



SHOREWAY OPERATIONS AND CONTRACT MANAGEMENT



STAFF REPORT

To: SBWMA Board Members
From: Hilary Gans, Facility Operations Contracts Manager
Date: October 22, 2015 Board of Directors Meeting
Subject: Discussion on Glass Commodity Market Issues Impacting Shoreway Environmental Center Operations

Recommendation

This staff report is for discussion purposes only and no formal action is requested of the Board of Directors.

Summary

The Shoreway MRF generates roughly 18,500 tons of glass per year from the processing of single stream recyclables. This material is currently shipped to a glass processor, Strategic Materials Incorporated (SMI) in San Leandro. SMI is closing its San Leandro facility sometime during the 1st quarter of 2016 and opening a replacement facility in Fairfield. Once the closure occurs South Bay Recycling (SBR), the Shoreway MRF operator, will be forced to ship the glass to Fairfield which will result in higher glass shipping costs for the SBWMA from both longer haul distance and the potential need for additional tractor-trailer equipment. Staff is pursuing designs for alternative onsite handling and transfer methods to try and partially mitigate the higher SBR operating costs.

Analysis

In September 2015, SMI provided notice that it will be closing its San Leandro processing plant in the 1st quarter of 2016 and that glass shipments will need to be redirected to a new processing plant in Fairfield. Since SMI is the only glass processor in Northern California, there are no alternative or closer markets for glass. SBR and SBWMA staff are developing an operations plan to transport the glass to Fairfield as well as other glass handling options. The handling and cost alternatives being analyzed are listed below and summarized in **Table 1**.

1. The increase in transportation cost directly attributable to the increase in mileage to Fairfield.
2. The capital cost of two new trucks and trailers to cover the additional SBR drive-time.
3. Potential F.O.B. commodity sales arrangement where glass transportation service would be provided by the SMI and included in the commodity price.
4. Potential new glass transfer and loadout system at the Shoreway facility to improve efficiency and mitigate cost increases.

Table 1 – Cost Summary of Options

<u>Option/Alternative</u>	<u>Estimated Cost Increase Over Current (per ton)</u>	<u>Estimated Cost Increase Over Current (\$ per year)</u>
1 Transport to Fairfield – SBR	\$20.07	\$260,910
2 New Fleet Equipment Capital – SBR	\$7.13	\$92,690
3 FOB Transportation Option	(\$22.07)	(\$286,910)
4 New Glass Transfer and Loadout System	(\$6.83)	(\$88,790)

Transportation to Fairfield- SBR

San Leandro and Fairfield are located 24 miles and 78 miles respectively from Shoreway. The additional 54 miles in hauling distance will increase SBR's 2016 glass hauling cost \$20.07 per ton (from \$27.00 to \$47.07 per ton) or \$260,910 per year.

New Fleet Equipment Capital - SBR

The increase in hauling distance will nearly double the drive-time per truck load and will necessitate additional drivers and trucks. To meet the additional hauling demand, SBR will need to purchase two new end-dump trucks and trailers with a total estimated cost of \$463,660. SBR would invoice the SBWMA through the regular monthly invoice process based on a 5-year amortization schedule that coincides with the remaining term of the SBR Operations Agreement that expires at the end of 2020. The estimated additional capital cost would increase the 2016 glass hauling cost \$7.13 per ton or \$92,690 per year.

FOB Transportation Option

SMI has offered to provide SBR a FOB (freight on board) or picked up price of \$25.00 per ton for the SBWMA's glass. Preliminary cost comparison shows that having SMI pick up the glass could be \$22.07 per ton or \$286,910 per year less expensive than having SBR haul the glass to Fairfield. FOB pricing would require a new MRF glass loadout system.

New Glass Transfer and Loadout System

The current method of shuttling small batches of glass from the MRF to the transfer station for loading onto end-dump trailers is inefficient and costs the SBWMA \$10.29 per ton. SBWMA staff has been researching glass loadout systems that would load trucks at the MRF, eliminating the double handling of glass through the transfer station. The cost of the glass loadout system at the MRF has been quoted by Bulk Handling Systems at \$450,000 (installed, without tax). BHS estimates that the system will take 12-15 weeks to fabricate and install. The estimated net savings of a new glass loadout system would be \$6.83 per ton or \$88,790 per year. Staff's analysis indicates that the system would pay for itself within approximately 5 years by eliminating the double handling of glass through the transfer station. The system would have the added benefit of reducing wear of site pavement which has become an expensive maintenance problem. The glass conveyance and loadout system is still under design and final designs will be presented at the November Board meeting.

Background

The Shoreway MRF generates approximately 18,500 tons of glass per month from the processing of single stream recyclables (13,000 tons from the SBWMA franchise area and 5,500 tons from third-party tonnage processed by SBR at the MRF). Currently, glass that is generated throughout the two-shifts of MRF operation is shuttled to the transfer station where it is then loaded onto end-dump trailers for transportation to SMI's glass processing plant in San Leandro. SBR currently has one end-dump truck in its fleet that the company uses for glass hauling and for hauling other materials from the transfer station. The 2016 SBWMA payment to SBR for handling and transporting glass to SMI in San Leandro will be \$27.00 per ton or \$351,000 per year (includes the onsite handling costs and transportation costs).

Fiscal Impact

The estimated cost increase of having SBR transport glass to Fairfield instead of to San Leandro is \$20.07 (from \$27.00 to \$47.07) or \$260,910 per year. The estimated cost impact of additional capital for trucks and trailers on glass transportation is \$7.13 per ton or \$92,690 per year. (The trucks and trailers would be purchased by SBR at a cost of \$463,660 and the SBWMA would pay SBR ~\$8,750 per month for 5-years until the expiration of the Operations Agreement (at which time the SBWMA would have the right, as with all other contractor's equipment, to purchase the equipment at its net book value)). Staff is analyzing different glass handling and FOB transportation options to mitigate the cost impact to the Member Agencies.