming ticket in conjunction with the video record of each load to verify data. In addition, mass balance calculations were reviewed on a random basis. This review included a review of random data generated for the test year and a correlation of that data against the reported information as provided to RCI.

Individuals Properly Trained for Functions They Perform

Cooper Tank Recycling employees receive adequate in-house initial and recurring training, including training from outside sources.

Cooper mandates a significant level of training for all employees working at the facility. During the field inspection safety training on Blood Borne Pathogens was being conducted by the regional insurance cooperative. In addition, DeFeo Associates reviewed multiple safety and operational training manuals including those related to:

1. Lock out Tag Out
2. Struck By Training
3. Heat and Cold Safety
4. SDS sheets
5. Personal Protective Gear

Additionally, all employees are mandated to sign attendance sheets and are required to log out of the training. Safety training is taken to a level whereby any violations of safety protocols results in an immediate disciplinary document being generated. The level and detail of training was exemplary.

During the site inspection, all employees were operating in accordance with the procedures outlined for the separation of recyclable materials from the incoming material stream. Employees were observed to understand their duties.

Performance Standard Test

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

DeFeo Associates reviewed the data for each of the months submitted during the test year and compared the monthly data submitted against the data summary. The data was analyzed to establish the recovery and recycling quantities and rates as well as for disposal as solid waste.

Recycling and recovery were based on calculations comparing recycling rates including use as alternate daily cover and recycling where materials were sent to secondary markets that returned those materials to the economic mainstream as products.

DeFeo Associates ran separate calculations on Cooper's data and confirmed the outcomes for each of the base areas per the data that was submitted.

Based on a review of the monthly and annual mass balance data provided by Cooper, and a review of the markets identified by Cooper, DeFeo Associates concludes that Cooper's reported Reuse and Recycling rates with and without Alternate Daily Cover conform to the

requirements and protocols of in the RCI Evaluation Manual 2.0 (EM), and RCI General CORR Protocol 1.9 (CRR).

Evaluation Statement Overview

DeFeo Associates, the evaluation body that conducted the facility review of Cooper, does hereby affirmatively confirm that the facility meets the requisite requirements for Certification as prescribed within the CORR Protocols with regard to:

1. Eligibility requirements.
2. All Measurement and record-keeping requirements.
3. And there are no existing material non-conformances or misstatements in the reported data.

DeFeo Associates recommends that the Recovery and Recycling rates submitted by Cooper Recycling be certified as Real Rates as outlined in the RCI protocol.

The undersigned hereby certify as follows:

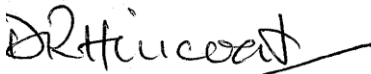
The information provided herein is true, complete, and accurate. They have read and understand the protocols developed by RCI, and are familiar with the requirements of RCI. Furthermore, they also certify that any signatories duly elected, qualified, and acting officers of their respective organizations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

For DeFeo Associates:



Print Name: Wayne D. DeFeo, LEED AP
Title: Lead Evaluator/Senior Internal Reviewer
Date: August 6, 2015

For Cooper Tank & Welding Corp.:



Print Name: DAVID HILLCOAT
Title: PRESIDENT.
Date: AUG. 20th, 2015