

Attachment 2-F Systems Acceptance Test Procedures

General Testing Requirements and Acceptance Standards

The purpose of Systems Acceptance Test is to verify that the system, as constructed, is capable of operating at the performance required under the Agreement.

During Acceptance Test, the Contractor shall operate the system in accordance with staffing plan and specified method of operation that has been submitted by the Contractor and approved by the Authority in the MRF Operating Plan prior to the signing of the Agreement and Acceptance Testing. For the purposes of the Acceptance Test, the Contractor shall not operate the facility in any manner which is not consistent with the approved Facility Operating Plan, nor shall the Contractor utilize additional personnel above and beyond those specified in the approved Facility Operating Plan to achieve Acceptance.

The Company shall be responsible to fully install and start-up (and test) all aspects of the MRF Facility to demonstrate compliance with all requirements of the Agreement, of Attachment 2-E, Equipment Performance Specifications, all manufacturer's warranty requirements, and this Acceptance Test. The Contractor will conduct the Acceptance Test in the presence of representatives from the Authority and its Consulting Engineer(s) if appropriate.

Acceptance Test Process Materials

The Process Materials for the Acceptance Test will be residential curbside materials as described below. The Process Materials will be prepared at the Shoreway facility by:

- 1) Importing single stream materials from a Bay Area location that has similar demographics to the Authority or by,
- 2) Selecting a material that meets the mutual agreement of the Authority and the Contractor or, by
- 3) Mixing the collected source separated fiber and container streams that are currently collected from inbound curbside route trucks delivered to Shoreway by recycling route trucks.

The Process Material shall resemble as closely as possible the single stream material that will be collected and be processed by the facility after the initiation of single stream collection by the Authority. The current residual level of dual stream commercial and residential source separated fiber and container materials being processed at the existing MRF is approximately 4.5%.

Acceptance Test Run Time

The Acceptance Test will be conducted over three (3) consecutive operating days. The start-time and end-time will be pre-determined as well as scheduled break-time. No unscheduled down-time is acceptable, and any occurrence of unscheduled down time will void the day. Contractor will provide clean product load-out containers (roll-off or

smaller bins) at each of the product and residual generation areas. Each container will be tare weighed on the Facility's scales and identified prior to placement.

The following data will be recorded at a minimum:

- The individual and aggregate weights of all materials (Product and Residual) generated during the Acceptance Test run time by day.
- Start and stop time and total run time (less breaks). The Company shall at all times be responsible for the performance of the Facility, and Facility processing time will not be suspended for any reason other than normal scheduled breaks.
- Logs of all maintenance, repairs, and adjustments to Facility operations performed by the Company during each test period. The hourly processing rate will be determined by dividing the total amount of Process Material (determined from the aggregate weight all products, residual and trash collected after the run) over the three (3) day testing period by the total amount of Run Hours.

Product Quality Test

The Product Quality Test will be conducted simultaneously with the Acceptance Test. During the Acceptance test, all Recyclable Material shall be recovered and processed as specified by the Contractor in the approved Facility Operating Plan, and all resulting Products shall be deposited in their designated containers (or bales). At the conclusion of each day, total tonnage of each product will be recorded.

A representative from the Contractor's company will select a Representative Sample (parties shall follow ASTM procedures if there is disagreement in the selection of a Representative Sample) of each Product from each of the system outputs. In the case of loose material, a five gallon bucket will be used to obtain the sample. In the case of baled material, a representative bale will be selected, unbound, and a sample will be placed in a 40-cubic yard box. All samples will be selected and analyzed in the presence of the Authority representatives.

- 1) Fiber - A bale of OCC, newsprint and mixed paper will be selected at random, loaded into a roll off container and unbound. To qualify for the Test, bale(s) must weigh more than 1,000 pounds. Fiber Product must meet the Product Quality Standards in Attachment 2-G.
- 2) Glass - A five gallon bucket of cullet will be extracted, subdivided and combined in accordance with ASTM grab sample protocol from each glass product storage container/area. Samples will be analyzed in accordance with procedures described in the test protocol. In order to meet product specification, each sample must meet the specifications set forth in Product Quality Standards in Attachment 2-G.
- 3) Aluminum - If baled, aluminum will follow the procedures for sample collection as described for newspaper, and if loose, the procedures for sample collection will follow those described for glass cullet. The sample must meet the Product Quality Standards in Attachment 2-G.
- 4) Plastic - The sampling procedures will follow the procedure for sample collection as described for newsprint. In order to meet product specifications,

PET and HDPE samples must meet the meet the Product Quality Standards in Attachment 2-G.

Residual Generation

Residual will be collected from all points of generation within the Processing System and aggregated into a container for sampling. The aggregate weight of residual for the day will be compared to the total tons processed (Processed Material) to determine the percentage of Residual generated by the Processing System. The Residual must be below 10%.

Residual will be considered all materials that are not captured as Products (as tested under the Product Quality Standards). Any materials that fall to the floor from the Processing System will be considered Residual.