Memorandum

MONTEREY REGIONAL
WASTE MANAGEMENT DISTRICT

Reviewed by: _____ Date: 10/11/19
General Manager

DATE: October 11, 2019

TO: General Manager

FROM: Senior Engineer and Director of Engineering & Compliance

SUBJECT: 2019 Single Stream Recycling Characterization Study by SCS Engineers

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RECOMMENDATION: That the Board receive the 2019 Single Stream Recycling Characterization Study by SCS Engineers.

BACKGROUND

At their June 21, 2019 meeting, the Board authorized staff to engage SCS Engineers to conduct the second annual Characterization Study of the Single Stream Recyclables (SSR) materials delivered to MRWMD's Material Recovery Facility (MRF). This study was successfully conducted during July and August of 2018 and yielded a weighted average contamination rate of 22% for all SSR being delivered to MRWMD.

DISCUSSION

The 2019 Single Stream Recycling Characterization Study was successfully conducted during July and August of 2019 and yielded a weighted average contamination rate of 22% for all SSR being delivered to MRWMD.

District staff worked with SCS to determine the statistically significant sample ratio for each jurisdiction delivering SSR to MRWMD. The District also worked with the collection companies to determine the pick-up schedule for each jurisdiction.

On each day of the study, scale staff directed the selected number of trucks to the sort area. SCS Engineers then pulled randomly selected samples from the chosen load and prepared them for processing.

The manual recycling characterization procedure used was based on ASTM procedure D 5231-92 which is consistent with the California statutory requirements in Public Resources Code 41030, et. Seq. and regulatory requirements of CalRecycle for performing recycling characterization studies. The 150-pound sample was placed on a sorting table and separated by hand into pre-determined material types (See "Category Table" on page 2). Each material type was weighed, and the composition of the sample was documented.

Residue material, which is material that does not fit into the pre-determined categories mentioned above, was characterized visually.

RESULTS

Results for the 2019 SSR composition study are included in the report. On average, the results show that 78% of the SSR being delivered to MRWMD is recyclable and 22% is contamination.

Category Table

Category	Material
Paper	Uncoated Corrugated Cardboard
	White Office Paper
	Mixed Paper
	Paper Board
	Old Newspaper
	Waxed Cartons
Plastic	PET
	PET Thermoform
	Natural HDPE
	Pigment HDPE
	Polypropylene #5
	Mixed Plastic #3, 4, 6, 7
Film Plastic	Film Plastic
Glass	Mixed Glass
Metal	Bi Metal
	Aluminum
	Aluminum other
Organics	Organics
Other	HHW
	Medical Waste
	Manufactured Products
	Refuse
Total	
Contamination (noted in grey shading above)	

CONCLUSION

The results of the study to characterize the materials in the recycling stream received at the District's MRF have multiple benefits of informing the MRF operations, informing improvements in the public outreach of recycling programs, reducing contamination in the recycling stream, and improving the quality of the bales of recyclable materials. Staff designs outreach and operational adjustments to take advantage of the information collected. Therefore, it is recommended that the Board receive the 2019 Single Stream Recycling Characterization Study by SCS Engineers.

David Ramirez

Guy R. Petraborg

Attachment