Composting is a novel method of waste disposal that diverts organic materials, such as food scraps and paper, from the landfill to a facility where the waste can be treated and broken down back into soil. Addressing how composting might be a more efficient waste disposal option is a timely and relevant question for office settings invested in staying current with a green agenda. If your office is interested in integrating compost to your established waste stream, consider taking some basic steps towards assessing the development of a program.
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Composting Office Template

[Template for any office building]

This template is designed for implementing composting practices in the office setting. Here are some basic but important questions you’ll need to answer to discern what procedures will work in your facility. Ascertaining as many specifics as possible is important for practical composting solutions.

1. What type of material is produced?

<table>
<thead>
<tr>
<th>Compost</th>
<th>Food scraps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Soiled paper products (napkins, plates, bowls, bags)</td>
</tr>
<tr>
<td></td>
<td>Compostable utensils</td>
</tr>
<tr>
<td></td>
<td>PLA cups, lids, and straws</td>
</tr>
<tr>
<td>Landfill</td>
<td>Plastic products (utensils, straws, lids)</td>
</tr>
<tr>
<td></td>
<td>Packaging (bags, containers, wrappers)</td>
</tr>
<tr>
<td>Recycle</td>
<td>Plastic bottles</td>
</tr>
<tr>
<td></td>
<td>Aluminum and metal cans</td>
</tr>
<tr>
<td></td>
<td>Clean paper (printer paper, newspaper, cardboard)</td>
</tr>
</tbody>
</table>

- Keep in mind that some items in your material stream may be a challenge to compost. To facilitate composting and material diversion, consider collectively or individually altering consumer habits.

2. What changes in your material stream and disposal need to be made?

Example:

<table>
<thead>
<tr>
<th>Staff</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custodial</td>
<td>Training, transporting material between bins within the office and a larger dumpster outside of the office</td>
</tr>
<tr>
<td>Purchasing</td>
<td>Purchase office supplies in bulk, encourage buying compostable packaging, buy reusable materials</td>
</tr>
<tr>
<td>Receptacles</td>
<td>Implement fewer individual landfill receptacles and encourage a centrally located compost bin</td>
</tr>
</tbody>
</table>

3. What amount of material is produced?

- The best way to assess what type of material is produced and in what quantity would be to conduct a waste audit or visual assessment in order to form a specific plan viable to the scale of your operation.
• Knowing the amount of material produced is important when trying to coordinate material pickups.
• Consider the visual assessments conducted and reported in the office case study on page 3 – 16.

4. ] What are the locations of your office material bins?

• Frequent and regular bin collection is a crucial aspect to successful office composting efforts.

5. ] What new materials are needed to initiate an office composting effort?

• Bins, signage, compostable bags.

6. ] Raising awareness for the new composting policies:

• Signage, announcements at office meetings, rules, incentives.
• Some employees may react negatively to composting initiatives in the office.
  o It is helpful to provide these people with additional information to help them adjust to the idea of composting.
  o Clarify that office composting will not generate any foul odors; it is the same material as before, only now we are separating compost from landfill waste!
Memorial Union / UC Extension

Case Study
Memorial Union/UC Extension Offices Case Study

Coordinators: R4 Recycling and Davis Honors Challenge

Purpose: To ascertain the best strategies for implementing composting procedures in the office setting on the 4th floor of the Memorial Union (MU), as well as learn from an already implemented composting program at UC Extension office.

Procedure:
1.) Performed interviews with offices on the 4th floor of the MU.
2.) Conducted a visual assessment of offices to determine what type of material is being produced.
3.) Performed an interview with UC Extension to learn about their step-by-step process of successfully implementing a composting program in their offices.

Definitions of Terminology

Biodegrade - The process where materials break down or decompose by the action of living organisms.

Compost - A mixture of decaying organic matter, as from leaves, food scraps, and paper products, used to improve soil structure and provide nutrients.

Compostable - A material that breaks down to become what is effectively soil. It contains no toxins and can support plant life.

Contamination (as related to compost) - Incorrectly placed materials in the compost that should belong in the landfill or recycle bin.

Diversion - Diverting material from the landfill, either by composting or recycling.

Recyclable - Materials that can be collected, separated, processed, and made into new products.


Zero Waste - A “whole system” approach that seeks to reduce the amount of consumption, minimize waste, maximize recycling, and ensure that products are made to be reused, repaired, or recycled back into nature or the marketplace.
UC 2020 Zero Waste Goal

UC Recycling and Waste Management
Each campus will submit for certification one pilot building at a LEED-EB “Certified” level or higher by July 1, 2008

To facilitate the implementation steps for the policy, campuses will develop an inventory of buildings that meet the scope eligibility requirements above, and then group these eligible buildings into categories of buildings with similar operational and maintenance needs. Campuses will submit proposed core credits for one of the building type groupings identified above and any campus wide core credits to the U.S. Green Building Council by July 1, 2009. A core credit is a credit that will be sought for either all scope eligible buildings on a campus, or for all buildings within a building type group.

By July 1, 2009, the University will evaluate efforts to date and develop an implementation plan and funding strategy toward a goal of achieving campus wide LEED-EB certification.

Recycling and Waste Management

a. In response to Public Resources Code Section 40196.3 which states that the Regents of the University of California are encouraged to comply with code Chapter 18.5, the “State Agency Integrated Waste Management Plan” and in support of the California Integrated Waste Management Board’s goal for a “zero waste California”, the University voluntarily adopts the following waste diversion goals:
   - 50% by June 30, 2008
   - 75% by June 30, 2012
   - Ultimate goal of zero waste by 2020

b. All campuses will develop an Integrated Waste Management Plan (IWMP) and funding mechanism by June 30, 2007.

c. Waste reduction and recycling elements shall be integrated in Green Building Design and Sustainable Operation implementation goals and into campus operations as they are developed.

d. The University will seek to develop funding sources for financing waste reduction projects.

   Implementation Procedures for Recycling and Waste Management:
   - The IWMP will include current and future programs, dates of implementation, funding, and exact diversion numbers intended to meet goals
   - For purposes of reporting, the medical centers (and other traditionally exempted entities) (Satellite locations) at various campuses will be required to report solid waste and recycling tonnage to the campus entity collecting data for the report. Medical Centers and other exempted facilities are also required to meet diversion requirements. Exceptions will be considered for those entities which represent less than 1% of the overall campus solid waste tonnage.
MU 4th floor layout:

- **Campus Events and Visitor Services** (Blue marks the boundaries of this suite).
- **Communal MU Material Bins:** (landfill/compost/recycling).
- **Break/copy room for MU aux – contains compost bin.**
- **Memorial Union Auxiliary Services** (The rest of 4th floor, outlined in black).
A. Interviews

Interviewees:

- Lina Layiktez [Conference and Event Services]
- Alice Dellevati [Memorial Union Auxiliary Services]

Questions:

- Do you currently have material separation in place (i.e. different bins)?
  - If so, what separations are being made?
- Do you primarily sort before collection or after?
- Can you explain the layout of your collection (bins, location, at each desk)?
- Who collects your material, how often?
- How often is food being consumed in the office?
  - How many people eat in the office?
  - What type of material is generated?
  - With what frequency do you cater in (bagels, coffee, lunch)?
  - With what frequency do you bring lunch from home?
  - Do people go out to eat?
1. Lina Layiktez—Conference and Event Services
Interview held on 05/13/2010

Current bins/separation:
- Mini bin system – main blue receptacle for paper and attached black bin for landfill waste.
- Had a communal trash bin, but it was replaced with one for recyclables (one for paper, one for bottle and cans) to decrease landfill waste production.
- General composting bin is present a few feet away on the 4th floor, but outside of the suite.

Material sorting: Landfill and paper material is sorted before it is collected from source.

Materials collection:
- Custodian group (Pride Industries) is in charge of waste and recycling collection every Friday.
- Some concerns that after material is collected it is all thrown into one dumpster (landfill and recyclables together).

Materials produced in office:
- Majority is paper and recyclables with some food scraps.
- Majority of people eat in the office for lunch (a total of 18 people work in this suite, at least 15 will eat on the premises regularly).
- If catering lunch, they usually rent a room due to lack of space in the suite.

Awareness Level of Composting:
- Only a surface level of knowledge is circulated in the office.
- There are some misconceptions about composting.
- A small percentage of the individuals know about composting, and an even smaller percentage of those individuals actually practice it.

Concerns:
- The whole office is not really enthusiastic.
- Have to figure out how to best educate and motivate people to compost daily. Willing to create incentives (coffee certificates).

Suggestions:
- Hold informational meeting to help sift out misinformation and misconceptions about composting.
2. Alice Delevati—Memorial Union Auxiliary Services

Interview held on 05/14/2010

Current bins/separation:
- One blue bin for paper and one black bin for landfill at each desk (both bins are of equal size).
- One composting bin in break/copy room (introduced only a month ago).

Material sorting: Landfill and paper is sorted before it is collected from source.

Materials collection:
- Custodian group (Pride Industries) is in charge of waste collections every Friday. Some concerns that after material is collected it is all thrown into one dumpster (landfill and recycle together).
- Compost bin is emptied nightly.

Materials produced in office:
- Majority is paper and recyclables with some food scraps.
- Most people eat lunch in the office’s break room (80% of the 20 people).
  - Usually bring food from home.
  - Go out for lunch once or twice a week.
- Seldom cater lunch.

Awareness Level of Composting:
- People use composting bin in break/copy room.
  - Very little contamination in the compost bin (no need to pull anything out).
- Good level of awareness.
- People are kept informed of the changes occurring in the office via e-mail.
  - Introduction to composting bin.
  - What items go into it.

Concerns:
- Office does not generate enough material to fill the bin (concern of investing in costly compostable bags).
- Currently gauging the value/usage of a compost bin in this space.

Suggestions:
- Increase awareness of the new compost bin in break/copy room.
- Put up signs by communal trashcans reminding people about composting their napkins, tissues, food scraps, etc.
- Decrease size of compost bin and consider use of rigid liner and washing versus bags.
B. Visual Assessment
Friday, May 21st, 2010, 2pm

1. Conference and Event Services

Trouble Items found in blue (recycling) bin:
- Used and contaminated paper towels
- Used and contaminated napkins
- Used and contaminated tissues (refer to picture 2)
- Paper bag soiled by food grease (refer to picture 2)

Compostable items found in black (landfill) bin:
- Paper towels (refer to picture 2)
- Napkins
- Tissues
- Some food scraps

Overall impressions/observations:
- People are not sure what to do with their paper towels, napkins, and tissues.
  - Some place them into the blue bin to be recycled (which is incorrect) and others into the black landfill bin.
  - Papertowels, napkins, and tissues are best to be composted.
- Some individuals collect their compostable material and then take it to the communal compost bin on the 4th floor at the end of the day.

Picture 2 – Trouble items in blue and black bins (tissues, papertowel, food soiled paper bag, post-its). Tissues and paper products soiled by food are not to be recycled. All items should be composted.
2. Memorial Union Auxiliary Services

Trouble Items found in blue (recycling) bin:
- Recycling bins looked clean

Compostable items found in black (landfill) bin:
- Paper products
- Tissues
- Napkins
- Food scraps (orange peels)

Overall impression/observations:
- Compost bin in break/copy room is being utilized.
  - People are saving their compostable goods at their desk and taken them to the compost bin at the end of the day.
  - Need better signage.
- Communal landfill bin in the hallway directly across from the break/copy room had many compostable items in it.
  - Increased awareness of compost bin in break/copy room is needed in addition to education on what goes into it.

Picture 3 – Compostable items found in black landfill bin (napkins, food scraps, paper products). All items can be composted.
Picture 4 – Communal trash bin in hallway next to break/copy room. Bin contains many compostable items: tissues, napkins, and food scraps.

Picture 5 – Bin set-up in break/copy room. Back to front: bottles & cans, paper, compost. Compost bin needs better sign and labels should be placed on top.

Picture 6 – Compostable items collected by one of the workers in the office at her desk to later be taken to the compost bin.
C. UC Extension
Interview held on 05/20/2010

Overview: In the beginning of the month of May, a composting program was implemented in the offices of the UC Extension building. It took over a year to finalize all details and set the program into motion. Waste bin set-ups were rearranged and new lids and signage were introduced (old bins were reused to lower costs). The program has received both positive and negative reactions from office workers (change of habit is hard to establish).

Process
- Assembly of Green Team (one member from each department).
  - Spread the word of new developments in each department (~5 people).
- Created a list of 38 things they wanted to do – composting was one of them.
- Contacted Lin King (R4 Recycling) to gather more information on:
  - Cost
  - Custodial - bins
  - Signage
- Received 10 yellow totes for compost collection.
- Held meeting with custodial staff to explain changes.
- Finally got an affirmed date and signs arrived.
- Introduced new bin arrangement!
  - In restrooms
  - In break room
  - In 3 classrooms
- Bins strategically placed to help with learning curve.
  - Two bins in bathroom – one by the door (people like to use paper towels to open the door), and one under the paper towel dispenser
- Started E-mailing, educating, and explaining guidelines to people in office early/before implementation.
  - Set guidelines for catering.
    - Everything must be either compostable, recyclable, or reusable.
    - No one-time use water bottles allowed.
  - Keep office informed via e-mail news updates—“Net News”
    - “Composting is now here in our office.”
    - “Did you know that you could compost ____?”
  - Keep the subject playful and humorous to stir interest.
    - Approach of lightness, casualness, constant bombardment.

Now
- Composting program in second week of implementation and is going well
- About 50% of people eat in the office
Costs
- Yellow bins = FREE
- $200-300 on signs
- $200 on lids (reused what bins they already had)
- $1.06 per compostable bag
- Pay less for landfilled waste (cost is calculated by weight).

Complications:
- Coordinating with other parties.
  - Campus pick up of compost (Campus Custodial).
- Getting custodial staff on board and inline with new guidelines.
- Paper towels/napkins → compostable, NOT recyclable.

Reactions/Responses:
- Many were very excited.
  - Received about 10-15 E-mails from people who are happy this project was implemented and willing to make changes.
- Some negative responses, employees who don’t want to bother
  - Replies to naysayers:
    - It is a good thing to do.
    - UC 2020 zero waste goal.
Picture 8 – Second bathroom compost bin is directly under paper towel dispenser.

Picture 7 – Bathroom bins. Compost bin on left next to door, small landfill bin on right.
Picture 9 – Bin and signage setup in break room. Recycle, landfill, compost (from left to right).

Picture 10 – 3D Poster demonstrating which items go in which bin (compost, recycling, landfill).
**Picture 11** – Close up of 3D poster.

**Picture 12** – A friendly reminder about recycling taped onto a cupboard next to the stove.
**Picture 13 & 14 – Getting creative!**

A visual aid handmade of compostable goods to be hung over the compost bins.
Want to add the end result at the bottom (soil with flower).