



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by:


 General Manager

Date:

1/11/19

DATE: January 11, 2019
 TO: General Manager
 FROM: Director of Operations
 SUBJECT: MRF 2018 Operations Report

RECOMMENDATION: Informational Only

BACKGROUND

January 2018 marked the completion of the site and building modifications, as well as the new Municipal Solid Waste (MSW), Single Stream Recycling (SS), and Construction and Demolition (C&D) equipment installation construction phase of the District's new Materials Recovery Facility (MRF) and the commencement of system testing and operations. The entire MRF renovation project took almost a full year to complete, so the start-up and commissioning of the facility was eagerly anticipated. Staff will be providing an overview of the successful system commissioning process conducted by Sloan Vasquez McAfee (SVM) and a presentation of the first nine months of operational performance of the staff and facility at the Board meeting.

DISCUSSION

In January 2018, Bulk Handling Systems (BHS) informed the District and SVM that the installation of the new equipment had reached substantial completion and was ready to proceed through the Performance Acceptance Testing (PAT) protocols outlined in the Facilities Procurement Agreement. The process of PAT had the following four phases.

- Phase 1. Components Testing- (SVM) inspected all of the mechanical components listed in the BHS general arrangement drawing and equipment list. Inspection and testing were completed to assure that all equipment was installed and operating according to contract requirements and component specifications. Phase 1 testing was conducted January 18 - February 7 and was verified as completed on Feb 14th.
- Phase 2. Functional Testing (unloaded) - Dry-run System test requires the full-system to be started in "auto" mode and that all components (e.g., conveyors, screens, hydraulics, chain drives, and compressors) function in uninterrupted operation without mechanical or electrical failure for four continuous hours. SVM verified that the system passed on Feb 1.
- Phase 3. Function Testing of the commissioning process requires full system availability for five hours during an eight and one-half hour operating shift (e.g. 6:00 a.m. - 2:30 p.m.), on two consecutive days. SVM verified the system passed this Phase on February 14 & 15.
- Phase 4. Performance Testing was scheduled for April, rescheduled for May, then delayed until the week of June 19, with test days occurring from June 20 to 23. The scope of each test day is provided as follows:
- Test Day One (June 20) – Single-Stream and Construction and Demolition (C&D) Processing Performance Tests
 - Test Day Two (June 21) – Single-Stream and C&D Processing Performance Tests
 - Test Day Three (June 22) – Single-Stream Materials Quality Tests
 - Test Day Four (June 23) – C&D Materials Quality Tests

The PAT protocols required the system to meet minimum available Uptime (90%) during an 8-hour shift, minimum throughput levels (Tons per Hour) for each material stream, as well as Minimum Material Quality and recovery levels for various material stream. BHS had operational control during these tests and ran the system while SVM and District staff performed system measurements and material quality testing.

On July 2nd, SVM issued their findings that the system passed all the system minimum requirements as outlined the Procurement Agreement.

Since the beginning of February, the District has been receiving and processing all of the single stream materials from Green Waste under the District's members Franchise Agreements, as well as all of the materials collected by Waste Management, Inc. throughout Monterey County. During 2018, the City of Watsonville, Republic Services in Salinas, and Recology in San Benito County also began to deliver single stream recyclable materials to the MRF, increase monthly volumes of materials for processing from approximately 2,500 tons/month to our current volumes of over 5,000 tons per month. This has required a full shift of operations for the processing of single stream materials. Additionally, the MRF has been receiving and processing between 5,000- 6,000 tons per month of C&D and Bulky Wastes on the C&D operations side of the MRF as well.

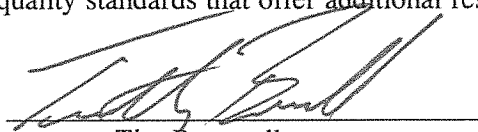
At the Board meeting, staff will report on continuing improvements of the MRF operational performance, the incoming sources of materials, the outgoing shipments of materials, the impacts of China's National Sword policies on material values, and the financial and operational impacts of greater than expected contamination rates of non-recyclable materials in the single stream recyclable material being received at the facility.

CONCLUSION

Staff is pleased to report that the facility as delivered by BHS and tested by SVM has met the standards of performance as specified and outlined in the Facilities Procurement Agreement, the Supplementary Conditions and the General Conditions.

In addition, the District's MRF operations are continuing to improve and develop a greater proficiency in the daily operational, financial and maintenance performance of the system. Staff continues to evaluate analyze these areas as we prepare for recommendations to the following areas to be considered for next fiscal year's budget, operational plans, and capital investment:

- Processing Fee structures for Single Stream Recycling materials and Residual Rates
- Second Shift operations for the processing of Commercial and Multifamily waste streams
- Capital equipment investments to meet end-market quality standards that offer additional resulting operational cost reductions/offsets



Tim Brownell