

Minnesota Correctional Facilities



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Company Background

The Minnesota Department of Corrections is a state agency that operates 10 prisons around the state. The facilities are located in Faribault, Lino Lakes, Moose Lake/Willow River, Oak Park Heights, Red Wing, Stillwater, Togo, Saint Cloud, Shakopee, and Rush City. Correctional



facilities house, feed and provide medical care to offenders as well as providing treatment, education, and employment through internal industry and maintenance of facility operations.

"My experience at the Department of Corrections taught me how to solve problems both on the ground and at an institutional level. Understanding how to translate individual solutions into department-wide best management practices will help me continue to develop economically viable solutions to sustainability problems throughout the rest of my career." ~ MK

Project Background

The Lino Lakes project was focused on determining waste streams throughout the facility, how they moved through the facility, and where were the best opportunities for waste reduction. Understanding what waste streams exist, how they move, and how much they cost will serve as a basis for recommending waste and cost reduction solutions at the facility. Findings from the Lino Lakes project were incorporated into a waste management toolkit that details best practices for prison waste reduction to be used by all other correctional facilities in the state.

Incentives To Change

The Governor's Executive Order 17-12 passed in 2017 and requires all state agencies to achieve a 75% recycling rate by 2030 and report annual recycling data to the Minnesota Pollution Control Agency (MPCA). Department of Corrections facilities began collecting data on their recycling rates and streams in 2015 in compliance with state statute 115A.15. According to this data, the Lino Lakes facility currently has a recycling rate of 43%.

"The Minnesota Department of Corrections is committed to reducing our impacts on the environment. The MnTAP internship program provided a focused look into our current products, processes and waste streams. The tools Maggie has developed will assist us to standardize our Waste and recycling approach throughout the Minnesota Department of Corrections. Maggie's adaptability, enthusiasm and ability to gain support from staff was a great asset to our project. We appreciate all the work that Maggie has provided and know that she will be successful in her future endeavors".

~ Alice Remillard State Program Administrator Principal Minnesota Department of Corrections

Solutions

Re-design Offender Tray Return

Organic waste generated in the kitchen department is the highest contributor to landfill waste at Minnesota Correctional Facility-Lino Lakes (MCF-Lino Lakes). Most of this landfill waste is disposed of in a landfill because it is commingled with non-organic waste on offender trays. By sorting non-organics from organics when trays are returned, MCF-Lino Lakes can divert 400,000 lbs of organic waste from landfills and increase the recycling rate by 30%.

Standardize Recycling Bins

Standardizing waste bins throughout a facility can make it easier for departments with diverse waste streams to properly sort and dispose of waste. MCF-Lino Lakes has been awarded a grant from Anoka County for \$20,000 to better dispose of waste, which can be used to purchase standard bins. Diverting recyclable materials using this system can increase the recycling rate by 7-9%.

Account for Un-recorded Waste Streams

MCF-Lino Lakes uses a service that collects and reuses pallets. This method of recycling was previously unrecorded. Now that it is recorded, this recycling method increases the recycling rate by 1-2%.

Reduce Compactor Pickups

Waste Management charges the facility both by waste weight and per pickup of each compactor. Currently, when picked up, most compactors are less than half full. By reducing compactor pickups, the facility can save \$14,500 annually.

Introduce Plastic Film Collection

The warehouse department receives large shipments of products daily. These products are wrapped in plastic film that was previously being thrown away. By introducing a plastic film recycling program, the facility can save \$400 and recycle 8,000 lbs of plastic annually.

Eliminate Small Can Liners

Facility waste in small bins is not wet or difficult to manage. Therefore, small can liners are not necessary. Eliminating small can liners can save the facility \$7,400 annually.



Recommendation	Annual Reduction	Annual Savings	Status
Re-design offender tray return	400,000 lbs	\$24,400	In progress
Standardize recycling bins	95,000 lbs	\$4,000	Recommended
Account for unrecorded waste streams	33,000 lbs	N/A	Implemented
Reduce compactor pick-ups	N/A	\$14,500	Recommended
Introduce plastic film collection	8,000 lbs	\$400	Implemented
Eliminate small can liners	800 lbs	\$7,400	Recommended

MnTAP Advisor: Nathan Landwehr, Waste Reduction Specialist