# Introducing Products to Reduce Waste at the Commissary in the Ohio Reformatory for Women



Lily Bucciarelli, Arabel Clinchot-Diaz, Olivia Severyn & Kenedy Witherow

School of Environment and Natural Resources, The Ohio State University

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Project Contact: Olivia Severyn

Severyn.14@osu.edu





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# **Executive Summary**

This report provides the Ohio Department of Rehabilitation and Correction (ODRC) with research regarding opportunities to reduce waste and offer a more sustainable selection of products in the commissary at the Ohio Reformatory for Women (ORW). ODRC has robust sustainability goals and has been actively working towards habitat conservation and reducing energy, water consumption, and waste. In 2019, ODRC set the goal to reduce the amount of waste sent to landfills by 25% from a 2017 baseline by 2020 (Ohio Department of Rehabilitation & Correction, 2019). They are highly motivated to reduce waste to lessen the impact on the environment and due to potential cost savings through reduced waste hauling fees. However, ODRC has identified that the commissary system is an area currently requiring improvements. At the commissary, the incarcerated population can purchase food and personal hygiene products, most of which are packaged in single-use plastics. This project seeks to aid ODRC in reducing the amount of waste generated at the commissary through evaluations of sustainable products and alternative packaging methods, including recyclable or compostable options and reusable containers. To inform our decisions about waste reduction methods, we conducted a waste audit at ORW and analyzed waste hauling data.

A crucial aspect of this project involved listening to insights from the incarcerated population in order to best provide successful and relevant recommendations. Upon gathering feedback from the incarcerated population, through a survey distributed at ORW, it was found that having access to healthy products is a top concern for many women. Thus, the recommended product list includes those that are environmentally sustainable, as well as those offering health benefits for the incarcerated population, with recommendations tailored specifically for ORW. However, upon successful implementation, these sustainable purchasing policies and

recommendations can be adopted by other ODRC facilities across the state. The final recommendations include a list of sustainable food and personal hygiene products to be added into the commissary, as well as potential vendors that ODRC can use to source these products. These products include shower essentials, dental care, feminine products, vitamins, and healthy food products.

#### Introduction

#### **ODRC** and **ORW** Overview

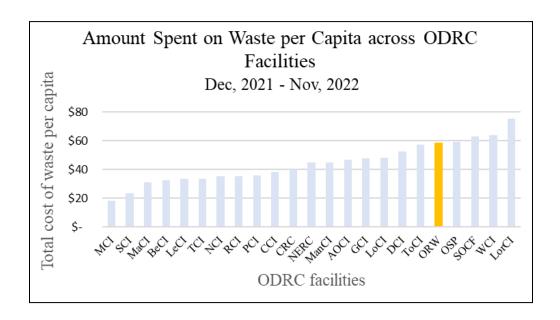
Ohio Department of Rehabilitation and Correction (ODRC) is the state agency tasked with operating prisons all throughout Ohio, with the mission to reduce recidivism among those that reside in these facilities. Currently, ODRC houses approximately 50,000 incarcerated individuals across the 28 rehabilitation and correction facilities. All of these facilities have commissaries, which are shops where the incarcerated individuals can purchase items they would like with their personal funds, such as personal hygiene products, snacks, over the counter medicines, and stationery.

The Ohio Department of Rehabilitation and Correction "is committed to enhancing the ecological and economic sustainability of our agency by integrating environmentally sustainable practices into our policies, procedures, and operations" (Chambers-Smith & Hildebrand, 2012). In recent years, ODRC has committed to sustainability goals related to water consumption, energy consumption, landfill waste, habitat conservation, and fleet fuel consumption. Strategies taken to reduce waste at ODRC facilities have included increasing food composting programs and exploring partnerships for textile and shoe recycling (Ohio Department of Rehabilitation & Correction, 2019). Despite current efforts underway to divert waste, there are still many great

opportunities to reduce waste from product packaging at commissary facilities. Furthermore, our research of the corrections industry revealed that there are no existing initiatives to provide more sustainable products to incarcerated populations through commissary facilities. This research addresses a critical gap in the industry today.

The Ohio Reformatory for Women (ORW), located in Marysville, Ohio, is a women's facility run by ODRC. The all-female prison currently houses about 2,200 individuals. ORW was selected as the focus for this project because it generates one of the highest amounts of waste sent to landfills and spends the most on waste disposal costs out of all the ODRC facilities. As shown below, in the past year, ORW has been spending approximately \$58 per capita on waste, while other facilities spend as low as \$20 per capita on waste.

Figure 1. Comparison of per capita waste costs across the 23 ODRC facilities with data available



#### Research Goal and Set of Objectives

The primary research goal of this project is to provide feasible recommendations for ORW on how to reduce the waste generated from the commissary while maintaining health, safety, wellness, and affordability for incarcerated individuals as top priorities. We intend for our research to inform ODRC in their decision-making and purchasing to ultimately supply ORW with a more sustainable product selection.

To achieve these goals, the following objectives were created and executed:

Objective I: Identify opportunities for waste reduction at ORW through a waste audit and analysis of waste hauling data.

Objective II: Distribute a survey and utilize the results to understand the incarcerated population's preferences and opinions about the commissary.

Objective III: Research the feasibility of switching some commissary items to alternative packaging such as compostable or recyclable packaging, and reusable containers.

#### Summary of Methods

To better understand how ORW can minimize the waste generated from the commissary, we visited the institution to learn about the current commissary products and practices. Touring the facility was a necessary step to help us better understand the operations and experiences of the incarcerated population at ORW. Our team conducted interviews with two incarcerated individuals, who are members of ORW's Green Team, as well as the commissary manager to discuss the inner workings of the commissary. Shortly after our visit to the institution, 120 surveys were distributed to incarcerated individuals within a dormitory to learn more about their

commissary preferences and requirements. A waste audit was conducted in the commissary and in a dormitory to gauge the amount of both the pre-and post-consumer waste generated by the commissary. The waste audit results were used to identify which types of products generated the most trash, revealing opportunities for waste reduction and diversion.

# **Project**

#### Tour of the Ohio Reformatory for Women

We visited ORW on October 6th, 2022. In an attempt to prepare for the visit, our team had begun conducting research on potential products, many of which ended up being discarded because of the perspective change as a result of the visit. The tour of ORW and its commissary revealed the challenges that the manager of the commissary faces regarding storage, inventory maintenance, and availability of products.

Incarcerated women can shop at ORW's commissary every two weeks. The women are assigned groups that shop at specific times throughout the two-week period. The commissary manager at ORW strives to ensure that all products are available for everyone, no matter when they shop. The commissary building does not have heating or air conditioning, so products there must be shelf-stable. There is one walk-in refrigerator in the commissary, but it is small and cannot store many products. The incarcerated population does not have access to refrigerators or freezers, so any non-shelf-stable products purchased must be consumed quickly. Another explanation for the commissary's storage problem is the size of the commissary building itself. The limited size makes it difficult to offer new products without replacing others, which would potentially upset the incarcerated population. The prices in commissary are adjusted to be

reasonable for the population given their wages, but with a range of needs and different financial statuses, it is difficult to accommodate everyone.

Figure 2. Photos of the commissary booths at ORW



#### Green Team Interview

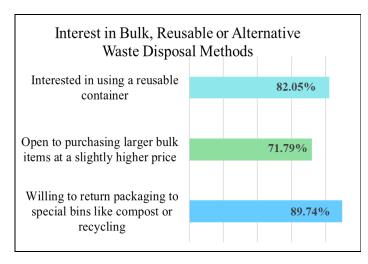
ORW has a Green Team, which is a group that incarcerated individuals can voluntarily join if they have an interest in learning about sustainability and have a desire to participate in environmental initiatives across ORW. We had the opportunity to interview two passionate Green Team members. They communicated that while waste is a major problem and that they would enjoy seeing more recyclable or compostable products, they raised concerns about their health and the health of their community overall. They stressed their desire for fresh produce, vitamins, and organic personal care products since these healthy options are not currently available or are very limited at the commissary. Based on these insights, we widened the project scope to include both environmentally sustainable products as well as healthier alternatives, all of which would display ODRC's commitment to reducing waste and improving health.

#### Surveying the Incarcerated Women

To ensure that the sustainable products provided would also enhance well-being and satisfaction within the incarcerated population, we surveyed the population to assess overall attitudes and opinions related to the commissary at the Ohio Reformatory for Women. A total of 120 surveys were distributed and the results are derived from 39 voluntarily returned, paper surveys. The surveys were distributed in general population dormitory, as opposed to a particular class or program group, in order to gather a diversity of opinions and results that more accurately represent the larger population.

Surveys assessed opinions about product selection, new product recommendations, and attitudes toward potential changes within the commissary that could help reduce waste. Participants were asked to rank their overall opinion of the commissary on a 1-10 scale (10 being very satisfied). The average score was 4.7, indicating a neutral-poor opinion about the overall commissary experience. Results gathered that each individual spends on average \$92.35 per visit. Regulations allow incarcerated individuals the opportunity to shop at the commissary twice per month, so on average, each individual spends about \$200 per month on products at the commissary. The incarcerated individual's budgets come from paychecks they earn from working jobs at the facility, but a large chunk also is contributed from the incarcerated individual's family.

The survey also attempted to assess how the individuals would feel about using more sustainable products such as reusable containers, purchasing in bulk, and their willingness to properly return their product packages to designated waste areas, including recycling and compost bins. Some key results are shown in the figures below.



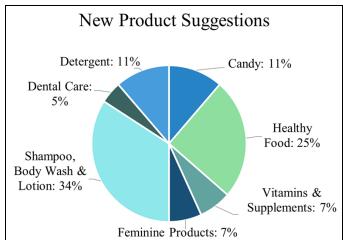


Figure 3. Survey results about incarcerated individuals' interest in reusable containers, bulk purchases, and recycling or composting packaging.

Figure 4. Survey results of the incarcerated individuals' feedback on new product suggestions.

Many individuals indicated an interest in healthier foods, including items such as whole-grain bagels and pasta, rice cakes, fresh vegetables, canned greens, and applesauce. There is also interest in prenatal vitamins and nutritional dietary supplements. A more diverse personal hygiene product selection is also in high demand. This feedback is crucial in informing a product selection that will increase incarcerated individuals' satisfaction in the commissary whilst also benefiting the environment.

#### Waste Data Analysis

ORW spends the most on waste disposal and produces the most waste out of all the ODRC facilities. Table 1 displays the total monthly waste from the entire facility in terms of cost and weight. Data was gathered from JadeTrack, a utility tracking service used by ODRC. Data on specific commissary waste is currently not available; however, an examination of total waste presents a picture of what is happening inside the facility. The average cost of waste throughout

the facility per month is \$13,803, and the average weight is 106 tons. For the 2022 fiscal year, waste cost \$165,641, which is correlated with about 1,300 tons of waste.

|         | Disposal Cost (\$/tons)<br>Jul 2021 - Jun 2022<br>(11 months) | Disposal Weight (tons) Jul 2021 - Dec 2022 (17 months) | Disposal Weight (tons) Jan 2022 - Jun 2022 (5 months) |
|---------|---|--|---|
| Average | \$ 309.27   | 5.49   | 4.61  |
| Median  | \$ 360.00   | 6.19   | 4.53  |

Table 1. Waste charge detail analysis table shows the average and median cost per disposal charge and weight of the dumpster haul.

The waste charge detail shows the cost of different waste collection services from July 2021 through June 2022. The most relevant charges to this project were disposal and hauling, which make up the costs of trash service pickup. Every disposal charge comes with a \$360 standard hauling charge, and there are approximately 15-20 disposal charges per month. Along with the standard hauling charge, ORW is charged \$52 per ton of trash thrown away. The average 30 cubic yard dumpster holds about 3.5 to 5 tons, which are estimated to be 150 to 180 ten-gallon trash bags of standard household waste (Dumpters.com, 2022). However, some staff have observed that the dumpsters do not appear to be full when they are taken. The waste detail charge showed that at least once per month, trash collectors came even when the dumpster was empty. This indicates that there may be an inefficient use of trash services occurring. Additionally, the first half of the fiscal year shows a significantly higher average and median weight of disposal than the second half of the year.

A waste audit was performed on the dumpster behind the commissary and on a bag from a trash bin placed in one of the dormitory halls. These samples were used to represent what waste generally looks like in both areas, back-of-house and post-consumer. Items were sorted based on material type to help determine whether items were being properly disposed of or not. When analyzing the dormitory trash, the results showed that commissary makes up about a third of ORW occupants' everyday trash and that approximately 23% of trash waste comes from compostables, paper, plastic, and cardboard. This means that about a quarter of waste produced from dormitories already has the potential to be diverted from the landfill. An analysis of the dumpster behind the commissary found that 75% of the waste found in the trash was cardboard. Approximately 98% of commissary trash has the potential to be diverted from the waste stream.

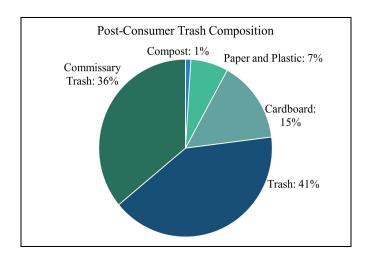


Figure 5. Shows the percent composition of different items based on weight compared to total weight of a trash bag sampled from one of the dormitories (8.2 lbs).

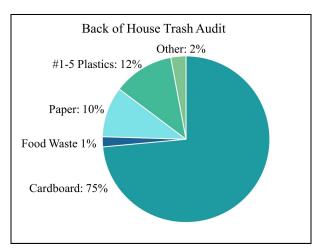


Figure 6. Items found in the dumpster behind commissary were categorized by material and were given a percent composition based on total weight of category compared to total weight of trash collected (121 lbs).

#### Recommendations

#### Sustainable Product Criteria and Restrictions

It is important to clarify the requirements that were prioritized when evaluating new potential products for ORW's commissary. The process began with discussions between our team and the project's main contact at ODRC, Cassidy Jenney. Our conversations highlighted specific priorities in the alternative products. These included prioritizing recyclable and compostable packaging, and products to help women take charge of their health. This encapsulates the health of their environment, community, and of their own personal health. The products, brands, and vendors recommended all have been evaluated for various advantages. Prioritized advantages of these products include certified B-Corporations, certified organic products, unbleached and untreated products and compostable packaging. These were criteria that the ODRC administration and incarcerated women all said they valued when it came to the commissary products.

Certified B-Corporation (B-Corp) is a holistic designation a business may receive by demonstrating high standards of verified performance, accountability, and transparency on factors ranging from employee benefits to supply chain practices and input materials. This project's specific focus is on the certified business's environmental policies which can support the project and ODRC goals (B Lab, n.d.). For more information on B-Corp requirements, visit <a href="https://www.bcorporation.net/en-us">https://www.bcorporation.net/en-us</a>.

Organic product certifications are equally important to the project. Although organic certifications alone do not further the initiative of reducing waste via ORW's commissary,

organic products, such as cotton, can help reduce the use of pollutants like pesticides and fertilizers. This aligns with our survey results that stated it is an important health concern.

In addition to the health and waste concerns, another primary consideration was the prison's supply restrictions and budget constraints of the incarcerated individuals. Products were carefully researched and selected to avoid items with glass or thin foil packaging due to safety restrictions on these materials. Products with prices similar to currently offered products were sought out to avoid exacerbating any affordability issues the incarcerated individuals shopping in the commissary may experience.

Finally, although not required, it was brought to our attention early on that clear packaging or products with a window would be preferred to add to the commissary since they can be searched more easily. An effort was made to find products with this feature.

#### Sustainable Product Recommendations

The products recommended to be introduced in ORW's commissary span across several categories, including shower essentials, dental care, feminine products, food and supplies, and vitamins. This broad focus helped to pinpoint products that would make a noticeable difference in the amount of waste produced. Waste disposal methods are also described with each product.

#### Shower Essentials

- Dr. Bronner's 3-1 bar (shampoo, conditioner and body bar)
  - This 3 in 1 bar comes in recyclable paper packaging. It eliminates the need for three separate shower items to be used and disposed of. It will save on costs while also being easy to carry and store. The incarcerated women have limited space for

their belongings, and the product's low profile could make it more appealing for the incarcerated population.

- Zero Waste Store shampoo, conditioner, and body bars
  - These products are similar to those mentioned above but are 3 separate bars that are each packaged in recyclable paper packaging.

#### Preserve razor

 Preserve is a certified B-Corp. The razor is made from recycled yogurt cups and the handle is recyclable.

#### Dental Care

#### • Bamboo toothbrushes

 Bamboo is a rapidly renewable resource and bamboo toothbrushes can be composted when the bristles are removed (Colgate, 2022).

#### • Toothpaste tabs

Toothpaste tubes are not recyclable via typical municipal recycling programs.
 Toothpaste tabs can be sold in compostable packaging that can be composted in ODRC's London, Ohio composting facility. Toothpaste tabs may also come in recyclable cardboard tubes.

#### Feminine Products

#### • Seventh Generation pads and tampons

 These pads and tampons are made from 100% unbleached, organic cotton and are packaged in recyclable cardboard.

#### Food and Supplies

#### • Bamboo cutlery

 Bamboo cutlery is compostable and more durable than plastic. Durability allows for a longer usable life, which further reduces waste.

#### • Nuts, dried fruit and granola

These are healthy snacks that are offered in recyclable bulk packaging, or in 1 ounce or 16 ounce packages that are 100% compostable. Many of these products are also sold in transparent packaging, which aligns with ODRC's packaging preferences. Sun and Swell packaging should be disposed of in bins labeled "Compost." The packaging can be composted in ODRCs composting facility located in London, Ohio.

#### • Simple Truth Foods (dairy, meat, grain and snack products)

Simple Truth is a product line of a wide-range of organic certified food products distributed by Kroger. Simple Truth is partnered with Terracycle, allowing all flexible plastic packaging to be returned to Terracycle facilities, where it can be recycled (Kroger Our Brands Free Recycling Program, n.d.).

#### Vitamins

 Offering vitamins in commissary does not directly decrease waste, but aligns with ODRC's mission in helping the incarcerated women build healthy lives. Types of vitamins offered should include multivitamins, pre- and probiotics, prenatals, pre- and post-menopausal supplements.

#### Recommended Vendors

All of our sustainable product recommendations come with vendor recommendations. The aim of the project was to limit the vendor recommendations list to five or less in order to avoid overwhelming ODRC with new vendors. The potential vendors include Kroger, Preserve, Sun and Swell, and the Zero Waste Store.

#### Kroger

- Kroger is a large online and in-store retailer that offers hundreds of different products and brands, including Seventh Generation feminine products.
- Adding Kroger as a vendor would allow ODRC to purchase more Kroger brand products in the future, such as Simple Truth foods. Simple Truth foods offers a range of healthy snacks and entrees (Kroger, n.d.).

#### Sun & Swell

• Sun and Swell is a certified B-Corp with wholesale options. Sun and Swell supplies organic snack foods in zero-waste packaging. All of their products are sold in compostable packaging (Sun and Swell, n.d.).

#### Preserve

- Preserve is a certified B-Corp that offers household products made from 100% recycled materials. They have a wholesale option that ODRC may choose to pursue.
- ODRC can also choose to purchase recycled plastic toothbrushes from Preserve and to partake in their takeback program, instead of purchasing bamboo toothbrushes from the Zero Waste Store (Preserve, n.d.).

#### Zero Waste Store

• The Zero Waste Store is an online store with a wholesale option. They offer zero-waste products such as toothpaste tabs, bamboo cutlery, and bamboo toothbrushes (Zero Waste Store, n.d.).

#### Alternative Recycling Strategy - TerraCycle

In tandem with new vendor recommendations, it is crucial to mention TerraCycle. TerraCycle is a company that accepts many non-traditionally recyclable materials such as chip bags and toothpaste tubes. TerraCycle shreds the materials and sells them to third-party partners to process into usable forms. While many of the products listed above are offered in compostable or recyclable packaging, TerraCycle is a solution for current products coming from the commissary. It could increase the ability of ODRC to add products that are desired for health benefits or preferences without increasing total waste. TerraCycle offers both free and paid programs for households and facilities alike, including products for relevant and popular products within ORW such as Colgate hygiene products and Gatorade products. TerraCycle also has a free program for all Kroger brand packaging, which would allow ODRC to purchase more Kroger brand products in the future if desired (Terracycle, n.d.).

#### Future Commissary Recommendations

In addition to the researched commissary substitutions and solutions, we have considered a few other sustainable options that ORW may choose to implement as they see fit. One option is to purchase products in bulk, and keep them in bulk bins behind the commissary. The incarcerated women could fill reusable containers during their commissary visit instead of purchasing single-use plastic products. For example, coffee is a common product purchased at

the commissary. Currently, the women at ORW are purchasing instant coffee in non-compostable and non-recyclable packaging. If ORW purchased instant coffee in bulk, it would be more sustainable by reducing waste, and also less expensive for the facility overall. Currently, storage space and product shelf life are limiting factors at the commissary. The transition to bulk systems will require future analysis on how to best navigate these logistical concerns.

Another option is to offer the option for the women to make their own shampoo bars and sell them at the commissary. Shampoo bars are relatively inexpensive to make and can be made using clean, organic materials that the incarcerated women have mentioned is important to them. The materials can be purchased in bulk which would save the ORW facility money and could be kept behind commissary in compostable or no package at all. These shampoo bars could be made in large batches and then sold to the general population of ORW at the commissary for profit, while simultaneously reducing the plastic waste that traditional shampoo bottles create.

We understand there are trade-offs to consider and that sustainable products are often more expensive than other options. We know ODRC will have to manage costs, and it is important to ensure there are options to choose from in the future.

# **Product Waste Savings**

An analysis of the cost of waste per item revealed that most of the alternative options are likely to provide a decrease in waste cost as well as reduce the overall volume of waste. Switching to bar soaps with compostable or smaller packaging can completely remove, or at least half, the cost of waste. Switching toothpaste brands would also remove the waste costs and hopefully increase oral health by switching to a more effective brand which was listed as a concern by staff and occupants. After examining the feminine products, it seems that the most

cost-effective option is providing packages with a larger number of products inside or perhaps even bulk options.

Table 2 and Table 3. Show estimated waste cost savings compared to the current product based on the estimated maximum number of purchases per month and weight of package waste.

| Item name                              | Current Soap:<br>Softee 3-1<br>Conditioning<br>shampoo | New Option: Dr.<br>Bronner's Pure<br>Castile 3-1 | Current Tampons: Tampax regular flow 10 count | New Option:<br>Seventh Generation<br>regular tampons 18<br>count |
|--|--|--|---|--|
| Retail Price                           | \$15.23  | \$5.01   | \$6.36  | \$7.00   |
| Estimated Cost of Waste per Month (\$) | \$0.33   | \$0.00   | \$6.06  | \$2.85   |
| Estimated Cost of Waste per Year (\$)  | \$3.90   | \$0.00   | \$72.77                                       | \$34.26  |
| Product End of Life                    | Landfill   | Compostable                                      | Landfill                                      | Recyclable   |

| Item name                              | Current Pads:<br>Always<br>Maxi-Pads<br>Super Long 60<br>Count | New Option: Seventh Generation Maxi-Pads Regular Absorbency 24 Count | Current Toothpaste: Colgate Fluoride Anti-Cavity Protection (8 oz) | New Option:<br>Fluoride Unpaste<br>toothpaste tabs<br>(125 tablets) |
|--|--|--|--|---|
| Retail Price                           | \$10.50  | \$4.99   | \$1.99   | \$10.99   |
| Estimated Cost of Waste per Month (\$) | \$4.87   | \$6.52   | \$0.04   | \$0.00  |
| Estimated Cost of Waste per Year (\$)  | \$58.43  | \$78.19  | \$0.46   | \$0.00  |
| Product End of Life                    | Landfill   | Recyclable   | Landfill   | Compostable   |

## **Next Steps**

Other discoveries have been found throughout the research process identifying potential improvements that the Ohio Department of Rehabilitation and Correction could pursue following the conclusion of this project. Firstly, the data gathered from the waste charge detail and the waste audit provided insight into the current state of waste management. It is recommended that ORW staff reviews the trash pick up schedule, and that staff and occupants are provided more education on sorting waste into compost, recycling, and waste disposal. The evidence collected from the waste charge detail suggests that there may be multiple unnecessary trash collections per month. This results in inefficient spending and further negative environmental impacts due to greenhouse emissions from garbage truck travel. As waste is reduced, these inefficiencies will continue to increase. It is recommended that a deeper analysis into the current trash pick up is done by a future Ohio State EEDS Capstone Project.

Furthermore, overall education about environmental issues and proper disposal methods for the incarcerated individuals, as well as for the staff at ORW, could greatly reduce unnecessary trash entering the waste stream. There are currently recycling bins placed throughout the facility, but it would be beneficial to add specific signage to these bins to help occupants understand what can and cannot be recycled. We recommend that these signs include universal images of products to ensure that the entire population can understand what can be recycled, even those who are not fluent in English. Composting bins in ORW could be a relatively simple addition, because ODRC has composting facilities available to them via the ODRC composting facility in London, Ohio. Placing compost bins next to the recycling bins could help ensure that products are being properly disposed of. Again, it is suggested that these compost bins are accompanied by easy-to-follow signs and images to allow for proper disposal.

Every year, ORW has a summer field day where the incarcerated women get to play games and experience fun activities in the main yard of the prison. It could be advantageous for one of these field days to be a zero-waste event. ODRC could use this as an opportunity to further educate the general population on proper techniques for recycling and composting, as well as utilize this as a time to supply the incarcerated individuals with food or drink products that are in compostable, reusable, or recyclable packaging. Cassidy Jenney and other staff members have already expressed great interest in this idea, and this project supports the need for this idea to come to fruition.

### **Final Summary**

This project has considered many different factors when carefully selecting which sustainable products to add to the commissary at the ORW. The finalized list of alternative products includes a range of item categories from personal hygiene to vitamins to cutlery. The hope is that ODRC will have a solid foundation of products and vendors to implement into ORW's commissary to reduce landfill waste and its environmental footprint.

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# **Appendices**

**Dataset** #1: 1\_Survey\_Results.xlsx

*Source:* The Ohio Reformatory for Women. Survey results from incarcerated women. Received October 26th, 2022.

These survey results were used to inform our decisions on potential products for ORW.

They helped us understand how important the commissary is to the incarcerated population.

**Dataset #2**: 2\_Visit\_Notes.docx

*Source*: The Ohio Reformatory for Women. Notes from conversation with 2 incarcerated women, Cassidy Jenney, Kevin Van Oss, and Rhinehart regarding the commissary system and preferences. In-person visit on October 6th, 2022.

The visit to ORW helped shape our entire project. We were able to hear opinions first-hand from the incarcerated women and ask questions about what they would like to see, as well as learn how commissary works and see the products that are offered.

**Dataset #3:** 3\_Store\_Item\_List\_9.13.22.xlsx

*Source:* The Ohio Reformatory for Women. List of commissary items from Officer Rhinehart, head of commissary. Received September 13th, 2022.

This list was provided to us by the director of commissary, Officer Rhinehart. This provided us with great information to begin with and find gaps in offered products, or identify basic sustainable products (such as bamboo toothbrushes, bamboo cutlery, etc).

Dataset #4: 4 Product Prices.xlsx

Source: Lily Bucciarelli and websites cited in spreadsheet.

This information was found online using product information from vendors and online calculation tools to determine the costs of waste associated with current and potential products.

Dataset #5: 5\_Waste\_Costs\_Across\_ODRC\_Facilities.xlsx

Source: Jadetrack Database, Ohio Department of Rehabilitation and Correction.

This information was shared to us from Jadetrack, ODRC's dedicated database to track energy and waste costs, and other utilities. This information showed us ORW's waste costs per capita and provided an example as to why ORW was chosen as a focus location.

Dataset #6: 6\_Waste Audit, Commissary\_and\_ORW\_Total\_per\_Month.xlsx

Source: The Ohio Reformatory for Women, Cassidy Jenney and Kevin Van Oss.

The waste audit was provided to us by Cassidy Jenney and Kevin Van Oss. They performed a waste audit on the dumpster behind the commissary and on a bag from a trash bin in one of the dormitory halls. Items were sorted based on material type to help determine whether items were being properly disposed of. These samples were used to represent what waste generally looks like behind the commissary and in dormitory areas.