

Employee Manual for Associated Students Recycling and Department of Public Worms

University of California, Santa Barbara
Last Updated Fall 2013

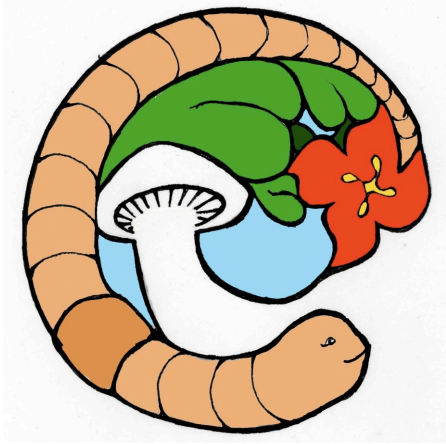


Table of Contents

Part I: Introduction and Overview	5
Waste Management at UCSB	5
Categories of Waste	6
Part II: AS Recycling and Department of Public Works	8
Mission	8
History	8
The Departments	10
The Office and Grove	11
Department Structure and Policies	12
Part III: Route Rider Procedures and Information	19
Route Procedures	19
Special Routes and Pickups	21
Basic Bike Maintenance.....	22
Potential Hazards	23
Part IV: Techno Procedures and Information	25
Route Procedures	25
Shipping E-waste	27
Potential Hazards	27
Part V: Outreach Procedures and Information.....	29
Scheduling Requirements.....	29
File Storage	29
Graphic Design.....	30
Printing	30
Website	31
Social Media	33
Writing for Campus Newspapers.....	33
Advertising.....	34
Tabling	36
Events in Common Areas.....	37
Promotional and Customized Items	37
Special Event Service	39
Conducting a Waste Audit	41
Writing an Audit Report	45
Invoicing for Events	45

Part VI: Department of Public Worms Procedures and Information.....	46
Picking Up Food Waste	46
Managing Worm Bins	47
Managing Hot Compost Bins	50
Making Worm Tea	51
Selling Worm Tea and Castings	52
Family Housing Compost	53
Managing the Garden.....	55
Starting Seeds.....	55
Conducting a Workshop	55
Potential Hazards	55
 Part VII: Maps, Data Sheets, Diagrams and Notes.....	 57

Part I: Introduction and Overview

This section describes very briefly how recycling, compost, and other wastes are handled at UCSB. It does not focus specifically on AS Recycling or Department of Public Works, but instead provides a general overview of UCSB's waste management efforts and a context for our groups' operations.

Waste Management at UCSB

The UC system as a whole has pledged to divert 100% of its waste from landfills by 2020. As of the 2012-13 fiscal year, UCSB is at about 70%. To divert means to recycle, compost, reuse, or otherwise avoid sending waste to the Tajiguas landfill.

Several different groups work together to handle UCSB's waste. Each oversees a different area of campus or type of waste, but all collaborate on major programs, reporting, and various projects.

Marborg: Marborg is our campus waste hauler. Their trucks pick up our recycling, office pack, compost, greenwaste and landfill waste and transport it to various processing facilities depending on type. They also help us with data collection by tracking dumpster pickup weights, and provide weight data on a monthly basis to help inform the annual campus waste management report. They sort and sell recycling waste within the company, but compost waste is simply dropped off with commercial composter Engel & Gray in Santa Maria.

Facilities Management: Facilities Management includes all custodial and grounds staff. They handle all main campus indoor recycling and landfill waste, and all outdoor landfill. They also run the Grounds to Grounds Program, in which grounds staff collect coffee grounds from the campus coffee carts, then add them to the campus landscaping beds. Matt O'Carroll, the Refuse and Recycling Manager in Facilities Management, oversees department programs and organizes all programs on campus for the Waste Management Plan. Jon Cook, the Facilities Associate Director, oversees the grounds and custodial staff.

AS Recycling: AS Recycling handles all outdoor recycling and indoor recycling in a few select locations. We also collect electronic waste, compost, and conduct outreach programs. AS Recycling is made up entirely of undergraduate students except for one full-time staff member, the Recycling Program Coordinator, who oversees the program.

Housing: Housing has its own custodial and grounds staff separate from Facilities, and does similar work in its own area. In addition, Housing also runs its own program to compost all pre- and post-consumer food in the dining commons through Marborg and Engel & Gray.

UCen: The UCen also has its own custodial staff that works in their buildings (UCen, MCC, satellite areas like Arbor, Coral Tree, etc.). They handle all waste collection, including pre- and post-consumer compost waste that, like Housing, is picked up by Marborg and taken to Engel & Gray.

Other groups: Groups like Central Stores, EH&S, PACES, LabRats and others help reduce waste on campus through their own specific services and outreach. Several contribute weight data to the annual waste diversion report and handle specialized programs.

Categories of Waste

UCSB sorts its waste into several different categories, and most categories are placed in their own color-coded dumpster. All of our dumpsters are picked up by our local waste hauler, Marborg, and processed according to material type. The waste categories and associated colors are:

Comingled Recycling (blue)

Santa Barbara County recycles many items that other regions do not, and virtually all recyclable items are mixed together in the same dumpsters. All metals, all types of (clean) plastics including plastic bags and saran wrap, all glass (except for Pyrex and lab glass, which are designed to resist heat and therefore cannot be melted down in the same recycling process as other glass), cardboard, even wood and carpet can go in a comingled recycling dumpster. For paper, it depends on the type: office paper, newspaper, paper bags, magazines, mail, glossy paper and card stock can be recycled in a comingled bin, while paper plates, cups, cartons, waxed paper, adhesive paper, and photographs are landfill material. In general, items have to be made of a single material in order to be recycled; something that is plastic with metal components does not qualify. After being picked up at UCSB, recyclables are taken to the David Love Place Recycling Center in Goleta for sorting and processing, then sold to material vendors.

Compost (yellow)

Most of UCSB's compostable waste is picked up by Marborg and taken to a commercial compost facility in Santa Maria. This facility uses on a 90-day windrow composting process, while many other facilities use only a 45-day process. This means that we can compost some materials that other campuses cannot, including ALL food scraps (some systems forbid meat and dairy) as well as compostable plates, containers, and other serveware. It can be difficult to recognize compostable serveware, but most feels less slick than plastic products and is marked with a "Compostable" label. The label "PLA", short for polylactide and often associated with a #7 recycling symbol, also means a product can be composted (but not all #7 plastics are compostable). Napkins, newspaper, cardboard, paper towels, and other non-waxed and non-glossy papers are also compostable. Some compostable waste is treated on campus through programs like Grounds to Grounds, Family Housing Composting, and multiple vermicompost programs and is not placed in the yellow dumpsters.

Greenwaste (green)

Greenwaste includes all lawn and landscape clippings collected by the grounds staff. After being picked up from UCSB or area businesses and residences, it is turned into mulch, allowed to compost enough to kill any weeds or pathogens, and then given away for free to Santa Barbara County residents.

Office Pack (white)

(Note: Office pack dumpsters were removed from UCSB in late summer 2013 due to decreased use and the need for additional dumpster space. All office pack paper should now be placed in a blue comingled dumpster. Because this change is very recent, this section will be left in place to familiarize students with old practices so they understand why they might still find an office pack bin in a campus office.)

Office pack is made up of long-fiber paper—basically, standard office-type paper and envelopes. Newspaper, glossy paper, cardstock, and so on are all short-fiber, lower quality papers that should be recycled in the blue commingled recycling bins. Some colored papers can be recycled with office pack, but bright fluorescent or neon colors should go into the commingled bin. Paper with spiral binding, staples, tape, paper clips or metal bindings can still be recycled with office pack, but anything containing glue cannot. Office pack paper can be placed in a commingled bin if no office pack bin is available, but this degrades the quality of the recycled product.

Electronic Waste (black bin, orange sign)

Electronic waste, or e-waste, includes any electric or battery-operated device and any related components such as personal computers, monitors, printers, televisions, VCRs, DVDs, CDs, stereos, batteries, ink cartridges, game consoles and associated cabling. Electronic devices contain harmful toxins such as heavy metals and chemical compounds that can cause environmental degradation and human health issues when left in landfills. The materials used to manufacture electronics are also very valuable and often obtained through destructive processes such as strip mining, so recycling the waste reduces the need for these processes. E-waste is not collected on campus by Marborg and should never go in a dumpster. AS Recycling has dropoff bins in 45 buildings on campus and will handle special pickup requests, and Central Stores takes whatever we can't handle. All campus e-waste is sent to a facility in Fresno to be processed fully; nothing is ever shipped overseas.

Hazardous Waste

Hazardous waste includes mercury-containing lightbulbs (CFLs, fluorescent tubes), batteries, paints, oil and oil filters, antifreeze and other chemicals. Hazardous waste should never go in a dumpster; it can be taken to Environmental Health and Safety (EH&S), located on Mesa Road behind the Grove. Associated Students Recycling picks up batteries and light bulbs with other electronic waste, and accepts paints and some identifiable chemicals as part of special pickups, then takes these items to EH&S. EH&S packages and ships material to various facilities where it is either incinerated (with scrubbers and filters trapping all dangerous gases in accordance with current EPA and Clean Air Act standards), recycled, or stored in a hazardous waste landfill.

Laboratory Waste (brown toter, red lid)

The laboratory waste program is a new program at UCSB. It is designed to isolate lab products so they can be safely handled and processed and kept separate from the other recycling and landfill waste. Without the risk of contact with hazardous or biohazardous waste, custodial staff are better able to ensure that other waste from laboratory buildings can be recycled and overall recycling rates improve. AS Recycling staff do not handle laboratory waste in any way, this is left to the building occupants that use the items and know exactly what chemicals are involved.

Landfill (light brown)

Landfill waste is placed in a light brown dumpster and is picked up by Marborg. AS Recycling does not generally handle landfill waste unless it is part of an audit; the custodial and grounds crew are responsible for these collections. Landfill items include Styrofoam, mixed-material items such as laminated sheets and paper/metallic snack wrappers, and anything too soiled to be recycled. All landfill waste is sent to the Tajiguas landfill in Santa Barbara County.

Part II: AS Recycling and Department of Public Worms

This section focuses exclusively on AS Recycling and Department of Public Worms. It outlines our mission, history, general duties and department-wide procedures and policies. Daily tasks and specific procedures are not listed here, but are instead found in Parts III and IV.

Mission

Associated Students Recycling

Our mission is to reduce waste at UCSB through direct collection, education, and information sharing. We believe that true environmental progress requires direct, hands-on action and personal responsibility, not just ideals and slogans. We, therefore, are deeply committed to the day-to-day recycling, compost, and electronic waste collection services that have helped make UCSB a state and national leader in waste reduction for nearly 20 years. At the same time, we recognize that teaching students and staff how to recycle, compost, and reduce waste can have a huge impact both on and off campus, and is the only way to achieve lasting change. We value our campus and community, and are committed to a goal of zero waste by 2020 at UCSB!

Department of Public Worms

We focus on on-site composting on campus and on encouraging students to compost at home. We believe that composting food and other organic waste is not only an excellent way to reduce the pressure on landfills, but also to improve landscapes and gardens in a closed-loop cycle without the use of chemicals or artificial products. We strive to encourage these environmentally friendly closed-loop systems on our campus and in our communities through education, demonstrations, and outreach. We highly value hands-on experience and believe that composting is often best viewed up close and personal.

History

Foundation

AS Recycling first began around 1993, when a small group of students were unhappy with the current campus recycling efforts (around 3% of all waste). These students were able to get an initiative added to the Associated Students Spring 1994 ballot that would charge every undergraduate student on campus a \$0.75 fee per quarter to fund a recycling program. The initiative passed with 85% approval and provided about \$34,000. The first students, two recycling coordinators and two recycling workers, worked with Mary Ann Hopkins, a Facilities staff member, to get the program underway, and the program was operated through Facilities. With insufficient funding for permanent bins, they first placed 22 temporary bins donated by the California Department of Integrated Waste Management. In the beginning, recycling workers collected aluminum, glass bottles and newspapers from these bins and placed it in dumpsters where the Community Environmental Council collected it free of charge (though CEC kept the revenue from recycling).

Development

A couple years after the program was set up, AS Recycling received a grant from the California Department of Conservation that allowed them to purchase 60 permanent recycling bins—thus bringing in the Berthas that we still have to this day. The students also began to focus heavily on indoor paper recycling and hired new students to focus specifically on outreaching to departments.

The program eventually expanded and took over the Eucalyptus Grove area. In 2004, CEC changed its focus away from waste just as Marborg was establishing itself as the campus recycler, so pickup transitioned from one to the other. A small pilot e-waste program was set up, with all collections going to Greendisk.

The Department of Public Worms program also began around 2004. Several large bins were built in People's Park in Isla Vista, and students fed the worms with waste collected from Isla Vista businesses. DPW also led workshops on composting in the park. While AS Recycling is funded with a ballot initiative, DPW is funded by money allocated through the AS Legislative Council/Senate which means that it changes on a year to year basis.

In 2006, AS Recycling doubled its lock-in fee through a new initiative. Program oversight was also taken from Facilities and given to Associated Students and eventually a new staff position was created. The program expanded dramatically with new funding; e-waste collection in particular grew to include dropoff locations in several buildings on campus. The students left their office in Facilities and moved into an old construction trailer located next to the Eucalyptus Grove. Unfortunately, the sudden expansion and changes were also combined with multiple changes in staff supervision and the consistency and quality of the program suffered.

In Winter 2012, the Compost Pilot Project began. This program created six post-consumer compost dropoff locations on campus, with all waste collected by DPW students. While the program was permanently adopted as a daily procedure, it was found that daily collection by two DPW students in a vehicle was inefficient and unsustainable. Today, route riders collect the compost once a week as part of their normal recycling routes. Around the same time, the DPW coordinator built new vermicompost bins in the Grove and abandoned the ones in Isla Vista park. The old bins are still in the park but are warped and unusable.

Current Status

In spring of 2012, Associated Students hired Sarah Siedschlag, the first permanent, full time staff to supervise the ASR and DPW programs in several years. Her priorities over the last year have been to organize the department and improve efficiency by reducing route frequency when possible, improve training and communication, and improve safety by eliminating the 100+ lb pickups that students were doing regularly. Route Riders have stopped sorting recycling as the income generated was slightly less than the labor cost of extra time spent on sorting, and because sorting also created pest infestations and cash handling risks. DPW has stopped picking up food waste from Isla Vista to feed the newly redesigned worm bin, and now collects higher quality food from the dining commons. Audits are now conducted to include measurements of both pre- and post-sort diversion rates, which gives a much more accurate picture of event waste diversion. The office has also moved from the old construction trailer to Building 437 in Facilities as we had exceeded the 3-year limit on our permission to use the trailer, and there was some question about the safety of the electrical and water connections.

Priorities for the coming year are to institute better training requirements for new student staff and to expand collections to include additional recycling bins, additional dining commons pickups, and horse manure composting. While techno bins are fairly well dispersed, there may still be new locations that can be set up. Training will not focus only on job duties, but on waste reduction practices in general and information on waste management at UCSB. Outreach students in particular must be better trained; they often promote the organization but as the only ones without collection duties they are often the least informed about how we operate.

This manual is also an effort to improve training and organization; the previous manual is extremely out of date and has large gaps of missing information. In the absence of a comprehensive organization-wide manual, each department also developed its own manual with wildly different styles, level of detail, and even rules. Hopefully this version will include all procedures and information, and can be easily updated by future students and staff to keep everything on track.

The Departments

Associated Students Recycling is split up into several smaller departments: Routes, Techno, and Outreach and Special Events. The Department of Public Worms, while technically a separate organization, can be considered a fourth department that works towards the same overall waste reduction goals. Each group specializes in something different:

Recycling Routes

AS Recycling originally began with the Routes program. Today, about 6 Route Riders use our specialized bikes and trailers to collect recyclable materials from over 100 recycling bins all over campus, with each bin located along one of several routes. In addition to handling recycling, Route Riders also empty all of the post-consumer compost bins on campus. While the vast majority of their work is focused on the outdoor bins, the Route Riders also handle indoor recycling for certain departments (all Associated Students offices, Student Health, Arts and Lectures, etc). Most indoor recycling and all trash is taken care of by the Facilities Management custodial and grounds staff.

Techno

Techno manages electronic waste collection at UCSB. 3-4 techno students work in pairs and drive around campus in small electric vehicles along one of 5 established routes to collect electronic waste. There are 45 buildings on campus that currently have e-waste collection bins, and any staff or student is free to drop off items from home or from campus. The Techno program collects all electronics and their component pieces (cartridges, discs, batteries, etc) that are dropped off in the bins and then brings them back to the Eucalyptus Grove for sorting. Most items go to Central Stores for transport off campus, though batteries are taken to Environmental Health and Safety and some items are shipped to third party vendors.

Outreach and Special Events

The ASR Outreach team is typically made up of about 4 students and works to promote AS Recycling's efforts and the importance of recycling, composting, and waste reduction in general. They table at

events like Isla Vista Earth Day, Spring Insight, and so on, promote workshops, develop our website and informational resources, and maintain our blog and Facebook pages. Outreach students also manage our Special Events program, where we help provide waste service at department and group events on campus and perform waste audits on what we collect. These audits give event planners specific feedback on their waste reduction efforts so they can improve their performance in the future.

Department of Public Worms

DPW is the composting branch of the organization. 3-4 students are responsible for running the hot compost program at Family Student Housing and the vermicompost program at the Eucalyptus Grove. DPW students were instrumental in getting compost bins on campus and compostable products in the UCen, but have a less direct role in these programs now as their primary focus is on-site composting and these bins and products are associated with commercial composting. DPW students maintain a garden in the Eucalyptus Grove to demonstrate the value of a food to compost to food cycle and how using compost can fully transform barren land into something much more productive. DPW holds regular workshops on gardening and composting for the student population.

The Office and Grove

ASR and DPW operate out of two main areas: the office in the Facilities yard and the Eucalyptus Grove. Both the office and the Grove can be accessed from 8am-6pm, Monday through Friday, and the Grove can be unlocked using the route keys that are kept in the office. In order to make sure that you are completely done with work by 6pm, please start all routes before 4:30pm.

The office is located in Building 437, room 171A. The office is where all keys, maps, schedules, data sheets and time sheets are kept. The computer and printer are also here, and meetings are generally held either in the office or in the nearby conference room. There is also a bathroom and a kitchen with a refrigerator available.

The Eucalyptus Grove is located up the utility access road past Parking Services, and acts as ASR/DPW's storage area and outdoor workspace. This area contains the route bikes, bins and other supplies, the Techno trailer, the vermicompost bins, and the garden. It is very important to keep the Grove clean in order to reduce pest infestations and damage to tools and other items from weather.

Miscellaneous Office and Grove Rules

1. If you open the office window, you must close it when you leave. The program supervisor does not always end the day in the office, and if the window is left open anyone can break in very easily and have access to the entire building.
2. Do not throw food or food containers away in the office trash or recycling bins. They do not get emptied every day and will attract flies.
3. Never leave any bagged recycling, compost, or other material in the Grove overnight without placing it in a bin with a lid. It will get ripped open by animals even if it doesn't contain food.
4. The tool shed in the Grove must be kept locked at all times. It contains both expensive tools and fuel, which by University policy must be kept secured.

Department Structure and Policies

This section focuses on the general procedures and policies that apply to the organization as a whole. Specific procedures are listed under each department.

Organizational Structure

AS Recycling and Department of Public Works are both supervised by a single full time staff member, the Associated Students Recycling Program Coordinator. She is aided by 4 student coordinators with each coordinator overseeing one of the departments (Routes, Techno, Outreach, and DPW). Each department has between 2 and 6 additional students that, along with the coordinator, perform the day-to-day tasks of that department.

Student coordinators focus on the daily operations of their departments, including training, scheduling, ensuring that routes are fully completed, communicating with student workers, organizing special pickups, tracking data, running team meetings, and generally keeping things running smoothly. The Program Coordinator aids the student coordinators in their tasks, oversees hiring and any disciplinary issues, facilitates communication with other campus departments, represents ASR, DPW, and waste issues in general on campus sustainability committees, and enhances the program by developing new projects and refining old procedures.

You should generally approach your student coordinator with most questions or issues, but do not hesitate to contact the Program Coordinator if you have any additional needs, cannot reach your student coordinator, or would rather speak to someone else. We are all here to help!

Work Etiquette

Remember that the office is a shared professional space. Don't play music too loudly and keep conversations appropriate for a work environment. You are welcome to keep your backpack, skateboard, etc in the office, but keep everything as neat as possible and out of the way.

Keep all phone calls, emails, and conversations with those outside of ASR polite and professional at all times and remember that you are representing a highly visible, 20 year old student organization.

If you answer the phone or field a question while in the office or out on campus, be very polite and professional. If you don't know the answer, take a message and notify your coordinator immediately. You can leave written messages on by the desktop keyboard or taped to the monitor. Most importantly, you **must** get the person's name and contact information so we can follow up!

Timecards

Timesheets are filled out electronically through the Kronos system. To enter your time, follow the instructions below:

When starting your shift:

1. Use the office computer and go to kronos.ucsb.edu.
2. Log in with your UCSBnetID.

3. Click on the My Information tab, then on My Timecard.
4. Enter your starting time in the “In” column.
5. Click “Save” in the top left corner.
6. Log out and close the page.

When finishing your shift:

7. Log back into your timecard as described above.
8. Enter your ending time in the “Out” column.
9. Check that your shift hours appear correctly.
10. Click “Save” in the top left corner.
11. Log out and close the page.

At the end of the pay period:

12. Log into your timecard as described above.
13. If the pay period already ended and you are finishing your timecard on the following Monday, open the top center dropdown menu and select “Previous Pay Period”.
14. If it is still the same pay period, go to the next step.
15. Check that your timecard is complete and all shifts have been entered accurately.
16. Click Save in the upper left corner above your entered shifts.
17. Click on the Approvals tab, then on Approve Timecard.
18. Log out. You’re done!

Scheduling

You will be asked to turn in a tentative copy of your work availability prior to the start of each quarter to your coordinator and to the program supervisor. This initial schedule is used to get through the first week while many classes are still in flux. At the end of the first week you will be expected to provide a finalized version of your availability that you can stick to for the entire quarter, along with the number of hours/routes you would like to work and any other requests (though they are not guaranteed to be met). Please note that availability is not the same as your class schedule; you must also include other jobs, CLAS, and any other time commitments. You should also keep in mind that work shifts must be arranged to fit around vehicle availability and other students who may be partnered with you, so while we do our best to meet your preferences it is very important to be as flexible as possible and to turn in your availability right away.

The program supervisor will take all student availability and design a weekly schedule that best fits the needs of the program and the staff. Once this schedule is set, it will not be changed for the duration of the quarter unless absolutely necessary. Please see below for what to do if and when you need the occasional shift covered.

You are expected to work through the end of finals week, though not necessarily the same shifts at the same time. It is your responsibility to let your coordinator and supervisor know if you are leaving before the end of the week and will not be available to work.

Attendance and Punctuality

It is very important to be on time and complete every shift fully and be present at all meetings. Whether you do your work independently or in pairs or groups, you are working as part of a team. We have a

certain amount of work to complete, and whatever you don't finish will then fall to someone else. If you do a route in pairs, do not leave the other person waiting and let them know if you are running late. If you run out of time and can't complete some part of your shift, tell your coordinator and leave a note for the rest of your team as soon as possible.

You must also finish your shift on time, especially if you are using a vehicle. The electric vehicles are used several times each day, and someone is most likely using it after you. Do not take extra time on vehicle routes, and do not keep the vehicle if you are not actively using it (for example, if you finish your route and then sort in the Grove for an hour). Non-vehicle routes should also be finished promptly to keep the organization running as efficiently as possible.

Taking Time Off

If you need to take a short amount of time off due to school, travel, etc, you must notify both the program supervisor and your coordinator several days in advance. They may require that you find someone to cover for you, in which case you must also check with your other team members. The earlier you give notice, the easier it will be to find someone.

In cases of illness or other sudden emergencies, you must contact your coordinator, supervisor, and entire team **via text by 10am on the day of your shift or meeting** (8am if your shift starts at or before 10am) and ask that someone cover for you. There is very little room in our schedule for missed shifts no matter what the reason and by notifying everyone early you increase the chance that the work can get done before we fall behind. **Calling out of a shift or meeting at the time it is supposed to start (or later) is completely unacceptable.** You are also expected to budget your time well enough so that you do not need to call out of work at the last minute to finish homework or study for a midterm; you are given enough notice in your class syllabus that you should be able to either prepare at another time or find someone to cover your shift in advance.

Communication and Meetings

Each department will have regular meetings to discuss any special pickups, incidents, or changes. In general, outreach, techno, and DPW meet weekly and routes meets 1-2 times per quarter. We may also schedule periodic all-ASR/DPW meetings, but these will be rare. Attendance at these meetings is mandatory. If you absolutely must miss a meeting you must clear it with your coordinator in advance and make up the time later at the coordinator's discretion; repeat absences will not be tolerated no matter the reason. Bring all questions, concerns, or suggestions to your department meeting so they can be discussed by the group, and be on time so you don't keep your team waiting or force your coordinator to repeat information. **Do not change your shift procedure without discussing it at a meeting with your entire team, coordinator, and supervisor.**

Check your email daily for important information and schedule changes. Respond promptly. Because everyone's schedules differ, we cannot rely only on face-to-face communication in the office, so email is often the best way to get information out.

Texting or phone calls are generally the best way to communicate when a response is needed quickly. Respond to messages promptly and thoroughly. At the same time, respect other staff's personal time and avoid texting or calling before 8am, after 6pm, or on weekends unless absolutely necessary. There is

a contact list in the office, but you are expected to have each member of your department, you coordinator and supervisor saved in your phone.

A student coordinator may choose to add to or modify this standard communication policy to suit his or her needs or the needs of the department or project. This is fully within the coordinator's power and duty, and should therefore be treated with the same respect as any other policy.

General Safety Standards

Safety standards are dictated by OSHA, and we are held to the same standards as any Facilities employee. Do not cut corners in order to save time or to get a little more done; serious injuries are possible and have occurred in the past.

- **You must wear closed-toed shoes and gloves while doing any route, a waste audit, or doing any work in the grove that involves lifting, shoveling or tools.** For a waste audit, you must also wear an apron. You may wear sandals while in the office, watering the garden, or doing other minor tasks, but you must switch shoes if you switch tasks. Most students choose to keep a pair of closed-toed shoes in the office or lockers. Certain very rare tasks such as using a power washer, sledgehammer, or pickaxe require specialized footwear and should not be done without specific permission. If you come to work without proper shoes you will be sent home and written up for missing a shift.
- **Never lift anything weighing over 50 pounds.** There is a hand truck in the techno trailer that can be taken on any route needed or used in the Grove, and teams of people may lift something weighing up to 100 pounds. Bins of batteries, glass, and compost can easily get over 50 pounds, and should always be split up or only partially filled to keep them at a manageable weight.
- **You must wear a dust mask if you are cleaning the bike or techno trailer, ESPECIALLY if you are sweeping.** No one should be in the trailer without a mask while anyone else is sweeping. There are a lot of rodents in the Grove and trailers in particular, and rodent feces can cause dangerous lung infections and extremely deadly diseases such as hantavirus. Hantavirus is very rare, but there have been multiple cases in Santa Barbara County.
- **You must wear a dust mask when handling compost that has grown mold, or is filled with dirt.** Both can release particulate matter when disturbed that can get in your lungs and cause irritation or infection, especially when done on a regular basis.
- **Always use proper weather protection.** Water bottles can be filled at the filtered water faucet in the Facilities kitchen. There are sunscreen bottles and rain ponchos in the shed. Stay hydrated on routes and do not over-exert yourself on very hot days.
- **Wash your hands at the end of every route or audit.** This stuff is gross.

Vehicle Use

Electric vehicle use is controlled by the campus-wide rules listed below. Violations can result in a write up and loss of vehicle use, and serious violations can result in instant dismissal from the program.

- **You cannot drive the electric vehicles until you have gone through electric vehicle training.** Training is done through the Facilities driver training program, which includes both classroom and behind-the-wheel training.
- **Pedestrians and bicyclists always have the right of way.** Even if they don't they will act like they do, so drive accordingly.
- **Vehicles must be driven at 5 mph or less when on any non-road areas of campus.** 5 mph means 5 mph, not 8 or 10 mph. If there are lots of people around, go even slower.
- **Never drive on the bike path for any reason other than to cross it.** Do not drive in the skateboard lane.
- **Never drive on the grass.** You will see gardeners and groundskeepers driving or parking on the grass, but their vehicles are equipped with more power and tires that are better suited for maneuvering across soil without getting stuck. The lawns are filled with hidden mud sinkholes, fragile sprinkler heads and underground pumps. It is very easy to tear up the lawn, get the vehicle stuck, or damage the irrigation lines, and it is very obvious after the fact.
- **Avoid walkways that are so narrow that the vehicle does not allow pedestrians to comfortably pass along the side.** If you absolutely cannot avoid such a situation, stop further back at a wider location or pull slightly and safely to the side and allow the pedestrian to pass before continuing. NEVER drive under a narrow covered walkway as there is simply not enough space and no way to pull off or turn around.
- **Do not park in locations that block walkways, and do not leave the car on walkways for longer than necessary.** If you are doing a route and need to park near an entrance to load material, pull over to the side as much as you can. If you will be stopping for longer (like a meeting) or do not have to carry anything, park in a campus vehicle parking space or far away from dense locations.
- **Do not wear headphones or play music loudly while driving.** You must be able to hear all surrounding activities at all times.
- **Report any accident or damage to the program supervisor immediately.** Reported accidents are generally dealt with without serious consequence, where unreported accidents can result in immediate dismissal from the program.
- **At the end of your shift, return the vehicle to its designated spot and plug it in if it is not close to fully charged.** Some of our routes are quite long and cannot be completed with a half-full battery.

Disciplinary Policy

UCSB is one of very few campuses that allows student workers to perform essential operations-type work; most campuses believe that students are simply not reliable or knowledgeable enough to be trusted with the type of duties that AS Recycling and DPW students do every day. The only way this organization succeeds is by hiring only the best, most conscientious students and by holding everyone to very specific, high standards.

Policy violations are dealt with on a case-by-case basis, but it is safe to assume that no violation will go unaddressed for very long. In general, you will receive a verbal warning; if the issue comes up again you will receive a formal write-up that will be kept in your personnel file. If it is still not resolved, your employment will be terminated. Safety-related issues or changing established procedures without permission may result in a write up even if with no prior offense, and serious breaches of conduct (harassment, damage due to recklessness, being under the influence of drugs or alcohol while at work, etc) can result in instant dismissal.

Evaluations and Raises

Evaluations will occur after you have completed 150 hours of work in your position. Remember that you are expected to work a minimum of 6 hours per week, so if you have worked less than 100 hours by the middle of your second quarter on the job your supervisor may choose to hold your evaluation early in order to address your low hour count. Your supervisor tracks how many hours you have worked and you are always welcome to ask about your current total.

You will be asked to fill out a self-evaluation and an evaluation of AS and your supervisor. The AS and supervisor evaluation will be submitted to a central database and will not be seen by your supervisor. After completing your self-evaluation, you will meet with the program supervisor to discuss your performance, your own impressions of the program and any other issues needed. If you have any deficiencies that need to be corrected, you will have another 50 work hours (5-6 weeks) to do so. After you have worked 200 hours and corrected any concerns brought up during your evaluation, you will be eligible for a \$0.25 raise.

If you have not addressed the concerns from your evaluation, you will not receive a raise at the 200 hour mark. If the concerns relate to failing to comply with a stated policy, you may receive a write up. You can be re-evaluated for a raise after working 250 hours.

Once you have received your raise, the hour counter will reset and you will be eligible for an additional \$0.25 raise until after an additional 200 hours of work. You can receive multiple raises in a single year, and you will undergo an evaluation before each one (though they may be brief if you have already had one that year).

Pay

Paychecks are distributed every other Wednesday for the pay period that ended on the Saturday 10 days prior. If you receive a paper check, it can be picked up at the Ticket Office, which is on the lower level of the MCC. If you would like to receive direct deposit, please speak to the Payroll staff member in the AS administration office (currently Claudia Alphin).

Complaints and Concerns

Hopefully, you will always feel comfortable bringing any complaint or concern you may have to your coordinator and/or supervisor, as we want to work with you to make sure that working at ASR and DPW is a positive experience for everyone involved. If you don't feel comfortable talking to either, you may also speak with:

Lisa Corcos
Associated Students
Assistant Director of Business Services
lisac@as.ucsb.edu
805-893-3374

Cindy Lopez
Associated Students
Assistant Director for Finance and Budgets
cindyl@as.ucsb.edu
805-893-3374

Denise Rinaldi
Associated Students
Assistant Director of Human Resources
deniser@as.ucsb.edu
805-893-3374

Part III: Route Rider Procedures and Information

The 111 outdoor recycling bins and 7 compost bins at UCSB are divided into 6 routes, serviced daily by AS Recycling Route Riders. Recycling collection has been a core focus of ASR since the beginning and the campus depends heavily on the work of our students.

Route Procedures

Starting a Route

1. Begin in the AS Recycling Office. Sign in on your timesheet and check the route board for any changes or notes. Pick up a clipboard, map for your route, and a set of route keys.
2. Head up to the Grove. If the gate is locked, it can be opened with one of the route keys.
3. Put on a pair of gloves, and, if needed, change into closed-toed shoes and other route-ready attire. You may keep any desired items in your locker in the trailer.
4. Pull a bike out of the bike trailer. Check that the tires are full; low tires can be filled with the bike pump located in the small shed.
5. Load the bike with collection bins from the stack outside the bike trailer. If you are collecting compost that day line one or two bins with compostable bag liners, found in the small shed.
6. Grab a spray bottle filled with all-purpose-cleaner (purple) from the small shed along with several towels. Secure the clipboard, spray bottle and towels in your bike and head towards the first bin listed on your map.

On Your Route

7. When you arrive at your first bin, park your bike out of the way of any foot traffic. AS Recycling bikes are the only bikes on campus that are allowed on pedestrian walkways, so don't cause a problem for the rest of us!
8. Open the bin. How you open it will depend on bin type, see description below. Empty the contents of the bin into one of the bins on your bike, leaving any bags in place.
9. Clean up any dropped items or any other waste nearby.
10. Close the bin and use the spray bottle and towels to clean off any stains, animal footprints, or other markings.
11. Double-check that the bin is securely closed. Go on to the next bin marked on your map.
12. You may empty your bins in a blue commingled recycling dumpster as often as you wish. The location of all recycling dumpsters is marked on your map, and any locked dumpsters can be opened with the 3212 key on your route set.
13. When you have finished your route and emptied your bins, return to the Grove.

Finishing the Route

14. Back at the Grove, return the spray bottle to the shed and place any used towels in the hamper.
15. Unload your collection bins and re-stack them neatly against the bike trailer; do NOT leave them loosely strewn across the area.

16. Push your bike back into the bike trailer. If you had any issues with your bike (stuck gears, loose chain), leave it outside of the trailer on the far side of the small shed and write a note for your coordinator and the other route riders on the trailer white board.
17. Change your shoes/attire and leave any desired items in your locker in the trailer.
18. Be sure to take your key set, clipboard and map back down to the office.
19. At the office, drop off your keys, map, and clipboard. Notify your coordinator if anything unusual happened (couldn't finish route, unusually heavy use, broken bin or bike, etc). Wash your hands in the bathroom or kitchen and use the hand sanitizer in the office. Sign out on your timesheet. You're done!

Types of Bins

There are 3 types of recycling bins at UCSB, and each is handled slightly differently. AS Recycling staff only empty recycling and compost bins; the grounds staff handles landfill.

Berthas are 4-unit clusters. One slot is always for trash, at least two are always for recycling, and the last may be recycling or compost. The signage on the bins is left over from when the campus separated all of its recycling into categories based on material type, but today everything can be mixed together. The doors on the front of the unit can be unlocked with a 3212 key, which is found on your route set.

Inside the Bertha you will find 4 bins. Empty the recycling bins into your collection bins. If there is a compost bin and it is a compost collection day (noted on the route board), empty the contents of the compost bin into the collection bin lined with a compostable bag. Remove any non-compostable items (plastic, foil, etc) and add to the recycling or landfill bins as appropriate. Leave the bag in the Bertha bin as clean as possible and close and lock the Bertha. Don't forget to wipe off any dirt with your towel and spray bottle!

Commingled pairings are pairs of landfill and mixed recycling bins. Brown metal bins called Keystone Ridges are used for landfill, and the recycling bins are cement bins with a blue top and are called QuickCretes. For these bins, simply twist off the blue lid and remove the bag. Empty the bag into your collection bins and place the bag back in the QuickCrete. Replace the lid and wipe off any dirt.

BigBellies are solar-powered compacting units and are the newest bins on our campus. They send a radio signal to indicate when they fill up, so their status can be monitored from the office or from a cell phone. If you are interested and have a smartphone, ask your coordinator about the app that will allow you to check on them anytime.

When you come to a BigBelly, check if the light on the top front is blinking green, yellow or red. If it is green, you can keep going and do not have to empty that bin that day. If it is yellow or red, open the front door with the large black key on your key set and empty all materials into your collection bin. Place the empty bag back in the big belly and be sure to close the unit securely—the doors do not always latch all the way and can then swing back open.

If you have been assigned to empty compost bins for that day and route, empty any compost BigBellies regardless of what color the light is. Open the door, remove the bag (or remove items one at a time by hand if you prefer) and dump all materials into your compost collection bin.

Remove any non-compostable items (plastic, foil, etc) and add to the recycling or landfill bins as appropriate. Place the bag back in the BigBelly, close the door securely, wipe off any stains and continue on your route.

Special Routes & Pickups

Special Routes are made up of a small number of indoor or unusual recycling collections. We handle recycling service for all Associated Students buildings including the Multicultural Center and Graduate Student Association, Terra Hertz in Broida and the Health Center.

Starting a Special Route

1. Start in the office. Sign in on your timesheet and check the bulletin board for any messages or special pickup requests. Pick up a clipboard with a special route schedule and attach any special pickup notes. Sign out a vehicle and pick up the vehicle keys.
2. Drive the vehicle up to the Grove. Pick up a rolling bin and several normal collection bins and load them into the back of the vehicle. Pick up as many empty yellow compost bins as you will need for your route that day (currently 3 for AS main building, 1 for Food Bank/EAB office, 1 for Annex) and clean off any dirt or stains with a towel and hose or spray bottle.

On Your Route

3. Take care of any special pickups first. The posted note should include a location, description of the items, and contact information in case you need more details or can't find the items. Usually special pickups involve an office that needs materials recycled but the daily use bins are not enough (office cleanouts, old readers after a quarter finishes, etc). Report to the office, locate the items and/or contact person, collect as needed and follow any listed instructions.
4. If all special pickups are taken care of, drive to your first normal stop. Place a regular bin inside your rolling bin and take it into the building.
5. Empty all recycling and office pack bins into your collection bin. Office pack dumpsters have been removed from campus but you may still find paper bins in offices, you can mix this with general recycling. You should be shown where all bins are located during training.
6. If you find compostable cups, etc in the recycling bin, remove them and save them for a compost bin.
7. When you have either filled the bin or emptied all the office bins, load the bin into the vehicle. Grab a new bin and keep going if needed.
8. If there are any compost bins, switch an empty and clean compost bin with the full one and load it into the vehicle.
9. If all of your bins or the vehicle get full, drive to the nearest recycling dumpster and empty everything. If the dumpster is locked, use the 3212 key on the vehicle keychain. Once the bins are empty, continue your route.

Finishing a Special Route

10. Once all stops are complete, empty any remaining items in a recycling dumpster and return to the Grove.

11. At the Grove, empty any compostable waste into a compostable bag in a yellow compost toter. If you need a bag, they can be found in the small shed. Remove any non-compostable items and dispose of them in the recycling or landfill collection bins as needed. Clean out the small compost bin with a hose and set them aside so they can be exchanged at the next route.
12. Return any collection bins to the stacks alongside the bike trailer. Stack them neatly!
13. Turn the rolling bin upside-down and leave it next to the collection bins. Clean anything else out of the vehicle.
14. Drive the vehicle back down to its parking space and plug it in.
15. In the office, drop off the clipboard and vehicle keys. Erase your name from the vehicle checkout board. Notify your coordinator if anything unusual happened (couldn't finish route, unusually heavy use, broken bin or bike, etc). Wash your hands in the bathroom or kitchen and use the hand sanitizer in the office. Sign out on your timesheet. You're done!

Basic Bike Maintenance

The AS Recycling bikes are old, heavily used, and carry a great deal of weight. As a result, they often break down, and may decide to do so while you are in the middle of a route. A few of the most common issues have an easy solution, however, and with a little effort you will be back on your way shortly!

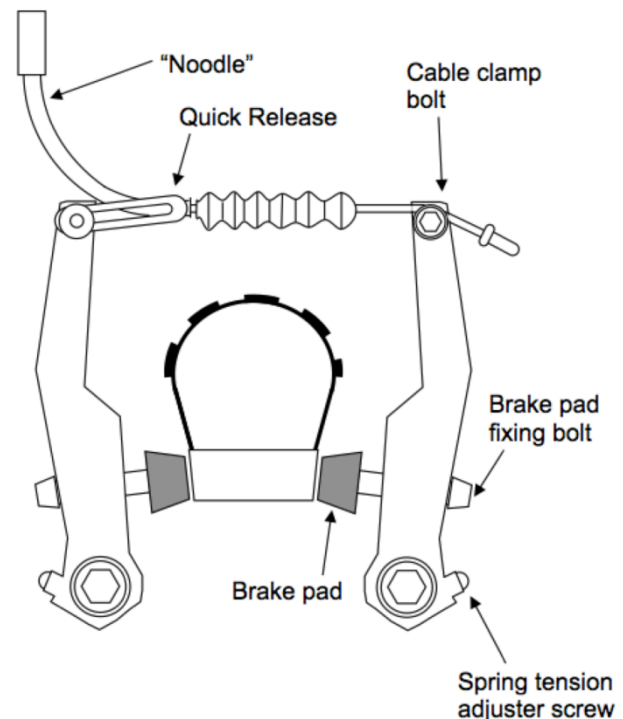
Disconnected Front Brake

If the handlebars are over-rotated, the brake cable can be pulled out of place. The "noodle" will slip out of the quick release slot so the brake cable is no longer connected to the brake pad and will be unusable.

You can avoid a brake disconnect by not over rotating the handlebars. If the brake does disconnect, straighten the handlebars and push the brake levers (pointed upward on either side of the wheel in the diagram) close together until you can slip the noodle end back into the quick release slot.

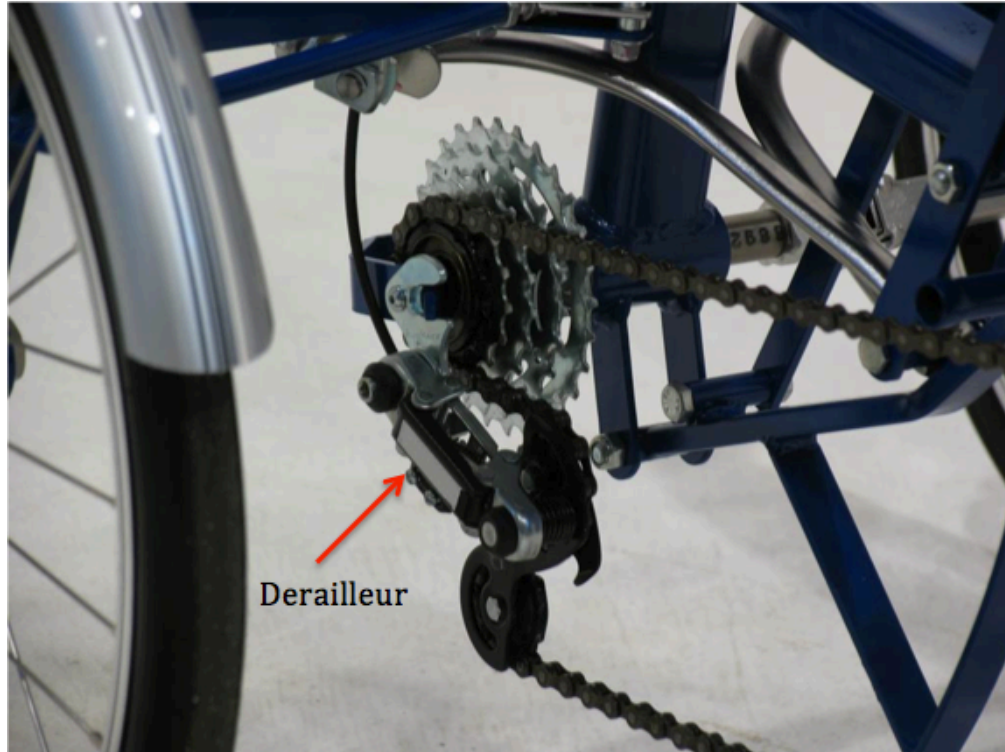
Low Tire Pressure/Flat

Tires can go flat from constant riding, especially if they are not properly inflated at the start of a route. Before you leave the Grove, check that you have plenty of air by squeezing each tire. If they feel firm you are ready to go, but if they are easily compressed between your fingers you will need to inflate them. The tire pump is located in the small tool shed; use it to inflate each tire to 60-70 psi.



Chain Falls Off

Because the chains on the Lightfoot cycles are so long, they can be particularly vulnerable to falling off. It may happen when you go over a large bump, because you start pedaling while the bike is in an awkward position, or it may just happen at random. To fix it, pull it around the appropriately sized sprocket and hook it on, then turn the pedals so it can completely settle into place. Sometimes pulling the chain isn't easy, and you will have to push the derailleur forward and down and hold it in order to pull the chain over and around the correct sprocket. Once the chain is in place, release the derailleur and it will slide back into place.



Potential Hazards

Though quite rare, there are certain hazards you may run into on your route and you should always be prepared. Always notify your coordinator and/or supervisor immediately if you encounter anything that seems wrong or unsafe to you.

Bike Accident or Injury

If you or anyone else is injured either on or off the bike, your first priority should be to deal with the emergency. If needed, call 911 from a cell phone or 9-911 from a campus phone if needed. UCSB's police dispatch number is 805-893-3346 from a cell phone or just 3396 from a campus phone. Report the situation to both your coordinator and program supervisor the second it is safe to do so. They will help you with any next steps and must report the incident according to campus procedure.

If your injury is not an emergency but does require basic care (open cut, pulled or twisted muscle, smashed finger, etc), stop your route and alert your coordinator or the program supervisor. Do not continue to work injured. If you cannot return to the Grove and need to leave the scene do your best to store the bike, vehicle, bins, or other equipment in a secure and out-of-the way space, but your safety is top priority.

Animal Encounter

Animals love trash, especially if it contains food. If you open a bin and see an animal such as a rat, raccoon, possum or skunk, alive or dead, immediately back away. Call your coordinator or the program supervisor. If they cannot be reached, call the Facilities Management Customer Service Line at 805-893-2661. Be ready to report the type of animal, location, and exact bin. If the animal is still alive, time is obviously critical. Never ever attempt to touch the animal or free it yourself—it may have been trapped for some time and it is very difficult to not make it feel cornered in such a situation.

Hazardous, Biohazardous, or Lab Waste

You may occasionally find something in the bin that should not be thrown away. If you ever see any hazardous waste such as paints or chemicals in the bin or any sign of blood or other bodily fluids, do not empty or touch it. You should also avoid any lab waste, including lab plastics and glass that may have contained chemicals or specimens. Report the bin location and material type to your coordinator or program supervisor, or call Environmental Health and Safety at 805-893-7534. Even if the material seems clean, lab material often cannot be recycled using standard methods because it is designed to be heat resistant. Calling it in will make sure it is properly handled.

Part IV: Techno Procedures and Information

Established in 2006, the Techno Recycling program is the branch of AS Recycling responsible for ensuring the responsible disposal of electronic waste generated by the UCSB community. Currently, the Techno program collects e-waste from approximately 45 campus locations. These collections add up quite a bit: our students diverted over 17 tons of e-waste in the 2012-2013 year alone!

Route Procedures

Starting in the Office and Grove

1. Begin in the AS Recycling Office. Sign in on your timesheet and check the bulletin board for any special pickups or notes. Pick up the blue clipboard, map for your route, and a set of car keys.
2. Head up to the Grove. If the gate is locked, it can be opened with one of the keys on the vehicle key ring.
3. Put on a pair of gloves, and, if needed, change into closed-toed shoes and other route-ready attire. You may keep any desired items in your locker in the trailer.
4. At the techno trailer, pick up a gray caddy, a cleaning rag, spray bottle, two battery containers and two rolling bins. If you are doing a drop off at EH&S that day, you should also pick up all sorted batteries and any other hazardous waste.
5. Load any e-waste that has been sorted or left in the trailer to be taken to Central Stores.
6. Load all items in the car and head to your first stop. Do EH&S first if you are going there (see At Environmental Health and Safety, below), otherwise head to your first special pickup or bin location.

At Environmental Health and Safety

7. Hazardous waste drop-offs are to be completed once a week on a Tuesday, Wednesday or Thursday before 4pm. EH&S prefers that we stick to an established time, so these drop-offs will generally be paired with a lighter route. The EH&S drop-off should be done before the rest of the route.
8. Drive the vehicle with all items that are ready to be dropped off to the EH&S gate and enter #4321 into the keypad for access. Enter and turn left towards the loading dock and park near the ramp.
9. Walk up the ramp and through the metal mesh doors on your left. Get a cart and bins from inside, and load each material type into a separate bin.
10. Weigh all items by material type and enter measurements on the EH&S outgoing weights form.
11. Wheel the cart and bins back to where you first got the cart. If no one is there you can leave it and it will be picked up by an EH&S employee.
12. Pick up a large battery bin to replace the one you just dropped off.
13. Leave EH&S and continue on to the rest of your route.

At the Bin Locations

14. Handle any special pickups first. All necessary information (room number, items being picked up, contact information) should be detailed on the note you picked up in the office. If anything is

unclear, notify your coordinator so that he or she can track down any details. Dispose of the items as you normally would based on type.

15. When you arrive at your first location, park the car near the entrance closest to the bin but out of the way of any food traffic. **Do not park on the grass.** Take a rolling bin, the caddy, spray bottle and cleaning rag.
16. Go inside and check the bin. When emptying, keep any batteries, laptops, toner or inkjet cartridges, or CFLs separated from other e-waste by placing them in the bucket caddy.
17. Place remaining e-waste into the rolling bin.
18. Clean the bin with the spray bottle and rag as needed.
19. Take all items back to the vehicle. Large and/or cumbersome items like printers and monitors can be placed separately in the car, the rest can stay in the rolling bin. Lift carefully!
20. Check off the location on the Bin Check Sheet on the clipboard and make any notes if necessary.
21. Head to your next stop!

At Central Stores

16. Once you have finished all your stops for the day, head to Central Stores to drop off most items. When you arrive, park in one of the spaces to the left of the loading dock area.
17. Grab a cart from the loading dock area and load all Central Stores drop-off items onto it (everything except batteries, CFLs, other hazardous wastes, and ink and new toner cartridges). You may have to make multiple trips.
18. Be sure to weigh everything as you load it up, and record weight on the Central Stores outgoing weight form.
19. Place any mini-fridges to the far right corner of the Central Stores parking lot for additional handling (because they contain Freon).
20. Place any remanufactured toner cartridges in the toner box in the front room (straight ahead from the loading dock).
21. Take all other items to the Furniture Room. Place large items such as computers, monitors, and printers in the rolling white cloth tubs. Place everything else in the cardboard bins. If you are unsure where a specific item should go, ask a Central Stores staff member.
22. Head back to the Grove with any items that still need to be sorted.

Sorting Batteries & Hazardous Waste

23. Once back at the techno trailer, dump all batteries except for lead acids in the open-front bins on the table. Lead acids can be placed in the large trash bin underneath the table until the next EH&S trip.
24. Place any other hazardous waste picked up on the route anywhere that is safe from moisture and out of the way until the next EH&S trip.
25. Individually bag each CFL bulb and place it in the light bulb bin until the next EH&S trip.
26. Taking about a handful of batteries at a time, sort out any non-alkalines and place each in its own pile according to type. All alkaline batteries can be placed in the larger bin on the floor.
27. Tape off the contact terminals on all 9-volt batteries and add them to the alkaline bin.
28. Bag all other batteries individually and place each in the appropriate bin based on type.

Sorting and Packing Ink and Toner

29. All boxes for storing and shipping inkjets and toners must not exceed 20" w X 20" h X 24" D and full boxes must not weigh more than 50 pounds. Each box should have its own inventory sheet. Use different boxes and different inventory sheets for inkjets and toners.
30. To start a new box, label both the box and the sheet with a corresponding number so they can be matched up later. Tape up the bottom of the empty box and pad it with a few sheets of crumpled newspaper.
31. Compare the product number on each cartridge with the inventory list. If it does not appear on our list, our vendor does not accept it and it can be added to the bin for Central Stores dropoffs.
32. If it does appear on the inventory list, mark each inkjet or toner with a tally mark. Wrap all inkjets in an individual newspaper sheet; toners do not need to be wrapped (but there still must be adequate padding). Place the cartridge in the box.
33. Pack all following cartridges securely in the same way so that they will not move around during shipment.
34. If the box does not fill, simply leave it for the next day.
35. Once the box is full, fill any remaining gaps with newspaper.
36. Weigh the box. If it is over 50 pounds you will need to unpack some of the cartridges. Write the weight on the box and on the inventory sheet. Do not seal the box.
37. Take the finished inventory sheet to the office and leave it for the coordinator to record the data. Once data has been entered, a copy of the inventory sheet should be sealed inside the box.

Finishing the Route

38. Once all pickups, drop offs, and sorting is done, make sure all items have been removed from the vehicle except the blue clipboard and head back down to the office. Park the vehicle and plug it in.
39. In the office, drop off the clipboard and vehicle keys. Erase your name from the vehicle checkout board. Notify your coordinator if anything unusual happened (couldn't finish route, unusually heavy use, vehicle trouble, etc). Wash your hands in the bathroom or kitchen and use the hand sanitizer in the office. Sign out on your timesheet. You're done!

Shipping E-Waste

Your coordinator will oversee shipments. When several boxes have been filled and all inventory and weights are entered, he or she will request shipping labels from our vendors. Once the boxes are labeled for shipping, they can be dropped off at Central Stores.

Potential Hazards

Vehicle Accident or Injury

If you or anyone else is injured on the route, your first priority should be to deal with the emergency. If needed, call 911 from a cell phone or 9-911 from a campus phone if needed. Any accident involving the vehicles should be reported to phone number 1-800-416-4029. UCSB's police dispatch number is 805-893-3346 from a cell phone or just 3396 from a campus phone. Report the situation to both your

coordinator and program supervisor the second it is safe to do so. They will help you with any next steps and must report the incident according to campus procedure.

If your injury is not an emergency but does require basic care (open cut, pulled or twisted muscle, smashed finger, etc), stop your route and alert your coordinator or the program supervisor. Do not continue to work injured. If you cannot return to the Grove and need to leave the scene do your best to store the vehicle, bins, or other equipment in a secure and out-of-the way space, but your safety is top priority.

Broken CFL

If a CFL bulb breaks, it will emit mercury vapor. Immediately leave the area and let the vapor dissipate for about 30 minutes. After this time it will be safe to reenter the area, clean up the bulb and continue the route. Place broken bulb pieces in a bag and turn them in at EH&S.

Chemical Spill

If you are ever collecting something you expect might be hazardous and any sort of chemical spills (other than printer ink or basic paints), leave the area and contact Environmental Health and Safety at (805) 893-3293.

Suspicious Items

If an item ever seems suspicious or unusual in any way or you do not feel comfortable handling it, leave it alone and notify your coordinator and/or Environmental Health and Safety at (805) 893-3293.

Oversized/weight Pickup

Your supervisor and coordinator will do their best to filter inappropriate pickups, but once in a while you may arrive on a location and find that someone has either disposed of a LOT of e-waste all at once or expects you to collect an extremely large or heavy item. Never push yourself to handle more than seems safe. If you are on a special pickup and there are a lot of individually manageable items, tell the contact that you will have to split the pickup over multiple days or even weeks. If there are a huge number of items at a particular bin, do your best to take as much as you can even if it means missing a few other stops. Inform your coordinator why you were not able to complete the full route, and leave a note on the collection sheet if there are still items left at the bin location.

If you encounter a very large item such as a large CRT television or refrigerator, leave it and inform the contact (on a special pickup) or your coordinator (at a bin location) that you do not have the tools to safely handle the item and they should call Central Stores. Your coordinator will contact the building manager who can track down the responsible party.

Part V: Outreach Procedures and Information

AS Recycling and Department of Public Works are different from virtually all other departments and organizations on campus. Departments such as Facilities Management focus entirely on campus operations and keeping everything running smoothly and tend to be invisible to most of the campus population unless something goes wrong. Groups such as EAB and Coastal Fund are almost entirely focused on advocacy, and do little hands-on operations type work themselves. Even PACES and LabRats, two groups that do an excellent job combining educational outreach and daily operations, do not generally manage buildings on a long-term basis. ASR and DPW are the only groups that handle mandatory daily collections and waste management to keep the campus running but also have a great ability to connect with and outreach to the student population. Our outreach students therefore are in a unique position, and have a unique responsibility to educate our students and community.

Outreach is often much less structured than the other departments and a lot is determined by the interest and goals of the current outreach coordinator and staff. Much of this section of the manual, therefore, is not written as a specific procedural guide but rather as a toolkit of options and policies that will help you get your message—whatever it may be—across to students and the UCSB campus.

Scheduling Requirements

Because outreach students do not generally have routine duties like students in other departments, they must fulfill other requirements to make sure that the department stays on task and that everyone participates fully. These requirements are:

1. As part of your training, you must attend informational sessions on recycling, electronic waste, compost, and waste management at UCSB in your first quarter on the job.
2. As part of your training, you must go on at least one Recycling route, one Techno route, one DPW Family Housing route, and must attend at least one DPW worm bin feeding session in your first two quarters on the job.
3. You should expect to be involved in two Outreach working groups at any given time (some working groups may change as tasks are completed, others may be long term).
4. You will be given a focus area (social media, event coordination, etc.) and are expected to dedicate time to your focus each week.
5. You will be expected to keep a log of your work and report back on assigned tasks or anything else you worked on over the past week at every Outreach meeting.

File Storage

You will be invited to a Dropbox folder that holds a collection of photos, logos, button designs, past flyers and brochures and other files that may be useful in future outreach efforts. You will be trained in using Dropbox, and are expected to help keep all files complete and up to date.

Graphic Design

As AS organizations, both ASR and DPW have free access to the AS graphic designer (currently Beth Ramone). Beth can help design flyers, Digiknow ads, logos, website banners, brochures, t-shirts, or other materials.

Before you submit anything, prepare all of your materials. If there is text involved like with a brochure or flyer, all text should be written word for word ahead of time. Beth will not edit copy or even fix typos, so be careful and **proofread**. Gather any images you would like to include directly or provide as an example. Define any ideas you have as to how you would like the design to look.

Go to http://www.as.ucsb.edu/services/design_order.php and fill out the graphic design work order request form. If you need to include more information, you can send an additional email to bethr@as.ucsb.edu. Select Sarah as your advisor and submit the order.

Expect your request to take 1-2 weeks. When she finishes, Beth will email you a draft of her design. If you would like to make changes, reply to her email with very clear instructions and she will update her draft. If you are satisfied, **you must respond to tell her the order is complete (and thank her!)**. Beth cannot close out a request until you have told her it is finished.

Printing

AS Publications is available to print any brochures, flyers, signs, or other items you might need. Printing is not free, so use the office printer for any draft items and save Publications for anything that needs to last or be a little nicer. Do **NOT** use AS Publications for laminating, as it is extremely expensive and we have our own laminator in the office. We already have an account set up with Publications, so you will not need to pay anything yourself—just say that you are with ASR or DPW.

Submit the file you would like printed to aspubs@as.ucsb.edu **and** publications@as.ucsb.edu (they may check either). It should already be formatted as you want it printed (for example, as a full-page image or as 4 quarter-sheet images, or as 11x17, etc as needed), do not expect them to reformat. Provide the following details about your request in the body of your email:

- That you are ordering for AS Recycling or Department of Public Worms
- How many copies you would like
- If multiple pages should be printed back to back or 1-sided only
- If you want color or black and white
- If it is a size other than 8.5x11, a reminder of the proper size (8.5x14 and 11x17 are also available, as are quarter and half-sheets)
- If you would like quarter or half-sheet printing cut into individuals
- Any other details (if you only want a couple pages of the file and couldn't split it up, etc)

Most printing orders that do not require folding, cutting, or binding will be ready within a day or so unless you are ordering during the beginning of a new quarter in which they are very busy with class readers. Even during this time, most readers are printed in black and white and the color printer is available. Sometimes they will email you to tell you the order is ready, sometimes they won't. If you don't hear anything, feel free to check via phone, email or just by showing up.

Orders are picked up at the AS Publications office. Enter the MCC/AS building through the single door that faces Corwin and is to the right of the ticket office and immediately turn right.

Website

Our website is recycling.as.ucsb.edu and is designed using WordPress. WordPress is extremely easy to use if you are only updating text, and slightly more complicated if you are reformatting the page or adding new pages and links. For the most part, using WordPress can only be taught with hands-on training, so it will not be covered in great detail here. JudyAnn Dutcher, the AS web designer, occasionally holds trainings and we will be sure to notify you if any are coming up. JudyAnn is also the best contact for any website issues, and is the only one who can make certain format changes. She can be reached via email at judyannnd@as.ucsb.edu. The Recycling program supervisor handles a great deal of the website's management, and can also answer many questions.

Our website is mostly used as an informational resource and describes where campus and community members can take their waste items or how they can reduce waste in their lives. Most sections do not need significant regular updating beyond, for example, when an e-waste bin moves from one side of a building to another. The program supervisor oversees most of these updates. Outreach handles all news and events updates, however. This includes:

- Information about any upcoming workshops or events we are hosting
- Information about any events we are participating in
- Follow-up pictures and descriptions of either of the above
- Information about other environmental groups' events if they have asked us to promote them
- Informative articles or blog posts written by ASR, DPW or UCSB Sustainability staff
- Links to any relevant and informative articles posted elsewhere (see criteria below)

There should be at least one new post each week. The best way to meet this goal is to host and cover as many events as possible and write articles or blog entries about a wide variety of topics. Short updates or shout-outs to groups deserving recognition are a good way to get a post out if you are tight on time. While postings should be up to date, it can be useful to prep material ahead of time but slightly delay publication of posts that are not time sensitive. This allows postings to be properly spaced out and helps ensure that we don't post a lot in the beginning of the quarter and then nothing once midterms start.

Using WordPress

In WordPress, all postings must be published as a new post, **not** as a new page. Pages are used for the more static sections of the site such as the recycling and e-waste information, not for current events or articles that we want to highlight under Latest News.

You can create a new post by logging in to our site at <https://recycling.as.ucsb.edu/wp-login.php> (you will be assigned a username). After logging in you will start at the Dashboard, click Posts in the left margin and then select New Post. Pick a title that is short, yet descriptive; this will appear in the left margin of our main site under Latest News. If you need to edit a previous posting, simply select All Posts from the Posts menu, then select the post you wish to edit.

Type in the main text box with the Visual option selected rather than Text (upper right of the text box). You can use the Text option if you want to enter HTML codes, but that is rarely necessary. Use the Paragraph option for any general text, and Heading 1 for any headings or lines that are fully bolded. You should only use the bold option if you are bolding a single word or phrase in a line of normal text. If you want to create a link, highlight the text you want to be linked (such as “click here”), click on the linked chain icon above the text box, enter the link address in the top box and click Add Link.

When you have written your post, you can click Save Draft and then Preview if you would like to check it before it is publicly viewable, and then Update when it is ready to go. If you are writing a longer piece, write in Word beforehand and have it proofread by your coordinator and/or supervisor. Once it’s ready you can paste the Word text into the box, but be aware that after pasting you will have to go through and redo your formatting.

Workshop and Event Information

If writing about a workshop or other event, be sure to include the following:

- The title of the event
- The time, date, and location
- A concise description
- If it is in the Grove, information on how to get there or a link to our How to Find Us page
- A contact phone number or email if people would like more information
- At least one image; all text is boring. Remember that images may not load correctly on mobile devices, so images should not contain essential information.

The finished post should be published at least two weeks before the event so it can be linked in email and social media advertisements. When the event is complete, create a followup post describing the event and include several pictures. Thank all attendees for coming and anyone who may have helped out. Be upbeat and energetic in your writing and give a personal touch, don’t simply report information.

Articles and Blog Posts

Articles and blog posts can be written about a wide variety of topics. Articles should be informative, and should teach the students of UCSB a little more about waste reduction on campus. You may wish to interview a UCSB staff person who works on waste management, shadow an AS Recycling or DPW route or custodial employee, or explain campus waste reduction goals and strategies. Blog posts can be more personal and about your own opinions or experiences. While all posts should be well written and professional, you should give your own voice and energy to the topic.

Links to Other Articles

If you find a particularly interesting piece somewhere else on the internet, you can create a short post and link to it to help increase attention. This should **always** be done for any article written by an ASR or DPW staff member for the UCSB Sustainability site or for a campus newspaper. Do not link to Pinterest or DIY-style craft posts. These are frequently low-quality, cheesy items that we’ve all seen a million times, and they aren’t always even practical (for example, a recent post showed how to reuse toilet paper tubes as plantable seedling holders; in reality the tube will not break down as fast as the seedling

grows and the roots will die). If you really want to do a reusable item craft post, do the craft yourself and create your own how-to guide to publish.

Upcoming Drop-Off Events

The county of Santa Barbara occasionally hosts free community workshops and electronic and hazardous waste drop-off events. Outreach staff should check www.lessismore.org/events and www.countyofsb.org/pwd/pwrrwm.aspx 1-2 times per week to see if any such events have been announced. If so, they should be posted in the designated spots on the website's hazardous waste page and/or electronic waste community resources page. It is also important to remove event listings after they have passed to keep our website looking up to date!

Social Media

Our Facebook profile was recreated in Summer 2013 since the password for the previous version had long since been lost. There are therefore multiple versions of our profile floating around, the current one is <https://www.facebook.com/ASRatUCSB> and uses the same password as our other accounts. It does not have very many followers, so please join and invite your other UCSB friends.

We have found that our Facebook page is most successful when managed by one outreach student in particular, though others may post when needed. It is also important to keep all of ASR and DPW's work under a single profile; do not create separate accounts for each department as it results in multiple inactive pages instead of one active page. It should have a new post about twice per week. Posting too often will cause us to lose followers who feel spammed by posts, too rarely and we will appear inactive. The most important posts are those advertising workshops, events, or other outreach efforts. Informational articles from other sources can also help meet the weekly quota. You can even post a quick shout out, like "Good luck on finals, recyclers!"

Writing for Campus Newspapers

UCSB has two main campus newspapers: the Daily Nexus and the Bottom Line. You are welcome to work with both, though the Bottom Line has the better reputation for quality and accuracy and is preferable. They are also the only one that allows guest writers outside of the opinion page.

The Bottom Line

If you are interested in writing content such as an informational article or opinion piece for The Bottom Line, you may initiate contact by emailing bottomlineucsb@gmail.com or by attending a weekly meeting in the Annex (time may vary depending on quarter).

The Daily Nexus

The Daily Nexus only allows guest writing on the opinion page. Opinion articles may be 600 to 700 words long, or 300 words long if it is a response to a previously published article. You may email your article to opinion@dailynexus.com; it should generally appear within a few days. You may also suggest a story by emailing news@dailynexus.com, sports@dailynexus.com, science@dailynexus.com, etc., and a Daily Nexus staffer may write an article on your proposed topic.

Advertising

Advertising is often the most important factor in getting a good turnout at an event or workshop, or increasing awareness of a new issue or campaign. People are generally interested in our work, so we just have to make sure they know what's going on! There are several ways to advertise, and ALL should be used for every outreach effort.

Website Postings

Website posts should be written first and over two weeks in advance if you are promoting an event. Any other advertising we do will refer people to the website for more information so this step is the most important. See Website, above, for details about how to craft this posting.

List-Servs and Email Groups

You should write a short 1-3 sentence description of whatever you are advertising to send out to several relevant listservs. **All requests or postings should be done in a separate, individualized email.** Include a heading, time, dates or deadlines, and a link to the website posting where people can go for more information. Make sure the date and time is shown prominently. Send this to the following people or groups. In the case of newsletters, you should address the contact directly, politely request that they add your description to the next newsletter and include it exactly as you want it posted. You may want to ask that they run it for a couple weeks until your deadline arrives, though they will most likely as you to send them a reminder. In the case of the AS listserv you can post your description directly; no request is needed as there is no list moderator.

- All current AS Recycling / DPW employees
- AS listserv: Email bcc@as.ucsb.edu to post directly to the listserv
- ES newsletter: send to Eric Zimmerman at Zimmerman@as.ucsb.edu to be added
- Sustainability newsletter: send to Jewel Snavely at jewel.snavely@vadmin.ucsb.edu
- EAB newsletter: request that it be added by emailing ucsbeab@gmail.com
- ZWC newsletter: request that it be added by emailing zerowaste.ucsb@gmail.com
- For certain rare cases (clear it with your coordinator or supervisor first), email the following people and request that they forward your message along to any students they work with:
 - Katie Maynard (kmaynard@geog.ucsb.edu)
 - Mo Lovegreen (lovegreen@geog.ucsb.edu)
 - Jordan Sager (jordan.sager@pf.ucsb.edu)
 - Danielle Kemp (dkemp@housing.ucsb.edu)
 - Tuyen Nguyen (tuyenn@as.ucsb.edu)
 - David Cleveland (Cleveland@es.ucsb.edu)

Social Media Advertising

Any post should be advertised with social media. Write a short headline and link your detailed website post so viewers can find more information. Repost the link a few times over the next couple weeks to remind people, but don't go overboard. Keep an eye on the page and address any questions people ask

in the comments. If you desire, you may share the link on your own facebook to let your other UCSB friends know as well.

Digiknows

Digiknows are the ads that run on the dining commons screens. First, design your ad using Powerpoint. Use common sense; Housing will refuse any ads that contain reference to alcohol, political positions, or any other inappropriate messages. Submit your ad at <http://www.housing.ucsb.edu/digiknow/submit-digiknow-ad>. Your ad must be submitted a minimum of 5 days before it will run, and payment must be received before the run date. Contact your coordinator or supervisor and they will handle **payment**.

Flyers and Posters

Flyers and posters should be used minimally in order to reduce waste. Print about 15 flyers and post them only in the most relevant locations. You must obey the following campus rules:

- Do not advertise any commercial organization or political positions
- All flyers must display the name Associated Students Recycling or Department of Public Worms so it is clear who is advertising
- Post only on posting kiosks or general use department bulletin boards with the permission of the department. Ask if you should come back and remove the flyer later or if someone else maintains the board.
- Banners may be posted on the Storke Plaza railings and on the bike tunnels. Banners must be less than 8 feet long and you may only have 1 banner per area. There is poster paper in the office you can use to make a banner.
- Use only staples on kiosks and blue painter's tape on railings or tunnels.
- All material that references a date must be removed within 48 hours of the specified date
- To post quarter-sheet flyers on residence hall doors, you must obtain permission from the Resident Hall Association. Go to <http://www.ucsbaha.com/funding.html> and fill out the funding request form by Thursday at 5pm—you are not asking for funding, but this will give you a space on the agenda for the next RHA meeting. The meeting will be held the following Tuesday at 6:30pm in the San Nicolas Hall Office. You will present at the meeting, and if you are approved you may post flyers.
- To leave quarter sheets at the front desk for students to take if they are interested, you need permission from the Resident Director or Assistant Resident Director of each building. Take a stack of flyers to the front desk and leave them with the attendant; they will check with the director and will then leave them out for distribution.
- You can also use our A-frame boards for advertisements or even general outreach. These may be placed between the UCen and Storke Plaza, though they should be on the cement and not the tile (putting them on the tile requires permission from UCen). They can also be placed along the Pardall corridor sidewalk as long as they are kept safely out of the way of skateboard, foot and bike traffic. Signs can be placed in either location until the end of the quarter.
- **DO NOT** use wire sign frames. They can be extremely dangerous when they are knocked over as they are invisible to the grounds staff and can be run over with a lawnmower. They have been forbidden on campus since a lawnmower flung one back out at high velocity and we will be fined if we use them.

Tabling

Tabling is one of the most common ways that student groups use to reach out to other students. We like to use tabling in combination with web resources, social media, workshops, training and other outreach strategies, but it is still one of the best ways to have fact-to-face interactions with the student body.

Tabling at Events

Often, groups will invite us to table at an event they are organizing. Examples include Pardall Carnival, Gaucho Gallop, Spring Insight, and so on. For many events, we are asked to both table and provide the waste infrastructure. This normally works out very well; our students arrive, set up the bins, set up the table, table while occasionally checking the bins, then clean up the table and clean up the bins.

Your coordinator will bring any tabling invitations he or she receives to the weekly outreach meeting and will schedule outreach staff for the event, including designating someone to pick up tabling supplies from the office and to return them after the event. Other than timing, it is also important to know if the event organizer will be providing tables and chairs or if we need to bring our own.

Tabling on Campus

Tabling on campus is subject to campus regulations. In general, tabling is only allowed in a few locations:

- **Arbor:** You may use one of the brown tables that line the Arbor walkway on a first-come, first-serve basis. Your tabling supplies must fit on the table with no freestanding items other than a shade canopy or A-frame sign, you must not serve food, and you cannot play any amplified music or use a megaphone. If you would like to do any of these things, you must get approval from the Minor Events Committee (see **Events in Common Areas**, below).
- **Dining Commons:** The dining commons occasionally request that we table for events like Earth Day and Sustainability Week, but we can ask to table there at other occasions as well. Tabling for Earth Day and Sustainability Week is generally organized by Danielle Kemp, who can be reached at dkemp@housing.ucsb.edu. During these special events, tables and chairs will be provided for you and you will receive a meal voucher. If you table at another time, you will not receive a voucher and should check whether or not a table will be available. Do not eat at the table, and do not attempt to engage students who are eating or walk around the building—you must stay at the table.

Setting up the Table

You should arrive at the office no later than 30 minutes before you are supposed to start tabling. Pick up the tabling supplies. If you need to bring a table, take the car keys and head up to the Grove. Take a folding table out of the bike trailer, load it into the car and drive it to the tabling location. If you do not need a table, take the tabling supplies to the tabling location by biking or walking.

Once you arrive, find your assigned spot and set up your table if needed. You should have:

- A striped cloth tablecloth: spread this out across the table

- The AS Recycling/DPW banner: stretch this across the front of your table and attach it inconspicuously with blue tape or zip ties
- Information pages and stands: these provide visual interest and information without being single-use brochures that people will throw away
- A display comparing compostable, recyclable and landfill items
- Business cards displaying the AS Recycling and DPW website and contact information, so those who are seeking more can find it without needing a full printed brochure. These should be kept behind the table and handed out on request.
- A recycling, compost and landfill bin and various items for each: this is an interactive game where people can try sorting various items into the correct bins in exchange for prizes
- Trivia questions: these are waste-related questions that are designed to teach people about recycling, composting, and waste management at UCSB, and people can answer them in exchange for prizes.
- Giveaway items: depending on what we have in stock, we may give out buttons, pens, stickers, temporary tattoos or other items. These should not be given away freely; people must play the sorting game or answer trivia questions to receive an item. Do not leave more than 3-4 on the table at a time. Do not give away food, candy, or items that have a lot of waste.
- In certain cases, you may also want to bring the office worm bin. You **MUST** be granted permission by the program supervisor each time you bring this bin and must not leave it unattended at the table. Only someone who has been trained on the bin should show it.

Interacting with the Public

Two students should be at the table at all times. There should never be more than 3 people unless most are actively engaged in a specific task (for example, a waste audit) since it tends to make you less approachable by students walking by.

Very few people will approach a table in a place like the Arbor without some sort of initial contact. Expect to call out to people and invite them to learn more about compost at UCSB, test their knowledge about recycling, or a similar opener. If you have extra people available, you can send one out to stand in the middle of the walkway to approach people and direct them towards our table.

Smile. Be positive and upbeat. Don't slouch and don't sit back from the table or you won't look approachable. We are here to educate people, so be ready to answer questions and gently correct those who think that compostable items should go in the recycling bin. You are being paid for your time so you are expected to be either talking with people or trying to initiate new conversations the whole time you are scheduled to table.

Never criticize other departments, organizations, staff or students at UCSB. If you aren't sure of an answer, admit that you don't know and, if possible, suggest a way the person can get their question answered.

Events in Common Areas

AS Recycling holds minor events throughout the year (according to definition, "minor" is considered to be an event with less than 2500 people), including workshops and public waste audits. For events such as these, we must take the appropriate steps in order for them to be officially approved. In the case of

tabling it is generally not necessary to take these steps (see **Tabling on Campus**, above, for a description of what can be done without prior approval). If someone has gone through the approval process they have priority for the space above any first-come, first-serve groups, but this is rarely an issue.

The Office of Student Life runs the UCSB OrgSync site (<https://orgsync.com/35502/chapter>) where you apply to hold an event. AS Recycling is already registered as a group and you should use our login and password.

Once logged in, go to the Forms tab on the left side of the page and choose which type of event you will be holding. Most often it will be the *Space Reservations Without Media* (try this first) or *360 Event Planning Guide*. Fill out all information.

Begin this process about one month before the event if possible. While it won't take that long to get approval, you want to make sure everything is fully taken care of at least two weeks in advance so you can advertise. It can take a few days to confirm if your proposal has been approved in the preliminary stage, then you must attend a meeting the following Wednesday at 12 pm in the SRB (this information will be included in the confirmation email). At this meeting will be Office of Student Life staff, the Fire Marshall, campus security, and other figures that are responsible for ensuring that events go smoothly. You will give a short overview of what the event will be and they will ask questions if there is anything that concerns them. The most common concerns are noise and food; you can avoid these concerns if you do not have amplified music or a megaphone at your event, and only provide food items that come prepackaged (as opposed to being homemade).

Once you have been approved, you may proceed with your event planning. Pay close attention to any special instructions you are given. As always, be sure that your event is safe and under control and that you clean up EVERYTHING when you finish. Our reputation as an organization is very important in getting approval for future events.

Promotional and Customized Items

We occasionally give away promotional items when tabling, and sometimes order customized items such as t-shirts, banners, and so on. This section lists the vendors we use for different products so that future groups do not have to research new ones each time they want to place an order.

Shirts and Apparel

T-shirts should be ordered from SustainU clothing (<https://www.sustainuclimbing.com/>). This company manufactures and prints shirts in the US (some "made in the USA" companies actually manufacture elsewhere and only print logos in the US) and uses locally sourced cotton scrap and recycled plastic bottles to produce the shirts.

Custom Banners

Durable banners (like those used for tabling) can be printed through the site <http://gotprint.net/g/uploadBanner.do>. You must upload the file directly to the site; the banner will then be printed and shipped to us.

Buttons

Buttons can be made using the button maker in the Community Affairs Board office. You will need to pre-print images, but there should be several standard designs saved on the office computer. CAB has all other needed materials. They pay for supplies but do not charge us, so don't abuse their generosity.

Stickers

To be determined!

Special Event Service

Special event service is actually one of our best forms of outreach. Many people either don't know where to start with waste reduction or assume they already know how to recycle or compost, but a special event combined with an audit report gives them very specific information about the items they used at their event and details of how they can reduce waste in the future. Outreach generally leads our special event service program, though staff from other departments will help as needed.

Scheduling the Event

Your coordinator will discuss any requested special event service at weekly outreach meetings and will oversee scheduling staff for setup, monitoring (if needed) and cleanup at each event. He or she will know the date and time of the event and how many of each type of bin will be needed. The coordinator will most likely also schedule an audit for the collected waste at the earliest convenient time. You are expected to help with special events whenever possible and needed. They are uncommon in fall quarter and extremely rare during winter quarter, but very, very common during spring.

You are generally expected to be at the event site ready to set up bins no later than 30 minutes before the event starts, though sometimes some events will require or allow an earlier setup. This means you should be at the office ready to pick up the car about an hour before the event to load up bins. You must also be at the event site as soon as the event is scheduled to wrap up, but do not necessarily expect cleanup to begin until about 30 minutes after the event ends and plan to take another hour by the time you drop everything back off at the Grove.

Setting up Bins

1. Arrive at the office about 1 hour before the event is set to begin unless you have been scheduled otherwise. Sign in on your time card and take a set of vehicle keys. Drive up to the Grove and load the car with 1) all needed bins, 2) all needed lids, 3) 2 hanging signs per bin and 2 lid signs per bin, 4) enough color-coded bags for each bin + extras. It is easiest to load bins first, lying flat, and place lids inside them.
2. If any bins or bin lids are dirty, they should be wiped off with a rag and spray bottle before being taken to the event.
3. Drive to the event location. Find the event organizer and let him or her know that you have arrived. Ask if there is anywhere in particular that the bins should be set up.

4. Set up the bins according to the organizer's instructions. If they do not have a preference, place them in convenient locations that people will walk by but that do not block foot traffic or create a fire hazard.
5. All bins should be organized into clusters, meaning that 4 recycling, 4 compost, and 4 landfill bins should be set up into 4 groups with one bin of each type per group, not split into 12 solo bins or paired in varying arrangements. If an event has all compostable products and therefore requests extra compost bins in addition to recycling and landfill, a cluster should consist of 2 compost, 1 recycling and 1 landfill, and not 1 cluster of 3 and 1 solo compost bin.
6. Place a bag in each bin according to the instructions on the lid. All bags must match their bin type: black for landfill bins, clear with blue lettering for recycling bins, and clear or compostable for compost bins. Snap the color-coded lid into place.
7. Attach signage to all bins. Affix hanging signs to both of the the lower edges of the lids, attached via Velcro. Attach lid signs to both sides of the flat top area of the lid.
8. Either take the car back to the office or Grove, leave it there for the cleanup group and leave on foot, or stay and monitor or table at the event. This will vary depending on scheduling and event needs.

Monitoring the Event

9. You may be scheduled to monitor the entire length of the event, at a specific time during a long event (right after lunch is scheduled to finish, for example) or while tabling at the event. If you are tabling while monitoring bins, be sure that your table has adequate coverage before leaving to check the bins.
10. Check each bin periodically and switch out bags as needed. Usually this is not necessary and a single bag will last the duration of the event. The exceptions are full day conferences or meetings with meals, in which it is often necessary to change the bags immediately after the meal and before the rest of the events of the day.
11. Place full bags in the vehicle. Do not leave them on site or in view of event attendees.

Cleaning up Bins and Waste

12. Wait until all attendees have left or at least thrown away all waste items before cleaning up. It is very rude to clean up while people are still at the event, even if it is running long. Help clean up any waste items that have been left out.
13. Remove hanging signs and keep them in a stack. Remove lids. Remove all bags and tie them closed. Fold bins. Place all items in the back of the vehicle.
14. Check the area to make sure you haven't missed anything. Count the items in the car to make sure it's all there.
15. Drive back to the Grove. If the gate is locked, use the key on the vehicle keys to open it.
16. Put all bins, signs, and lids away in their proper color-coded locations. Put all bagged waste in a rolling toter near the audit area and add a note that it should not be disposed of until after the audit. Never leave any waste anywhere but a closed bin overnight.
17. Take the vehicle back down to the office, plug it in and drop off the keys. If it is after hours, lock the bin in the grove and leave the keys in the vehicle.

Conducting a Waste Audit

Waste audits are small scientific studies in the volumes and types of waste being generated at UCSB. They also require handling a wide variety of waste materials, and you can't always tell what you are picking up until after you do so. Proper procedure is therefore very, very important both to ensure accurate data collection and to keep everyone safe.

Materials:

Large tarp (min 15x15, larger is better)	Digital scale
2 gray folding tables	Data sheet, pen and clipboard
Several collection bins	Proper attire (see below)
For smaller audits, several gray desk-side bins	Waste to be audited
Bin liners and compostable bags	

Proper Attire and Safety

To conduct a waste audit, you must wear:

- Closed-toed shoes (if you come to an audit without closed toed shoes, you will be sent home and will be considered to have missed your shift)
- A plastic apron
- Latex or nitrile gloves
- Work gloves (worn over latex gloves)
- Goggles (depending on the audit)
- A face mask (depending on the audit)

While sorting, pay close attention to what you are handling and work slowly. Do not throw waste or allow anything to break or splatter. Waste mixes together very well, and there is always a chance for broken glass or other dangerous items to be hidden in whatever you are handling. It is also important that all waste is properly sorted into a bin and none spills on the floor or mixes with other waste categories.

If *your gloves tear*, replace them immediately. When removing your gloves, always use proper laboratory technique so nothing that has touched the outside of the gloves touches your bare hand. With one gloved hand, pinch the **inside** of your other glove at the wrist and pull it off so it turns inside out. Crumple that glove into your still-gloved hand, then use your bare hand to pinch the inside of that glove and pull it off, inside-out and containing the other balled up glove. Discard both together.

If *you find any blood, feces, or other biohazardous waste*, speak up loudly both to inform your waste audit leader and any other students who may be working next to you so they may step back while the hazard is removed. Assuming you have not been exposed, the audit leader will help you remove the waste safely and will check for any remaining hazards. You will most likely be asked to wash your hands and arms thoroughly, use sanitizer and change your gloves.

If *you are **exposed** to biohazardous waste (waste comes in contact with broken skin, eye, mouth, or any other mucus membranes)*, immediately notify the audit leader. He or she will help you wash the exposed area with a large amount of water and will take you to the health center for medical attention.

If you cut yourself but are not exposed to a serious hazard (by clean broken glass, for example) notify your audit leader. Clean the area very thoroughly and bandage it. You cannot continue auditing with an exposed open wound.

If you find electronic waste or a CFL light bulb, notify the waste audit leader so they may set it aside. If a CFL bulb breaks, speak up loudly. Everyone must back away from the table for about 20 minutes so any mercury vapor has time to dissipate. When you return to the table, either the audit leader or a techno student who has been trained to handle broken bulbs will clean up.

Audit Setup

An audit will require a large flat area with plenty of ventilation. At ASR, we usually set up audits in the Grove either in the back area by the small shed or on the back side of the bike trailer. To set up:

1. Create a data sheet. It should be set up in a grid with each bin category on one axis and each category you are sorting out on the other (see example audit data sheet below). Categories should be designed so that every item in a category has the same final dumpster destination. If “glass” is a category, for example, it should be specified to include only include recyclable glass while Pyrex and mirrored glass should be considered to be in the landfill category.
2. Spread a large, clean tarp on the ground. You will want a minimum of a 15x15 foot area, plus enough space for sorted and unsorted waste to be placed far away from each other so they don’t get mixed up.
3. Set up two folding tables so that their long edges are touching and together they form a square. The tables are usually kept in the bike trailer.
4. Cover the tables with a large plastic sheet and secure it on all edges with tape or clamps.
5. Set up collection bins along the edge of the table, with 1-2 for each person auditing and at least one for each category of waste you are sorting into. Designate each bin as being for a specific category of waste from your data sheet.
6. Line each bin with a bag, and be sure to use compostable bags for any bins designated for food or compostable products.
7. Set up an area for weighing and recording data. Because there are very few flat areas in the Grove and uneven ground can give inaccurate weights, the best place for the scale is on the floor of the small shed.

Sorting and Weighing Waste

8. Position auditors so that each is standing between two bins, and make sure each knows the materials that go into the bins on either side of them. An 1-2 people, possibly the audit leader, should be assigned to weigh, record data, and switch bins out as needed.
9. When you are ready to begin, pick all unsorted waste that came from a single bin category that you have designated (such as all recycling bins or all VIP area compost bins, for example). Dump as much waste as possible from that category in the center of the audit tables. You may add the rest after a portion is sorted and more space opens up.
10. Begin separating all waste items from that category into bins based on material type. Plastics might go in one bin, metals in another, etc, all depending on how you have defined the list of materials you are auditing. Each auditor will focus mainly on collecting types of items that go in the bins on either side of him or her, but auditors frequently help each other by passing items across the table as needed.

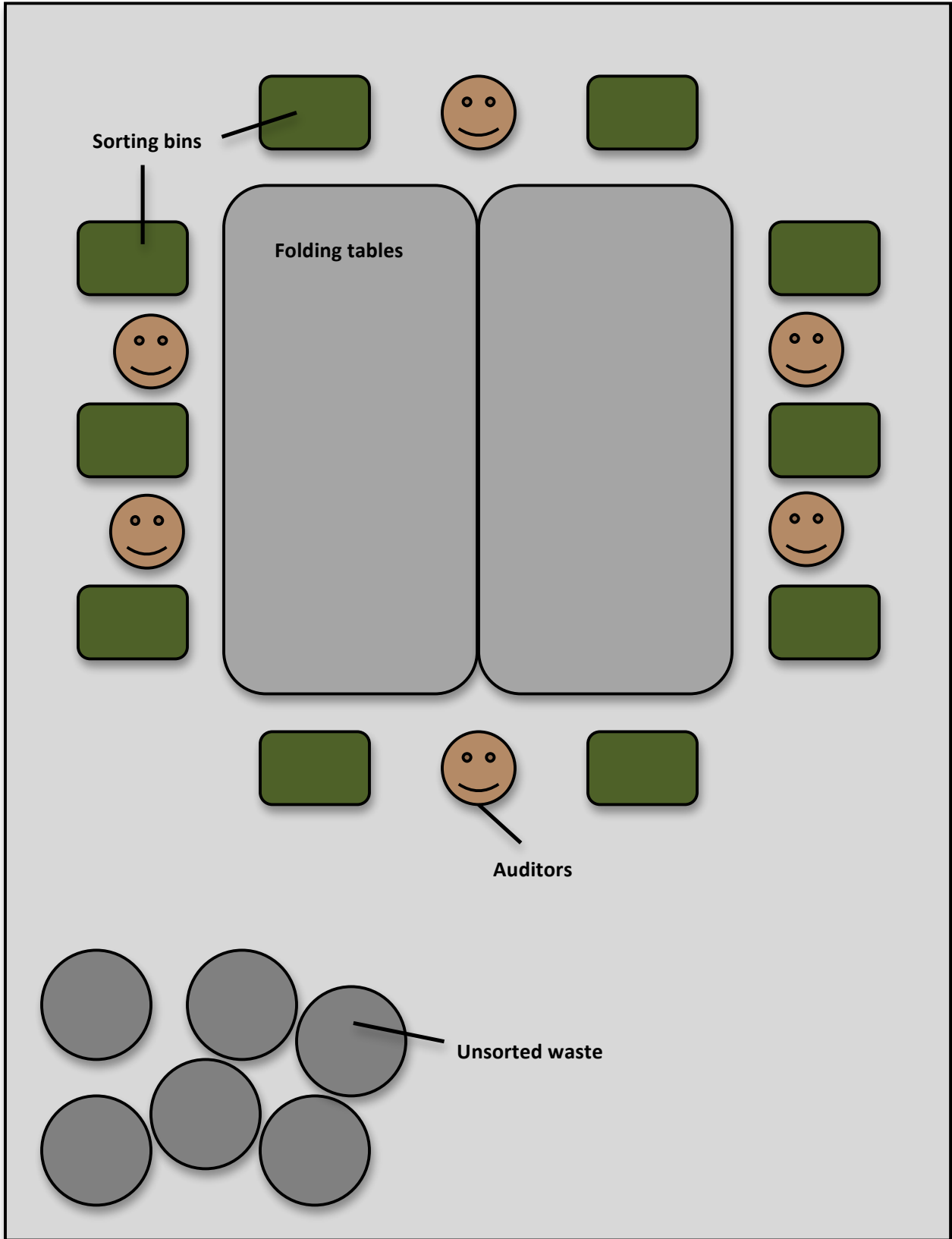


Diagram of Audit Setup (tarp area only, weighing area and weigher not shown)

11. When a bin fills or weighs about 30 lbs, the auditor should notify the weigher. The weigher should switch out the full bin with a fresh empty bin lined with a bag and take the full bin to the weighing area.
12. The weigher should weigh the bin and contents on the digital scale. Record the weight on the data sheet in the cell at the intersection of the row for the original bin type and the column for the waste category, then remove the bagged waste and record the weight of the empty bin next to it so it can be subtracted later. See attached data sheet for an example.
13. The weigher should tie the bag of waste closed and set it aside to be taken to a dumpster when the audit is over. Remember that if only black bags are used it can be impossible to tell which bags contain recycling and which contain landfill waste (compostables will be in a different bag) so designate one place for recycling bags and one for landfill. Keep all sorted waste far away from unsorted waste. Do not discard anything until the audit is complete.
14. When the weigher is recording weights, he or she should also note what specific items make up the majority of each material type (the glass category is usually made up of wine and beer bottles, for example) on the data sheet.
15. Once all waste of a specific bin category is fully sorted, all auditors will take a few minutes to check the floor, under the table, or remaining unsorted bags to make sure that nothing was missed. If everything is done, record all weights of all bags of materials even if they are not full.
16. Remove all bags and set them in the area for sorted bags that are ready to go to a dumpster. Wipe off the tables and clean the tarp as needed. Re-line all bins.
17. Once everything is cleared, repeat the procedure for the next bin type. Never start one bin type until the previous bin type is completely finished and removed from the area.
18. When the audit is completely finished, check once again that nothing has been missed and that all data has been entered. Take all sorted waste to the appropriate dumpster, sweep or hose off the tables and tarps and put them away. Put all safety equipment back in the small shed.
19. Take the data sheet down to the office.

Data Analysis

20. Promptly after the audit, record all data in an Excel spreadsheet in a grid format similar to the data sheet. Sum all waste weights and subtract all bin weights to get a final weight for each bin category/material type cell.
21. Record the list of most common items for each category on the same spreadsheet.
22. Once all of this data has been entered, place the original hard copy data sheet in the office file cabinet in the Audit Data folder.
23. Back on the Excel spreadsheet, add up all cells in which the bin category is correctly paired with the material type and the material type is recyclable or compostable (but not landfill). For example, add up all cells for recycling/glass, recycling/plastic, recycling/metal, compost/food, compost/compostables, etc, but do not include compost/plastic, landfill/food, etc.
24. Divide the summed total of the above cells by the total waste generated by the event. This will give you your pre-sort diversion percentage and shows what percentage of waste would have been diverted if no waste audit sorting had occurred.
25. Next, add up the total weight for each category regardless of bin type. Add all of the recyclable categories together and divide by the total waste for the entire event. This gives you the percentage of waste that was recyclable. Do this for compostable and landfill waste categories as well. Add the percentages for recyclables and compostables to get your total post-sort diversion rate.

26. Have your coordinator or supervisor double-check your analysis and discuss any additional information that might be needed, as exact setup may vary depending on the audit and who will be receiving the final report.

Writing an Audit Report

An audit report gives event planners or building and department managers specific feedback on their waste generation. While more elaborate reports are often created when specific data is needed, even the most simplistic report must include the following components:

1. The standard heading used on all of our reports. This can be copied from previous reports
2. The title of the audited event or area and the sponsoring department
3. The date of the event
4. The number and type of bins used if ASR provided bin service. If not, a summary of the waste infrastructure should be given.
5. A description of the event. If possible, include the event location, description of attendees (students in general, members of a particular organization), number of attendees if known, details such as food and entertainment provided, time of day, length of event, and so on. All of these details are useful if we cover the same event the following year.
6. A section entitled Waste Audit: Self-Sorting by Event Attendees/Users/etc. This section should give the percentage of waste from each bin type that actually belonged in that bin (for example, 75% of waste in the recycling bin was actually recyclable, and so on) and the pre-sort total diversion rate.
7. A section entitled Waste Audit: Post-Event Sorting by ASR. This section should include the percentage of all waste generated at the event or site that was made up of each category (for example, 30% of event waste was recyclable, 40% of waste was compostable, etc). It should also include a list of the common items for each item category.
8. Evaluations and Suggestions. This section should decipher the results and offer ways that the organization can improve their performance in the future. It should consider two issues in particular: how recyclable or compostable items were and how well users sorted their waste themselves. Ideas for alternate materials and better education should both be provided.
9. Tables showing all raw data and percentages, and equations and explanations showing how all results were calculated.

Writing a report can be challenging. Your supervisor and coordinator will assist you and will check your report before submitting it via email to the planner or contact, so don't be afraid to ask for help. All finished reports should be filed on the office computer so they can be referenced next year as many people just request "whatever bins we ordered last time".

Invoicing for Events

The outreach coordinator or program supervisor handles all special event invoicing. Invoices are written using a standard form with a breakdown of charges showing the ordered bins. An invoice number is also given for administrative purposes. The invoice is mailed in .pdf format to the event organizer and to the AS Record Keeping Specialist (currently Jose Raygoza). Payment is received at the AS main office and deposited into the ASR account. It is important to periodically request revenue reports from the AS administrative office and check if invoices have been paid, as student groups are frequently late.

Part VI: Department of Public Worms Procedures

The Department of Public Worms is one of the most recent additions to the AS Recycling group, and has changed the most over the last year. Starting as a program that focused on picking up food waste from Isla Vista businesses and composting it in the park, DPW has since evolved to handle a diverse array of on-site composting programs at UCSB.

Picking up Food Waste

We pick up food waste from the dining commons to feed our worm bins. This helps provide our worms with a variety of food waste and allows at least some of our waste to be composted on campus rather than driven to a facility 70 miles away in a carbon-polluting truck. The resulting product is also an extremely desirable soil amendment so the UCSB community can benefit even more!

Starting in the Office and Grove

1. Start in the office. Sign in on your timesheet and pick up the green clipboard. Head up to the Grove.
2. At the Grove, pick up 2 5-gallon buckets for each dining commons you are visiting and load them into the back of a bike trailer. Pick up a pair of gloves and ride the bike to your first dining commons (either DLG or Ortega or both). Grab a couple towels.

At De La Guerra

3. Enter from the loading dock through the door marked De La Guerra. Go to the manager's or administrative office and let them know you have arrived.
4. Collect the green salad bar prep toter from just inside the kitchen area. Make sure they have a second bin available so they can continue working.
5. Wheel the bin out to the compactor area. Sift through the food and take anything that is appropriate for the worms (non-citrus fruits and vegetables only, avoid onions and hot peppers). Place this food in your 5 gallon buckets.
6. When you have either taken all appropriate food or filled your buckets, weigh each bucket and record it on the correct data sheet, subtracting 1.5 lbs for the bucket itself.
7. Use the towels to clean up EVERY speck of spilled food.
8. Wheel the toter back into place inside the kitchen.
9. Take your buckets and scale back to the bike and load everything into the trailer.

At Ortega

10. Enter from the loading dock through the door by the compactor. Go to the manager's or administrative office and let them know you have arrived.
11. The Ortega staff will either direct you to a specific toter or aim to get the one designated for salad prep. Take it out to the loading dock next to the compactor.
12. Sift through the food and take anything that is appropriate for the worms (non-citrus fruits and vegetables only, avoid onions and hot peppers). Place this food in your 5 gallon buckets.
13. Use the towels to clean up EVERY speck of spilled food.

14. Leave the toters on the loading dock.
15. Take your buckets back to the bike and load everything into the trailer. Head back to the grove.

Drop-Off and Finish

16. Once back at the grove, unload your buckets from the bike. Weigh each bucket and record the total, minus the 1.5 lbs of weight per bucket, on the data sheet in the green clipboard.
17. If you are feeding the worms that day, you may use the food as needed. If you are not feeding the worms, add the food waste to the food collection bin until you are ready to feed.
18. Wash out the buckets and store them to dry. Wash your gloves and hang them.
19. Put any used towels in the hamper, put away the scale and put the bike back in the shed.
20. Take the green clipboard down to the office and sign out on your timesheet.

Managing Worm Bins

Vermicomposting is the core of the Department of Public Worms program. Our 4x8 flow-through bins help us reduce campus and community food waste while developing a high-quality product that can be used to enrich flower and vegetable gardens. Like our hot compost programs, vermicompost allows us to process waste on site and reduce the transportation impacts associated with commercial composting. It is also an engaging way to educate students on how they can compost at home, as vermicompost systems can be adapted to any size.

Materials:

Large flow-through vermicompost bin	Compost thermometer (kept inside bin)
Mixture of food or manure waste	Water (from Grove hose)
Carbon/bedding (shredded newspaper)	

Acceptable Food Waste

Vermicompost worms must be fed a very specific diet, as certain foods can be quite harmful. The best foods are non-acidic fruit and vegetable scraps, and certain other types of food can be added in very limited quantities. Meat and dairy should be avoided altogether, as should more than the smallest amount of foods like onions or hot peppers (worms are one long mucous membrane, so if it stings your eyes, it will hurt them!)

Good – Main Diet

Fruit (non-citrus)
Vegetables

Fair – Limited Quantity

Coffee grounds (too much causes excess heat)
Bread (can ferment)
Beans & peas (can ferment)
Tomatoes (slightly acidic)
Citrus (acidic, limit heavily)
Onion (aromatic, limit heavily)

Poor – Avoid

Meat (can cause odors, contain pathogens)
Dairy (can cause odors)
Oils, dressings, & fats
Hot peppers (can burn)

Worms also strongly prefer that their food be chopped as finely as possible as it improves microbe colonization and therefore their ability to break it down further. Pureeing, freezing, and even a partial hot compost cycle can help break down food so worms can process it more quickly.

Acceptable Manure

Worms love manure, provided it is the right type and is pre-treated properly. Horse, sheep, cow, and rabbit manure can be used after being properly aged. Cat, dog, or pig manure can contain dangerous pathogens and should never be used. Chicken manure is also not ideal as it is extremely high in nitrogen. Overall, grass-fed animals produce great manure for worms, other animals not so much.

Any manure must be well aged and/or pre-composted before it is used in a worm bin. Fresh manure is still far too high in nitrogen and will lead to the production of ammonia, which can very quickly kill off your worm population. Manure will be ready for worms after being allowed to sit in a large pile for several months to age. The process can be sped up by following hot composting procedures to balance aeration and moisture and encourage adequate heat production. Hot composting the manure also has a huge advantage in that temperatures above 140 will kill off most pathogens that may be present. When the manure is mostly finished with the composting process and no longer smells like manure, it is ready to be added to the worm bins.

Many people worry about using manures from animals medicated with de-worming medications. This can be an issue with fresh manure, which you shouldn't be using anyway, but the aging and composting procedures seem to eliminate the risk.

Observation (done every day)

1. Open the bin and check and record the temperature. Ideal temperature is between 60 and 80F, and tolerable temperature is between 40 and 90F.
2. Note any smells coming from the bin. There should be no foul odors.
3. Note the moisture level of the bin by reaching several inches down into the compost layer. The contents should be deeply moist but there should be no standing water.
4. Note the presence of flies or evidence of other pests (mouse-sized holes, for example). While there will be many species in the vermicompost ecosystem, there should not be a large number of fruit flies under good conditions.
5. Note if the most recently fed material has begun to break down and be consumed. Food should be obviously breaking down before fresh food is added.
6. Record any observations along with the date and time.

Maintenance (as needed based on observations)

7. If the temperature *is within the ideal range for worms* (60-80F), no action needs to be taken.
8. If the temperature *is within the tolerable range for worms (40-90F) AND the temperature is expected based on current weather conditions* (for example, if the bin temperature reads 85F on a very hot summer day), notify the DPW student coordinator and program supervisor so they may continue to monitor conditions, but there is no need to worry just yet.
9. If the temperature *is outside of the tolerable range for worms or is unexpectedly high or low based on weather conditions*, notify the coordinator and supervisor so they may take immediate

action. Action will vary depending on the situation but may include watering, leaving the lid open for a short time, adding bedding, or adding an insulating blanket.

10. If there is a *bad odor* coming from the bin, add additional bedding material and very slightly mix into the top layer of material. Loosen any compacted material by lightly mixing with your fingertips, but only do so where necessary. Odor is often associated with a lack of oxygen, which may be caused by too much moisture. See *overly wet below the bedding layer* below.
11. If the bin contents are *dry below the bedding layer*, lightly spray water from a nozzle on the “shower” setting. Contents should be thoroughly moist but not saturated, as too much water will reduce oxygen flow and cause anaerobic conditions.
12. If the bin contents are *overly wet below the bedding layer*, add additional dry bedding. If the bedding that is already present is wet, mix the layers very lightly.
13. If there are *a high number of flies*, thicken the top bedding layer by adding extra bedding material. No food waste should be exposed.
14. If *recently fed material* is not being consumed, hold off on additional feedings. If certain materials go untouched while the rest is consumed, the worms may be avoiding them and they can be removed.

Feeding (done once per week)

15. Make sure that food waste from the previous feeding is showing obvious signs that the composting process has begun. If it still looks fairly untouched, hold off on additional feedings.
16. If there is no shredded paper available, weigh out approximately 5 pounds of newspaper per bin to be fed and record the exact weight. Shred it using the office shredder and carry it up to the Grove in a plastic bag or tub. If shredded paper is already available, do not record the weight as this was already done at the time of shredding.
17. Assuming worm population is at capacity (about 1000 worms per square foot) and that worms have been eating at a normal rate, measure out approximately 100 pounds of food waste per bin. During the summer, food should be pulled out of the hot compost bins so it is already somewhat broken down and will not heat up in the worm bin. During the winter, it may be desirable to use fresh food to keep the bin warm. Record exact weight of food to be used.
18. Open bin. Spread added food and manure waste mixture evenly across top of current material. Do not bury, and do not mix lower layers together. Use the hose on shower setting to moisten the material.
19. Spread shredded newspaper evenly on top of food layer so that food is completely covered. Do not mix into lower layers. Do not moisten. Close bin lid.
20. Add any remaining food or manure waste to hot compost bins (see **Managing Hot Compost Bins**).

Harvesting Worm Castings (done once per week maximum)

21. Remove the ties that hold the grates to the bottom of the bin and set the grates aside.
22. Scrape the ceiling of the harvesting chamber lightly to loosen any stuck finished compost. Collect it either in the trays or in your hand.
23. Pick out any worms or unfinished material and put them back in the top of the compost bin.
24. Place all finished compost in a plastic bucket or bin. Cover the compost with newspaper and write the date on the newspaper. Place the plastic bucket or bin in the shed and let it sit.
25. Put the grates back in place and tie them closed.

26. After the compost has been sitting for about two weeks, sift it by pushing it through the harvesting screen placed over the finished castings bin. Pull out any worms that have hatched and place them back in the main composting bin.
27. Place the bin of finished castings and harvesting screen in the shed. Clean the plastic bucket so that it can be used during the next harvesting session.

Managing Hot Compost Bins

The hot compost bins are used to process overflow material from the dining commons pickups that cannot be used in the worm bins. Hot compost also allows us to pre-treat food waste and the manure from the horse stable dropoffs before feeding worms and to generate larger amounts of compost than can be made through the capacity-restricted vermicompost process. This compost can be used in the garden or given away or sold to the campus and its students.

Materials:

Hot compost stalls	Compost thermometer
Food or manure waste	Water (from Grove hose)
Carbon source (newspaper, dried grass, straw)	

Definitions

- **Active stall:** A single stall that is not yet full of food or manure waste but to which waste is being added on a regular basis. Once the active stall fills, it becomes a processing stall. No more waste should be added; a different empty stall should be selected as the new active stall.
- **Processing stall:** A stall that has been completely filled with compostable waste. Processing stalls should be left alone except to check temperature, water and turn compost (2-3 times per week); no new waste should be added even as bin volume decreases during composting process. There may be multiple processing stalls at once, though each will most likely be at a different stage in the process.
- **Finished stall:** A stall that has completed processing and is filled with finished compost. Because compost activity is greatest at the hot center of the pile, the surface of otherwise finished material may still appear unfinished. If you are ready to use the finished compost, unfinished remains may be added to the active stall.

Starting Procedure and Observation (done twice weekly)

1. Remove burlap cover on hot compost stalls.
2. Use the long-stemmed compost thermometer to measure and record the temperature in the center of all active, processing, and finished compost stalls (see below for definitions of different types of stalls). Observe each pile's progress and note any smells.

Managing Piles (based on observation)

3. If a processing pile *looks like it has mostly but not fully completed the composting process AND the temperature of the pile is dropping after a period of high heat*, the material can be considered properly pre-composted and can be fed to the worms as needed.

4. If a processing pile *looks like it has completed the composting process* (all material resembles dark brown soil, food waste no longer recognizable) AND *the pile is no longer producing its own heat* (temperature dropped to near ambient levels), it can be considered finished. Record the date so we can track average finishing times. Empty the stall and record the total weight of the finished compost. The compost can be used as needed, and the stall can be used for a new batch of waste.
5. If a processing pile's *core temperature exceeds 160F*, aerate the pile and add water to avoid overheating and killing the microbe population, which will halt the composting process.
6. If a processing pile *smells of ammonia*, add additional carbon. This is the only situation in which something other than water should be added to a processing pile.
7. If a processing pile *appears and smells normal and has a hot or rising temperature* (at or below 160F), everything is probably progressing well. Aerate the pile and add water if it is less than 50% moisture, then leave it alone until the next check.

Feeding and Aerating (daily)

8. Record the weight of waste that is to be added to the active stalls.
9. If the active stalls are empty, simply add fresh food waste or manure to start a new pile.
10. For each processing stall and each active stall that already has at least some material, the pile can be aerated in one of two ways. A full turning should be done about once per week or when new waste is added. Otherwise, skip to step 13.
11. Open door and pull all waste out with a shovel or pitchfork. Add new waste to the loose pile from the active stall ONLY.
12. Turn each pile back into its stall so that the waste is fully mixed and what was on the top is now on the bottom and vice versa. Compost activity will be greatest at the hot center of the pile, so it is important that all waste eventually spend some time in the center and that no material is in the center for too long (which can make it heat up too much).
13. Add a thick layer of carbon material (straw or shredded newspaper) to the top of the active pile.
14. Run the blower for about 5 minutes to force air through the conduit and into the piles. While the blower runs, clean the buckets used to pick up food waste and put them away and check on the worm bin.

Watering (daily as needed)

15. Soak active and processing piles with a hose for about 20-30 seconds or as needed. Piles should be about 50% moisture, (consistently moist, though with no pooling). Some extra water can also be added to overheated or very high nitrogen processing stalls in order to slow down composting.
16. Replace all burlap covers to prevent flies and to help retain water and heat.

Making Worm Tea

Materials:

- | | |
|-----------------------------------|-------------------|
| Finished worm castings | 2 large mesh bags |
| 6-gallon brewing bucket w/ spigot | Molasses |
| Air pump w/ tubing & air stones | Dechlorinator |

Any additional additives (kelp, etc)
Empty bottles, jugs, other containers

Electricity (extension cord @ back of Grove)
5 gallons water (from Grove hose)

Brewing Procedure

1. Take the brewing bucket to the entrance of the techno trailer and set it on top of the bucket with the sealed lid. Make sure the spigot is turned to OFF (there is faint white lettering on the spigot handle).
2. Fill the bucket with about 5.5 gallons of water from the hose at the back of the grove. Add a very small amount (only 1/10th of a teaspoon is needed) of dechlorinator.
3. Plug the air pump into the extension cord, submerge all available air stones in the bucket and turn the airflow to the maximum level.
4. Allow pump to mix dechlorinator for 5-10 minutes while you prepare the castings.
5. Tuck one mesh bag inside the other so that it is double bagged. Fill the bag with two large handfuls of finished worm castings and tie the bag closed.
6. Place the bag of castings in the filled brewing bucket. Add about a teaspoon of molasses.
7. Return molasses, dechlorinator, any additives to storage.
8. Fill out the chart on the clipboard, and be sure to note any reserved quantities.
9. Leave the pump running and let the tea brew for a minimum of 24 hours.

Harvesting and Cleanup Procedure

1. After tea has been brewing for 24-48 hours, unplug air pump and remove air stones.
2. If necessary, move the bucket to a raised surface (so a bottle can be placed under the spigot).
3. If tea is being sold, use spigot to fill gallon jugs or quart jars as close to time of customer's arrival as possible, or even while they wait. Place DPW worm tea adhesive label and instructions on container. See Selling Worm Tea and Castings for additional mandatory protocols on conducting sales transactions.
4. If tea is being used in the garden, add 2 quarts to the watering can, fill the rest of the can with water, and water the garden normally.
5. If any leftover tea remains, it can be used in the garden or taken home by ASR and DPW employees in any available containers.
6. When the bucket is empty or near empty, remove the mesh bag and allow to drain, squeezing slightly.
7. Remove and discard used castings in the hot compost bin, or use them in a garden bed if there is an immediate need. Rinse bags thoroughly with a hose nozzle on a high-powered setting until all residue has been removed.
8. Allow bags to dry and store for later use. Rinse and dry bucket, store. Rinse air stones as needed, store.

Selling Worm Tea and Castings

Receiving an Order

1. Customers will often call or email to place an order. If you answer one of these calls, get the customer's name, phone number, what they want to order, and a tentative pickup date about 48 hours in the future. Inform customer that someone will call to confirm the order and pickup

time, and that it is very strongly preferred that they pay with a check. Credit and debit cards are not accepted.

2. Immediately notify DPW coordinator of the order and of all details; they will make sure that someone prepares it in time and confirms with the customer.

Preparing an Order

See Making Worm Tea or Harvesting Worm Castings (under Managing Worm Bins) for instructions on how to prepare tea and castings for sale.

Making the Transaction

Note: UC cash handling policy is very strict and is designed to keep the risk of loss to an absolute minimum and to protect employees from accusations of theft if funds are missing. These rules should be followed at all times.

1. **Two staff members must be present from the time a customer arrives to pick up an order to the time the check (or cash if absolutely necessary) is deposited.** The DPW coordinator and program supervisor should be fully aware of any and all scheduled pickups.
2. If someone drops by the Grove wanting to purchase tea or castings on the spot and without a reserved order, inform them that they must place an order in advance by calling or emailing the office. Notify the coordinator and supervisor that they came by even if you do not collect their information.
3. When the customer arrives, finish preparing their order if it is not ready and give it to them. Take payment depending on the method:

If the customer pays with a check: Both students should immediately bring the check down to the main office and leave it with the program supervisor. If she is not present, call her or a coordinator and get further instructions.

If the customer pays with cash: The students should fill out a green cash envelope form with the documenting staff member's name and email, the date of sale, AS group (Department of Public Worms), account number (498), and event (Worm tea/castings sale). The sold items should be documented and totaled in the list section and a staff member should sign and date the bottom. The cash should be placed in a cash envelope along with the green form and immediately sealed. Both students should sign their names across the edge of the flap of the envelope (so if it were opened and resealed the signatures would be broken). Both students should immediately bring the sealed envelope down to the main office and leave it with the program supervisor. If she is not present, call her or a coordinator and get further instructions.

Family Housing Compost

The composting programs at Storke and West Campus Family Housing began as a PhD project on motivations for environmental action. We took over the program in Summer 2012 when the research component was completed and have been maintaining the piles ever since.

Starting in the Office and Grove:

1. Meet your assigned partner in the AS Recycling Office. Sign in on your timesheet and pick up the green clipboard and a set of route keys if you do not already have keys.
2. Head up to the Grove. If the gate is locked, it can be opened with one of the keys on route key ring or with the keys you have been given.
3. Take a pair of gloves for each person, and, if needed, change into closed-toed shoes and other route-ready attire. You may keep any desired items in your locker in the trailer.
4. Grab the scale, a spray bottle and towels from the shed. Put on sunscreen. Be sure to lock the shed when you leave.
5. Using bikes, skateboards, or other methods of self transportation, head to your first Family Housing stop (usually Storke).

At Storke Family Housing:

6. When you arrive, park in the front parking lot. Take the scale and the clipboard and head towards the garden area. When first entering the garden area from the parking lot, you will see a set of several black igloo-shaped compost bins, a black trash bin and a green greenwaste bin. Put the thermometer into the active stall and continue on with the route, record the reading when you return with all food waste.
7. Lift each of the igloo shaped bins and remove the green collection bins from inside. Remove any non-compostable items and place them in the trash bin. Combine all compostable waste into one collection bin, unless if too heavy then split it into multiple bins.
8. Place the scale on level ground and make sure it is set to pounds. Record the weight of the compostable waste by weighing the filled collection bin and subtracting 7 to account for the weight of the bin.
9. Put all empty collection bins back and replace the igloos after rinsing them with a hose if needed. Set the full bin next to the wooden cross structure.
10. Gather any garden greenwaste that has been left by the wooden cross structure and put it in the greenwaste bin. If the greenwaste bin is more than half full, take it to the trailer-sized open-topped disposal bin in the back parking lot. Empty the trash bin in the same location.
11. Go to the second set of igloo bins of the far side of the garden area. Repeat steps 7-10 for this set of bins.
12. At the wooden cross structure, determine which quadrant is the current active pile (where food is being added). Push the current pile to the side with a shovel or pitchfork. You can get tools from the tool shed that is further towards the back of the garden.
13. Tear up the new food and add a layer of food and a layer of carbon (from the nearby pile left by the grounds staff). Moisten the layers with the hose. Continue layering and soaking until you have used all of the new food waste.
14. Put the older material back on top of the new layers, and add an additional layer of carbon on top. Add as much water as needed to make sure the whole pile is moist.
15. If a pile has completely finished processing, move the finished compost to the finished bin so the residents may use it.
16. Rinse and clean the collection bins and put them back in their igloos. Wash any tools and put them away. Clean up any trash that may be lying around.
17. Pack up the scale and head towards the West Campus complex.

At West Campus Family Housing:

18. Repeat steps 7-10 for both igloo clusters at West Campus. The two clusters are located along the hillside on the road that runs below the garden area.
19. Repeat steps 12-16 at the West Campus pile area, which is located in the center of the garden area.
20. Pack up the scale and return to the Grove.

Finishing at the Grove/Office:

21. Put away the scale and drop off any used towels or spray bottles away in the shed, as well as thermometer.
22. Take the green clipboard to the office. Sign out on your timesheet. You're done!

Managing the Garden

Planting

Watering

Weeding

Harvesting

Common Problems

Starting Seeds

Planting

Watering

Light

Protection

Common Problems

Conducting a Workshop

Potential Hazards

Accident or Injury

If you or anyone else is injured on the route, your first priority should be to deal with the emergency. If needed, call 911 from a cell phone or 9-911 from a campus phone if needed. Any accident involving the vehicles should be reported to phone number 1-800-416-4029. UCSB's police dispatch number is 805-

893-3346 from a cell phone or just 3396 from a campus phone. Report the situation to both your coordinator and program supervisor the second it is safe to do so. They will help you with any next steps and must report the incident according to campus procedure.

If your injury is not an emergency but does require basic care (open cut, pulled or twisted muscle, smashed finger, etc), stop your route and alert your coordinator or the program supervisor. Do not continue to work injured. If you cannot return to the Grove and need to leave the scene do your best to store the vehicle, bins, or other equipment in a secure and out-of-the way space, but your safety is top priority.

Animal Encounter

Animals love trash, especially if it contains food. Always use caution when turning piles and opening bins. In almost all cases, the animal will race away the second it is discovered and you can carefully continue your work. If you encounter a trapped animal such as a rat, raccoon, possum or skunk, immediately back away. Call your coordinator or the program supervisor. If they cannot be reached, call the Facilities Management Customer Service Line at 805-893-2661. Be ready to report the type of animal and location. If the animal is still alive, time is obviously critical. Never ever attempt to touch the animal or free it yourself—it may have been trapped for some time and it is very difficult to not make it feel cornered in such a situation. If you find a dead rat, it can be discarded using a long-handled shovel; never attempt to touch the animal even with gloves. For larger dead animals, call Facilities Management.

Pathogens

The composting process destroys most types of pathogens, however there is always a very small chance of exposure from fresh material (especially manure). Using gloves and standard safety protocols such as handwashing should eliminate virtually all risk, however you should immediately notify your supervisor and coordinator if you suspect you have been exposed. If you develop symptoms of illness or infection, you should notify your doctor of the type of work you do so he or she can treat you properly.

Mold

Compost is made up of wet organic material, obviously a great environment for mold growth. Use a dust mask when working with any bin or pile that has a great deal of mold as the turning process can stir up the mold spores and make them airborne. This may cause lung irritation and, in severe cases, infection.

Part VII: Maps, Diagrams, Data Sheets and Notes

Manual Edits and Additions Needed

- Add maps and data sheets
- Refine Family Housing procedure with new bin arrangements
- Write Managing the Garden section
- Write Starting Seeds section
- Write Conducting a Workshop section
- Add iPad sales to Selling Worm Tea and Castings
- Add stickers vendor

