



TO: Larry Gardner

Manager, Solid Waste Services

DATE: October 26, 2015

MEETING: RSWAC, November 7, 2015

FROM: Amanda Kletchko

Special Projects Assistant

FILE: 5380-20

SUBJECT: Share Shed programs at the Regional District of Nanaimo Solid Waste Facilities

RECOMMENDATION

That the report be received for information.

PURPOSE

The Regional Solid Waste Advisory Committee (RSWAC) included the introduction of "Share Sheds" at the Regional Landfill (the Landfill) and Church Road Transfer Station (CRTS) as an option to be considered as part of the current Solid Waste Management Plan (SWMP) review.

BACKGROUND

Share Sheds give customers the opportunity to set aside items in good condition for re-use by others instead of landfilling; the installation of Share Sheds at the CRTS and the Landfill could result in greater waste diversion as items are donated and re-used instead of landfilled.

Currently, CRTS and the Landfill do not offer any customer exchange programs, and salvaging is not permitted. Share Sheds have not yet been introduced at the facilities primarily due to potential liability to the Regional District of Nanaimo (RDN) by making salvaged material available to the public. Other considerations include managing traffic, loitering, space and staffing implications.

In order to reduce potential liability, the RDN could introduce a program that imitates the program run by the Capital Regional District. In this scenario, items collected are offered only to local thrift stores or non-profit groups - the public does not have access to items in the Shed. This program could involve a list of desired items submitted to the facility by the receiving organizations, and those items would be identified and set aside by the customers as directed by the Attendants. Alternately, Attendants could be responsible to determine if items are suitable for donation, and pickup could be assigned on a regular basis. The submission of a liability waiver by the receiving organization could solve any liability issues that may arise.

It may be possible to locate sheds inside or outside the scaled areas of both the Landfill and CRTS:

Outside the scaled area

If the Share Sheds are located outside the scaled area, the Attendant would be required to direct the customer to the Share Shed for drop-off. The customer would be required to travel over the scales to complete their waste transaction, and proceed to the Share Shed location. There would be no revenue created with this method, as the customer would not be paying to drop off their item.

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Care and planning must take place to reduce traffic congestion and/or confusion. Providing sheds outside of the scaled area could require additional staffing to provide oversight and to maintain the facility. Diversion could be tracked when the receiving organization crosses the scale at the time of pick up.

Inside the scaled area

By providing a Share Shed inside the scaled area, the Attendant would be required to direct the customer to the Share Shed for drop-off, but the customer would not be required to pass over the scale first. This would allow the RDN to continue to collect revenue for all items brought to the site, and the amount of material diversion could still be monitored at the time of pickup by the receiving organization. Additional staff may not be required to monitor the shed, as it would be in the vicinity of the bins area. Attendants may have to field questions by self-haul customers regarding why they cannot take items from the shed.

If it was determined that there would be no charge to the customer for dropping items off for donation, the customer would be required to travel over the scales to complete their waste transaction, and then proceed through the bypass lane and back into the scaled area. Care and planning would need to take place to reduce traffic congestion and/or confusion.

Moving forward with this program could increase customer satisfaction, as requests by customers to provide others with access to reusable items (i.e. furniture and household items), is common. Customers have expressed the desire for a Share Shed, explaining that they have good items to donate, and would like to see things reused rather than landfilled. As they have already made the trip to the facility, it would be convenient if they did not have to travel further to donate at a thrift shop. Staff at the Cowichan Valley Regional District's Bing's Creek facility have indicated that their Share Shed program is very popular with customers, and Attendants at the Landfill say that the amount of re-usable items being landfilled appears high. Nanaimo Recycling Exchange offers free drop-off in their Community Market, but customers must purchase desired items.

A number of guidelines would need to be pre-determined prior to the installation of the Share Sheds:

Acceptable items

The RDN would need to determine what items are considered acceptable in the Share Shed, and also who would be responsible to say if an items belongs in the shed.

Length of Time

A regular routine of organization pickup must be put in place, whether the RDN contacts the organization when the shed is full, or whether a truck comes by on a pre-determined schedule.

Liability

Prior to implementing the Program, the RDN would need to determine liability of collecting second hand goods on behalf of a non-profit organization.

IMPACT ON DIVERSION

It is estimated that approximately 160 - 240 tonnes of waste could be diverted from the Landfill per year resulting in a 0.32% - 0.45% diversion rate. This value is based on the estimations made by landfill Attendants who indicate that one to two 16' cube vans worth of items (1500kg capacity) are re-saleable per week, depending on the time of year.

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FINANCIAL IMPLICATIONS

Short Term Costs

Time required to prepare the area is location dependent. Preparation at CRTS could be completed within a few hours to a day; preparation at the Landfill could take up to several days due to space restrictions. A Planner or Engineer may need to be involved in planning the Sites for best use of space and roadways.

Financial requirements to prepare areas for the Share Sheds is dependent upon the chosen location of the sheds at each facility. The current rate of Engineering consultation, if required, is \$200/hr. Labourers, operators and equipment are available on site at the Landfill at a rate of \$175/hr; labourers and operators are available at CRTS at a rate of \$75/hr, but equipment may need to be rented at a rate of \$125/hr and a mob/de-mob fee of approximately \$500. New informational signage and directional line painting will be necessary.

The cost of a shed varies with size and model. Based on pricing from Global Industries (Figure 1), a metal garage approximately the size of a two-car garage $12w \times 32l \times 8h$ (2169 ft³) with a roll-up door, is \$4,400 including the cost of freight. Pricing from Future Buildings² (Figure 2) for a steel garage kit $16w \times 32l \times 17h$ (8704 ft³) is \$26,000 including freight, as of Aug. 12, 2015. Table 1 gives greater detail on short term pricing estimates.

Figure 1 Global Industries DuraMax Metal Garage



Figure 2 Future Buildings Steel Garage Kit



Global Industries, Buildings and Storage Sheds, DuraMax Large metal Garages with Roll-Up Door,
http://www.globalindustrial.ca/g/outdoor-grounds-maintenance/sheds/metal-storage-sheds/duramax-large-metal-storage-garage-with-door-accessed: August 4 2015

² Future Buildings, Steel Garage Kits, http://www.futurebuildings.com/future-steel-products/steel-garage-kits.html/nggallery/page/1
Accessed: August 17, 2015

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Table 1 Share Shed Pricing Estimate

Landfill									
	Amount	Unit	Per unit cost	Total					
Labour and Equipment	6	Hours	\$175	\$1,050					
Engineering	4	Hours	\$200	\$800					
Building	1	Each	\$4,000	\$4,000					
Building Delivery	1	Each	\$600	\$600					
Road Marking	ng 1		\$200	\$200					
Signage	2	Each	\$75	\$150					
			Total	\$6,800.00					
		CRTS							
Labour	4	Hours	\$75	\$300					
Equipment	2	Hours	\$100	\$200					
Mob/de-mob	1	Each	\$500	\$500					
Building	1	Each	\$4,000	\$4,000					
Building Delivery	1	Each	\$600	\$600					
Engineering	1	Hours	\$200	\$200					
Road Marking	1	Each	\$200	\$200					
Signage	2	Each	\$75	\$150					
32 00 00 00 00 00 00 00 00 00 00 00 00 00		- M. (1999)	Total	\$6,150.00					

Total Share Shed Short Term Cost Two Locations

\$12,950.00

Long Term Costs

A Share Shed will require regular housekeeping by an attendant in maintaining the Share Shed, including directing customers and general tidying. Depending on the location of the shed, one additional Attendant at each location may be needed to monitor the area at a rate of \$33/hr.

Table 2 Labour Estimate

Landfill							
	Personnel	Amount	Unit	Per unit cost	Total per day	Total per week	Total per year
Labour	1	8	Hours	33	\$312	\$2,184	\$96,096
			CRT	S		•	
Labour	1	8	Hours	33	\$312	\$2,184	\$96,096

Total Labour Both Locations

\$624 \$4,368 \$192,192

REGULATORY AUTHORITY

Should the RDN decide to move forward with implementing Share Sheds at the Landfill and CRTS, there does not appear to be any changes necessary to RDN authority regarding this program.

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SUMMARY

Share Sheds give customers the opportunity to donate items in good condition for re-use by others instead of landfilling; the sites could take on a similar program to that of the Capital Regional District, where items are donated to local thrift stores. From the customer's perspective, the option to donate good quality items at the facility is preferable to landfilling or traveling to a thrift shop. Feedback from facilities that currently offer a Share Shed program indicate that the program is extremely popular with customers, and Attendants at both RDN facilities often see re-useable items being landfilled.

The installation of Share Sheds at the CRTS and the Landfill could result in some waste diversion as items are donated instead of landfilled. The introduction of Share Shed programs at the Landfill and CRTS could result in waste diversion of 160-243 tonnes per year, or a 0.31% - 0.45% diversion rate.

Installing Share Sheds would have a number of short term costs including site preparation, engineering, buildings and signage; Capital costs to introduce Share Sheds at the two facilities could be approximately \$13,000. Over the long term, and depending on the location of the Share Sheds, there could be additional labour costs in running the program as one additional Attendant may be required for maintenance purposes; annual operating costs could be approximately \$190,000 per annum for the two sites.

Report Writer

General Manager Concurrence

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