

MEMO

Consent
Item #: 3



Meeting Date: July 21, 2023

To: Board of Directors
From: Senior Engineer, David Ramirez
Approved by: General Manager, Felipe Melchor

Subject: 2023 Waste Characterization Study

RECOMMENDATION: That the Board authorize the General Manager to execute the contract for a Waste Characterization Study with SCS Engineers of Long Beach, California. The cost for the services will be billed on a time and materials basis with a not to exceed cost of \$244,000.

BACKGROUND

ReGen Monterey has participated in the implementation of solid waste reduction, recycling, and diversion programs on behalf of its Member Agencies. The passing of AB 939 required all jurisdictions (e.g., Cities and Counties) in California to divert at least 50% of their solid waste away from landfill disposal by the Year 2000. ReGen's Member Agencies reached that goal and are now aiming to reach the State of California's current standard of 75% diversion. Implementation of SB 1383 regulations require a 75% reduction in organic waste landfill disposal by 2025 (relative to the baseline year, 2014). Given these regulatory goals, ReGen and its Member Agencies would benefit from getting a snapshot of what are the distribution of materials in the current waste stream as a status check for the upcoming regulatory deadlines.

Additionally, ReGen Monterey and Monterey One Water have embarked on a Joint Feasibility Study which is evaluating areas where the two agencies can mutually benefit from partnerships and study the available organic wastes that exist in the neighboring communities. A waste characterization study would enable staff to assess assumptions made in the study to ensure accuracy and assist staff in its future planning activities related to SB 1383 requirements.

In 2012, ReGen conducted a waste characterization study of commercial Municipal Solid Waste (MSW) to assist in the design process of the SSR/MSW sort line for the MRF 2.0. Since then, ReGen has not directly measured the composition of the waste coming from its Member Agencies. Although, CalRecycle has visited the facility several times in the past 10 years to do a limited, Statewide waste characterization study. The general trend of the characterization study data has been of decreasing presence of organic materials in the waste stream.

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Let's not waste this.



DISCUSSION

Implementation of SB 1383's organics diversion regulations began in January of 2022. Since then, residents have been instructed to dispose of household 'food scraps' with yard trimmings in their 'green cart'. These organic materials are then diverted from the landfill and processed in the compost facility. ReGen staff has been giving the rollout of the 2022 residential curbside organics diversion program a chance to gather steam before embarking on a waste characterization study in order to get an accurate depiction of the participation in the rollout program. In theory, there should be a decrease in organic material in the waste stream ('black cart') and an increase in both a) food scrap organic materials in the 'green cart' being processed at the compost facility and b) paper/cardboard organic materials in the recycle cart ('blue cart'). Given the fluctuations in yard trimmings generation, it can be difficult to determine if changes in tonnages are the result of increased organics diversion or if they result from natural fluctuations in yard trimmings generation rates. Performing a waste characterization study at this time will allow for ReGen staff and Member Jurisdiction staff to evaluate 'what materials are where' and to what extent the organics diversion program is operating.

The information collected by the waste characterization study is valuable and can be used for several purposes including, but not limited to, the following:

- Identify the recyclable items in the waste stream that need to be diverted to the recycling can ('blue cart')
- Identify the percentages of the various recyclable material types in the waste stream
- Identify the organic items in the waste stream that need to be diverted to the 'green cart' (food scraps & yard debris organics) and the 'blue cart' (paper/cardboard organics)
- Identify potential hazards in the waste stream
- Assess diversion efforts within specific jurisdictional areas
- Inform ReGen's and the hauler's outreach campaigns and subsequently, the quality of the recycling stream
- Set a baseline to inform Member Agencies of the potential impact of future enforcement mechanisms
- Fine tune ReGen's landfill operations

The characterization study is designed to collect a sufficient number of samples of a representative size (e.g., weight) to characterize the waste stream that the materials came from (e.g., various municipal areas and/or source types such as 'residential' versus 'commercial/multi-family' collection routes).

Each sample consists of 200 lbs. of material that is weighed and sorted into its components. The components are then weighed individually and documented to determine the contents of the load. The number of samples noted above represents a statistically significant sample size for the given community and its recycling stream. The result of the study is a defensible set of data that can be used to incentivize proper diversion and design public information campaigns.



Given ReGen's obligation to its Member Agencies and the cost of the study, Staff recommends the completion of this study be conducted on member jurisdiction waste materials only except where Regional Customers have agreed to participate in the study and to cover their proportional costs in the study. Regional customers who are not Member Agencies will be offered to participate in the study at their own expense. ReGen will then invoice the Regional Customer for their cost in the study.

FINANCIAL IMPACT

Funds for this project are included in the FY 2023/2024 professional services expense budget. The data obtained from this study will help inform future discussions and decisions for ReGen and its Member Agencies relative to compliance with SB 1383 requirements.

CONCLUSION

Conducting a study to characterize the materials in the waste stream that are now being received at ReGen's landfill will have multiple benefits of informing how well the diversion of organics is tracking relative to SB 1383 requirements, informing improvements in the public outreach of diversion programs, customer engagement by the hauler's, and reducing undesirable items in the waste stream or not in the appropriate collection bin. Staff therefore recommends the Board authorize the General Manager to execute the contract for a Single Stream Recycling Characterization Study with SCS Engineers of Long Beach, California. The cost for the services will be billed on time and materials basis with a not to exceed cost of \$244,000.