Food Waste Reduction in Correctional Facilities



Case Study

Cedar Falls

Montezuma

Poweshiek County Jail | Montezuma, Iowa

Correctional facilities across the country are taking the initiative to reduce the amount of food wasted on a daily basis. It's not only better for the environment, but it results in lowering disposal costs. Especially for small facilities, these costs can be high with the distance needed to transport waste.

A study conducted for the Grocery Manufacturers Institute and Food Marketing Institute in 2012 estimated that food waste generated by prisons in the United States equals about 587,863,160 pounds with an estimate of one pound of food waste generated per meal per inmate. The Poweshiek County Jail serves three meals per day per inmate. This data helps with the first step of reducing food waste, an audit.

In the summer of 2016, Jenny Trent, Environmental Specialist at the lowa Waste Reduction Center began talking with Ben Anderson, the Deputy and Jail Administrator at the Poweshiek County Jail. With interest in reducing their food waste, a food waste audit and waste sort was scheduled.

Right: Lead dispatch jailer, Jay exhibits the inmates favorite lunch, peanut butter and jelly sandwiches.





Left: Located in Montezuma, IA, the Poweshiek County Jail averages 20 inmates at any given time but can hold up to 50.

The Iowa Waste Reduction Center and the University of Northern Iowa are equal opportunity providers and employers.

1-319-273-8905 iwrc.uni.edu/food-waste

Waste Sort Results for 18 inmates

TOTAL AMOUNT OF food waste 2.4 pounds per meal

daily waste generation

7.2 pounds

DAILY ESTIMATE per inmate

0.4
nounds

Right away, Trent noticed there were things in place that help the facility keep its food and kitchen waste low. First is that the prepared meals are purchased from a private contractor. This results in less waste at the jail from food preparation because most of that occurs at the contractor's location. Second, food is served on reusable plastic trays along with one plastic reusable fork which means no disposable plates or silverware are discarded.

Daily inmate counts are provided to the food contractor so the number of meals served daily is accurate, however inmates can also purchase food items from the jail commissary.

SORTING THE WASTE

After each meal, any leftover food is thrown away in the garbage so on September 1, 2016, Trent visited the Poweshiek County Jail to conduct the food waste audit and waste sort to get a baseline to begin reduction and diversion efforts.

On that day, 18 inmates were served during the lunch period. Because of the use of the reusable plastic trays and forks, there were no plastics, non-compostables/ non-recyclables, or metals in the waste so only food waste was calculated.

Since the number of incarcerated inmates varies from day to day or even from month to month, the amount of food waste generated by Poweshiek County Jail is difficult to estimate on an annual basis. However, based on the waste sort, it is estimated that each inmate has a daily food waste generation rate of 0.4 pounds.

Based on an average of 20 inmates, that equals 2,920 pounds or 1.5 tons of food waste per year that ends up in the landfill. This amount is far lower than the estimates the Grocery Manufacturers Institute and Food Marketing Institute calculated in 2012, however it is impossible to calculate yearly food waste generation rates due to many variables involved in how many individuals will be incarcerated yearly at the Poweshiek County Jail.

During each of the three daily meals, the inmates food trays contain food, a drink packet, and the plastic reusable fork.



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