

<b>Project #</b>	<b>42-17-01</b>	<b>Project Title</b>	MRF Roof Replacement
<b>Department</b>	<b>Solid Waste</b>	<b>Manager</b>	Alex Beyer
<b>Phase</b>			
<b>Budget Action</b>	Update, Delay	<b>Date</b>	March 2, 2015 Revised April 1, 2016

CAPITAL BUDGET SUMMARY						
Year	2015	2016	2017	2018	2019	Total
Project Phase			Construction	Construction		Project
Expenditure Budget			55,000	55,000		110,000
Revenue Budget			(55,000)	(55,000)		(110,000)
Net County Cost	0	0	0	0	0	0
<b>COST DOCUMENTATION</b>				<b>REVENUE</b>		
Architect/Engineering		0		State Grant		0
Land		0		User Fees		0
Land Improvements		0		Other		110,000
Building		0				0
Building Improvements		110,000				0
Plans		0				0
Project Manager/Contractor		0				0
Site Preparation		0				0
Equipment		0				0
Furniture		0				0
Fixtures		0				0
Advertising/Legal Notices		0				0
Total Project Cost		110,000		Total Revenue		110,000
Expenditure Budget		0		Revenue Budget		0

**Project Scope & Description:**

The Materials Recovery Facility (MRF) roof is composed of three sections, two of which are past their expected twenty year lifespan. One section was replaced in 2014. It is anticipated that the other two sections will also need to be replaced in the coming years. The work will include installation of 0.060 mil EPDM single-ply membrane roofing and associated work, including (but not limited to) replacement of insulation as needed, installation of flashing and membrane sheet joint sealers.

Contractor will remove and re-use existing stone ballast (rock). Remove and dispose of existing roof membrane. Remove and dispose of wet insulation and replace with new insulation of same thickness. Furnish and install a 0.060 mil un-reinforced EPDM ballasted roofing system. Furnish and install new 24 gauge gravel stop. Furnish and install termination bar. Furnish a watertight warranty. Provide products recommended by manufacturer to be fully compatible with existing substrates. Provide separation materials as required to eliminate contact between incompatible materials.

**Location:**

Material Recovery Facility, 600 Moore Road, Plover. Roof sections over the MRF tipping floor and storage area.

**Analysis of Need:**

The MRF is over twenty years old; the roof is past warranty and reaching the end of its expected lifespan. After several leaks over the processing area, that section of roof was replaced in 2014. The remaining two sections of the roof appear to be in better shape and have not had any leaks as yet. The remaining roof sections have far fewer penetrations, this has allowed them to last longer without leaking issues. The remaining two sections do not cover any office areas, limited or no processing equipment and limited HVAC components. Due to the lack of leaks and limited potential damage that would be caused by a leak, the roof will continue to be monitored and replacement will be scheduled once warranted. Replacing the roof soon after issues develop will limit the amount

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of moisture that contacts the insulation and limit the costs associated with replacing the insulation. During the 2014 roof replacement work, the contractor assessed the remaining two sections and believed that replacement would not likely be warranted immediately as long as the roof sections are not leaking or otherwise adversely affected by weather events.

Alternatives:

Roof leaks can continue to be repaired as they occur. Repaired areas tend to fail again. Repeated leaks in the same area increase the potential for the underlying insulation to need replacement, rather than allow it to be reused with a new roof.

Both roof sections could be replaced this year, or at any time prior to developing any leaks.

Ongoing Operation Costs:

In 2013, over \$2,000 was spent on roof repairs, that number fell to \$0.00 for 2014 and 2015, once the new roof section was installed. Once leaks begin developing, repairs will likely have to be made repeatedly, at a cost of \$300-\$400 per occurrence. Repair costs for the remaining two sections will likely be less than \$2,000 per year per section due to the limited number of penetrations. Roof leaks do have the potential to damage equipment, disrupt processing, and water damage can negatively affect the quality of paper and cardboard products sold out of the MRF.

Previous Action:

2014-2019 Capital Plan: Approved as new project and one roof section replaced.  
2015-2020 Capital Plan: Updated expense estimates and accelerated the project.  
2016-2021 Capital Plan: Update.