DAVIS STREET TRANSFER STATION
C&D SORT LINE

CORR PROTOCOL EVALUATION REPORT

November 2, 2015
Evaluation Body: Kies Strategies
Executive Summary

This report is the evaluation of an application by Davis Street Transfer Station (DSTS) for CORR Certification by the Recycling Certification Institute (RCI). The Davis Street Transfer Station is owned and operated by Waste Management of Alameda County. It is located at 2615 Davis Street in San Leandro, California.

The evaluation was conducted by Kies Strategies and represents an independent review of data and information provided to RCI. 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), RCI General CORR Protocol 1.9 (GCP) and RCI CORR Protocol and Certification of Real Rates: A Method for the Verification of C&D Recovery Rates at Combined MSW and Building Materials Processing Facilities (Alternative Protocol) were used to guide the evaluation process. The Alternative Protocol for sampling events was used because the DSTS is permitted to accept municipal solid waste (MSW) and operates sort lines not only for construction and demolition (C&D) debris but also for commercial dry waste, multi-family residential waste and bulky waste.

The evaluation found neither material or immaterial misstatements nor deviations from the described process train for the operations of the C&D sort line at DSTS. The sampling event conducted met the operational and reporting requirements as outlined in the Protocol.

Overview of Construction & Demolition Recycling Facility and Operations

The Material Recovery Facility (MRF) at DSTS is a 39,000 square foot facility where Dry Recyclables, Multi-Family Residential Waste, and Construction and Demolition Debris are processed to recover a wide range of recyclable commodities. The conveyers and screen systems have been permitted by the Bay Area Air Quality Management District (BAAQMD).

Intercompany and self-haul vehicles unload materials onto an asphalt tipping floor to the West and East of stationary excavators. A loader pushes the material to the excavators and the excavators load the material onto an in-feed conveyor leading to the designated sorting line. The excavator also removes very large and bulky material that can’t be placed onto the sort line.

For C&D debris, the first sorting line is a pre-sort line where sorters capture the largest pieces of cardboard, wood and metal. The material then passes over a 9-inch shaker screen. The items larger than 9” proceed to a second sorting line where large recyclable items are removed. This process captures the remaining recoverables including wood, cardboard, mixed recycling and inerts.
Material smaller than 9” falls onto another conveyer, passing under a magnet to remove ferrous metal. The material is again screened through a 2-inch screen. The 2-inch “overs” pass through a trommel capturing 9/16” fines. Items larger than 2” but smaller than 9” pass through an optical sorter, which captures wood.

Sorted materials are dropped down chutes into debris boxes. When full, the debris boxes are pulled by roll-off trucks and dumped on-site to await further processing (wood & cardboard) or taken straight to the recycler.

Items not removed by sorters for recycling are carried out of the MRF on a conveyer that drops them directly into the North end of the pit for transport to a landfill for disposal.

MRF technologies and equipment include:
- **Air Separators:** To separate small pieces of paper
- **Magnets:** To recover ferrous metal
- **Optical-Sorting:** To separate wood and aluminum
- **Vacuum System:** To separate film plastics
- **Vibratory Screen (Small Stones/Rocks):** To separate small stones/rocks
- **Vibratory Screen (Wood):** To separate out wood

The materials accepted at DSTS include the following:
- Mixed C&D
- Cardboard and Paper
- Carpet, Padding and Foam
- Ceiling Tiles
- Concrete, Asphalt, Stone, Porcelain
- Deconstructed & Salvage Items
- Dirt/Clean Fill
- Drywall/Gypsum
- Glass Plate/Tempered/Bottles or CRV
- Green Waste - Yard/Landscape
- Metals
- Plastics
- Roofing Material
- Screen Fines
- Tires
- Wood
- Trash

Most materials arrive mixed and not source separated.

**Development of Evaluation Plan**

DSTS 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 lists of...
markets (material recipients and their contact info) and a variety of other background documents. Other information provided through the intake process included:

- 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
- Name of company contact person, their position/title, and contact information
- Website address

RCI and Kies Strategies conducted interviews with Rebecca Jewell, Recycling Programs 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. RCI also provided an overview of the Evaluation process to aid in the streamlining and completion of activities on the days of the site visits and sampling events. On-site review included:

- 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

DSTS also coordinated the scheduling and methodology of a sampling event to comply with the Alternative Protocol. As specified in the Alternative Protocol, certification requires sampling events to be conducted quarterly over 3 years and then in Quarters 1 and 3 in years 4 and 5 for a total of 16 sampling events.

**SITE VISIT/SAMPLING EVENT**

As the first eligible facility to apply for certification using the Alternative Protocol, an initial site visit was conducted by RCI and Kies Strategies on June 19 and 20, 2015.
A second site visit and a sampling event were conducted on September 30 and October 1, 2015 by Kies Strategies.

On June 19-20, 2015, RCI completed an on-site evaluation of the DSTS facility. This included an interview with Ms. Rebecca Jewel, Recycling Programs Manager, a tour of the facility and an inspection of the physical plant associated with the DSTS facility. A full walk-through of the facility was conducted to where materials enter, are weighed, deposited, processed/sorted, and eventually leave the facility:

- Observations of the scale house including observations of actual loads being entered to the system and vehicle entry and egress from the scale.
- Observations of vehicles being weighed in for gross weight.
- Observations of vehicles dumping loads to the tipping floor.
- Observations of the entering vehicle leaving to determine tare weight.
- A complete walk through tour of the sorting lines from loading the feed conveyor to observing the sorting system.
- 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.
- Reviews of data entry methods.
- Review of safety training manuals to determine if adequate QC existed for those staff with the potential to directly affect the recycling and recovery reported by the facility and determined adequate an ongoing training exists in these key positions to maintain QC of processes and data.

On September 30, 2015, Kies Strategies reviewed regulatory and training documents and confirmed that preparations for the sampling event the next day were properly underway.

On October 2, 2015, the sampling event was conducted. Kies Strategies confirmed all bunkers were empty of material, scales were reset, and adequate materials were ready for sorting. The sampling event was conducted under normal operating conditions and included sorting of a minimum of 100 tons of C&D materials per the guidelines outlined in the Alternative Protocol. Kies Strategies observed sorting operations and verified weights of all outgoing commodities and residual materials. At the end of the sorting shift, the residual belt tonnage was documented.

On all occasions, the facility and work site were observed to be clean, well-maintained, and maintenance logs are kept. Adequate signage was observed for safety, hazards, material identification, as well as indicating directions for traffic and where materials should be placed. All personnel were observed to be wearing appropriate personal safety equipment.

**Regulatory Compliance Test**

*Davis Street Transfer Station possesses the necessary permits to operate.*
Kies Strategies reviewed the required permits and inspection reports for the facility. DSTS operates under Solid Waste Facility Permit #01-AA-0007 issued by the California Integrated Waste Management Board (CIWMB, now CalRecycle). The permit was issued on May 18, 2004. There have been no documented areas of concern or violations of requirements governing the operations of the C&D/MRF in the last 12 months.

**Use of Scales**

*Kies Strategies concludes that the Davis Street Transfer Station satisfies the requirements for use of scales.*

Third party customers arrive at the main scale house and declare the origin and type of materials they are hauling. Credit customers' tare weights are already stored in the Fastlane System. Cash customers may be weighed or measured. Heavy loads or loads containing inert materials are typically weighed. Measured loads are usually small pickup trucks or passenger vehicles. Measured customers are charged by the cubic yard. Weighed customers are required to leave a deposit and weigh out.

InterCompany trucks scale in using the Automated Scales. Cards are used that identify their routes and material types. Roll off trucks’ cards reflect the tare weight of the truck, but the drivers must select the origin and type of materials they are hauling from drop down menus.

Once materials and origins are recorded, drivers carrying C&D in InterCompany trucks and third party trucks proceed to Unit 1 where they are directed to deposit their loads in the C&D pile for processing.

There are 5 scales throughout the Facility. The residue belt scale which weighs the material heading out of the MRF for landfill disposal is calibrated monthly. The scales which weigh trucks are calibrated quarterly. RCI documented weighmaster certifications in the scale house and scale calibrations and certification.

**Supporting Data for Rate Estimates**

*Kies Strategies concludes Davis Street Transfer Station maintains required supporting data as required by the EM and Alternative Protocol for recycling and recovery rate estimates.*

Kies Strategies reviewed outbound commodities loads records and contacted all recycling markets reported to receive materials from DSTS to verify the legitimacy of recorded outbound material.

Kies Strategies observed the October 1, 2015 sampling event, analyzed the results, and calculated the recycling and recovery rates as guided by the Alternative Protocol.

**Data Transcription and Management**

*Sufficient QC exists for creation of reuse and recycling rate tables from EMS data.*
RCI and Kies Strategies interviewed Rebecca Jewell, Recycling Programs Manager for DSTS on several occasions. She is responsible for tracking and reporting all data from the C&D/MRF. She generates regular reports and cross-checks them according to Waste Management of Alameda County’s rigorous standards.

With these verified procedures and the observed competencies of the individuals involved in the data entry and reporting, RCI concludes that sufficient QC exists for data transcription and management.

**Individuals Properly Trained for Functions They Perform**

*Davis Street Transfer Station employees receive adequate in-house initial and recurring training, including training from outside sources.*

DSTS conducts 48 trainings per year, four each month.

One of the four of these trainings is health-related (diabetes, healthy weight, blood pressure, etc.); another is safety related (ladders, hot-weather conditions, PPE, etc.), a third is driving related (defensive driving, cold-weather driving, pre-trip inspections) and the fourth is environmental (air quality, storm water quality, housekeeping, etc.).

All of these types of trainings are documented in the training notebooks that were reviewed, including sign-in sheets.

**Performance Standard Test**

*Reported recovery and recycling rates have been determined in compliance with the Alternative Protocol.*

Kies Strategies observed the October 1, 2015 sampling event, analyzed the results, and calculated the recycling and recovery rates as guided by the Alternative Protocol. The required steps include:

- Step 1 - Collect inbound loads of mixed C&D materials.
- Step 2 - Process material collected in Step 1.
- Step 3 - Weigh recovered C&D material.
- Step 4 – Conduct analysis to calculate C&D recovery rate.

Based on this sampling event and analysis and a review of the markets identified by DSTS, Kies Strategies concludes that the Recycling Rates with and without Alternative Daily Cover conform to the protocols of the RCI Evaluators Manual 2.0 (EM) and the CORR Protocol and Certification of Real Rates: A Method for the Verification of C&D Recovery Rates at Combined MSW and Building Materials Processing Facilities (Alternative Protocol).

**Evaluation Statement Overview**
Kies Strategies, the evaluation body that conducted the evaluation of Davis Street Transfer Station's C&D sort line, does hereby affirmatively confirm that the 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.

Kies Strategies recommends that the Recovery and Recycling rates calculated for DSTS be certified as Real Rates as outlined in the RCI 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 Kies Strategies:

By Delyn Kies
Print Name
Owner
Title
November 2, 2015
Date

For Davis Street Transfer Station:

By Rebecca Jewell
Print Name
Recycling Program Manager
Title
11/3/15
Date