

**Sustainability of Pitzer College Campus
Response to Report Prepared by Students in ENVS94 Spring 2007**

CONTROLS 3.2.5.12 Our campus HVAC system (Heating & Cooling) uses Johnson Controls thermostats that offer a more efficient use for heating and air conditioning. With preset values, the system maintains nominal room temperatures and heating and cooling are supplied from one central location. Setting the thermostats to a preset value minimizes energy use and maximizes LEED requirements, and also maintains a comfortable room temperature to reduce energy costs. The systematic replacement of older motors to energy efficient motors and frequency drives has also produced energy savings.

The use of ice storage allows us to cool the buildings during peak demands with low energy use. How the system works: Our A/C unit cools water to just above freezing at night when the energy demand is low, and then the water is stored in three large holding tanks. When the demand for cooling reaches its preset limit, the chilled water is then pumped into the air handlers on the buildings providing cooling with minimal energy use. The implementation of new software and the improvement of existing software allow us to monitor and control the HVAC system for energy savings.

SINKS 6.3.2.1.1 All the new residence halls have low-flow water fixtures installed. These fixtures reduce the amount of water usage but still maintain water flow. This means it uses less water to wash your hands and brush your teeth using the same amount of time as someone in Mead or Holden Halls. We are systematically installing in those buildings as well.

SHOWERS 6.3.2.1.2 All showers use low-flow water fixtures and shower heads. The same principle applies that with the use of less water to shower in the same amount of time as Mead or Holden. As shower heads need replacement in Mead and Holden, we will install low-flow shower heads to reduce water consumption.

TOILETS 6.3.2.1.3 Every toilet in the new buildings, including the common rooms, uses low-flow water technology with two flush options. Both individual and common restrooms have an option for liquid waste and an option for solid waste. The use of low flow technology will reflect savings over the long-term in water usage and cost.

Everyone can do their part, the use of CFL (compact fluorescent lights) and other energy efficient lighting has helped in keeping energy cost down. But there are other ways of keeping cost down; shut down computers when not in use, turn off lights when ever possible, for students with TV's set the sleep mode at night take less time in the showers. These little things can go along way in minimizing energy consumption and maximizing a greener campus.

Pitzer College Recycling Program 2.2.26

The Pitzer College recycling program is a joint effort between students, faculty, and staff. In accordance with the City of Claremont recycling program, Pitzer College co-mingles recyclable materials. The City provides Pitzer College with five bins (4 cubic yards each) free of charge that are picked up every Tuesday and Thursday and then taken to a recycling center for separation. The bins are stored at the following locations on campus: two at the Gold Student Center (GSC) and three at the McConnell Center, where the dining hall is located.

Recycling procedures are as follows:

Residence Halls: Every residence hall room is provided a 28-quart recycle can and a trash can. Students empty these cans in a centrally located area with larger containers located throughout the residence halls. Pitzer employees (building attendants) pick up these larger containers and empty them into the 4-yard bins daily.

Faculty and Staff Offices: Each office is provided a 28-quart recycle can and trash can. Pitzer building attendants pick up trash and recycling thrice weekly.

Classrooms: Every classroom is provided with a 28-quart recycle can and trash can. Pitzer building attendants pick up trash and recycling daily.

Common areas: There are several 23-gallon recycling and trash cans located in hallways and common rooms throughout all of the non-residential buildings on campus. These cans are emptied daily by Pitzer Building Attendants.

Outside areas: There are several 56-gallon recycling and trash cans located throughout the campus. These cans are emptied daily by Pitzer College Groundskeepers.

Composting Program: We have 23-gallon bins located in the main dining hall that are used to separate food waste. This waste is mixed with campus green waste (grass clippings, etc.) to create an outside composting operation. The composted materials are used as mulch throughout the campus.



**Newspapers, Magazines,
& Mixed Paper**

- Junk mail
- Telephone books
- Catalogs
- Computer paper
- Envelopes
- Wrapping paper
- Brochures
- Crayon drawings
- Office paper
- Copy paper



Cardboard, Chipboard

- Cereal boxes
- Tissue boxes
- Food boxes
- Milk cartons
- Juice boxes
- Soda/beer cartons
- Egg cartons (paper fiber)
- Paper bags
- Cardboard boxes
- Gift boxes

**ACCEPTABLE RECYCLABLES
(PUT IN YOUR RECYCLING CONTAINER)**



Glass Bottles/Jars

- Juice bottles
- Beer bottles
- Wine bottles
- Liquor bottles
- Baby food jars
- Condiment jars
- Jam jars
- Jelly jars
- Assorted food jars
- Salad dressing bottles



**Plastic Bottles,
Jugs & Jars**

- Plastic water bottles
- Plastic soda bottles
- Plastic milk jugs
- Plastic laundry jugs
- Shampoo bottles
- Lotion bottles
- Food bottles
- Condiment bottles
- Motor oil containers
- Vegetable oil bottles



Aluminum & Metal C

- Aluminum soda cans
- Aluminum beer cans
- Fruit cans
- Vegetable cans
- Pet food cans
- Juice cans
- Soup cans
- Sauce cans
- Assorted food cans

Chicken Project 2.2.6: The Pitzer Chicken Project is maintained by Pitzer Grounds/Arboretum staff along with student help during the academic year. The chickens (3 at this time) are fed and watered daily during the work week. On the weekends the chickens have automatic feeder and water systems. In the past we have had a rodent problem and several traps, near and around the area, were placed to control the problem. With the help of students, the chicken-coops are cleaned out monthly and new shaving placed for the chickens. Chicken manure is used in the garden and in the compost to add organic fertilizers to the garden soils.

Grey Water Project 2.2.14: Connor Mehan, a Pitzer alumnus, implemented the Grey-water system as a class project to show the possibility of using the drain water from the Grove-House sinks to supplement the irrigation water in the garden. Connor dug a trench and placed several filters to drain and release grey water into the garden. He then connected the sink drain to these filters and leach lines. Soil was added and plants were planted. The system worked well for several semesters until several pounds of raw rice were flushed down into drains clogging the filters, drains and leach lines. The drain pipe had to be cut and reconnected to the old sewer system to alleviate the backup. All the rice material was removed from the filters and drains but this did not resolve the problem. In order to bring the system to a satisfactory condition we will need to inform the "Pitzer Community" at a later date. By then we will have had time to evaluate the cost environmentally and monetarily to discern if the system can be replaced. This was a valuable pilot project and shows that grey water systems do work, and with planning, could be applied to other areas of the campus.

Pitzer Landscaping 2.2.19: In the past, Pitzer's campus was planted with pleasingly aesthetic plants and large lawns, trees and shrubs making Pitzer's campus one of the most beautiful in the area. However, Pitzer's campus is located in the semi-desert of southern California where water is scarce. Today and in the future we need to hold onto many of the good features of the past landscaping, yet continue to develop certain parts of the campus with drought tolerant and sustainable plants. With encouragement and commitment from president Trombley much of Pitzer's landscape is changing to plants such as California natives, succulents, and plants from areas of similar climate type that are non-invasive. This effort will continue so that Pitzer's campus will be green and sustainable and yet retain the tradition of the past.

Unfortunately many of our irrigation systems are old and in need replacement and the grounds crew has been working diligently to replace these broken systems. Often older systems are not as efficient, (either from overspray or lack of compatibility), and these are being replaced. At this point in time we have five climate controlled systems and expect to have more as older systems are replaced. The future is bright and as the landscaping on the campus changes, we will be using more drought tolerant plants and much more efficient water systems.

Pitzer LEED-NC v2.1
IDc1.4 Green Housekeeping

Statement of Purpose

The mission of Custodial Services is to operate, maintain, and improve the physical assets of Pitzer College in a professional and efficient manner by providing safe, functional, and attractive facilities for students, faculty, staff, alumni, and visitors. Our main goal is to enhance occupant comfort and health by maintaining campus environments that promote performance and productivity.

Policies and procedures have been developed by Pitzer College to reduce the impact that harsh chemicals and solvents have on indoor environmental quality. Custodial Services has implemented a green housekeeping program that focuses on removing building pollutants by using safer cleaning products. Green Seal-37 approved cleaning products, which contain less toxic compounds, help reduce indoor air pollution, as well as reducing the contaminants present in both water and solid waste streams.

Approved and Prohibited Cleaning Products

Pitzer College currently purchases the following Green Seal-37 approved products for cleaning campus facilities:

- Butchers Floor and General Purpose Cleaning #74 Raindance Fragrance Free (Low-Foam Neutral Floor Cleaner)
- Butchers' G-Force Cleaners #71 G-Force (Washroom Cleaner)
- Butchers' Spray Cleaner Look NA (Glass & Multi-Purpose Cleaner Non-Ammoniated)
- Butchers' G-Force Cleaners #70 (All Purpose and Glass Cleaner Concentrate)
- Butchers' G-Force Carpet Care #15 Fountainhead Dual Task (Carpet Extraction Cleaner)

Only the Green Seal-37 approved chemicals listed above are used for cleaning campus facilities. All other products are prohibited for use.

Any future cleaning products purchased for cleaning campus facilities will be required to be Green Seal-37 approved. Products will be prohibited from containing any of the following chemicals:

- Alkylphenol ethoxylates
- Dibutyl phthalate
- Heavy metals including arsenic, lead, cadmium, cobalt, chromium, mercury, nickel, or selenium
- Ozone-depleting compounds: An ozone-depleting compound is any compound with an ozone-depletion potential greater than 0.01 (CFC 11 = 1).
- Optical brighteners: Defined as additives designed to enhance the appearance of colors and whiteness in materials by absorbing ultraviolet radiation and emitting blue radiation. Also known as fluorescent whitening agents.

Custodial Staff Training

Pitzer College campus facilities are maintained by and adaptive and diverse support team of dedicated and well-trained professionals. WAXIE Sanitary Supply provides custodial staff members annual training sessions on green cleaning procedures including chemical use, storage, and disposal of Butchers cleaning products. Any new personnel to join the staff are subsequently trained by Mark Crawbuck, Manager of Custodial Services, until the next annual WAXIE training session.

Residential Cleaning Supplies

All public campus facilities including residential hall common areas are maintained by Pitzer Custodial Services. Private resident facilities, which include dormitory bedroom and restroom facilities, are not maintained by Pitzer Custodial Services. Private rooms are cleaned by those individuals occupying the space.

However, Pitzer College does provide green cleaning supplies to these individuals to enable private facilities are offered the same environmental benefits as facilities that fall under the jurisdiction of Pitzer Custodial Services. Green cleaning products are stored in all residence hall facilities for individual resident use. Bottles are stored in one of two places: janitorial closets contain green cleaning supplies that students can gain access to by contacting the hall director on duty; the building service desk maintains a supply of green cleaning products accessible to building occupants upon request.

The following green cleaning supplies are available for private facility cleaning:

- Butchers Floor and General Purpose Cleaning #74 Raindance Fragrance Free (Low-Foam Neutral Floor Cleaner)
- Butchers' G-Force Cleaners #71 G-Force (Washroom Cleaner)
- Butchers' Spray Cleaner Look NA (Glass & Multi-Purpose Cleaner Non-Ammoniated)

Education and Awareness

Each year residence hall directors are notified and educated on the benefits provided by the green housekeeping policies and procedures instituted by Pitzer College. Hall directors are also provided an informational flier provided by the College to educate building occupants about the environmental benefits gained from Green Seal-37 cleaning supplies used in the facilities. These flyers are then distributed to building occupants on an annual basis to ensure each incoming resident is aware of the Pitzer green housekeeping policy in place.

2.2.35 Working to reduce paper usage on campus

Work with printers that have FSC (Forest Stewardship Council) certification. The FSC promotes environmentally appropriate, socially beneficial and economically viable management of the world's forests and forest products

-Use the greenest paper possible: totally chlorine free (TFC), post industrial recycled content, post consumer recycled content, FSC certified, recycled fabric content, tree-free paper (Kenaf or Hemp)

-Print with soy or vegetable based inks

-Do not print a document unless necessary or to reduce the number of pages in a document, send your reader to a url on your Web site

-Use PDF's whenever possible instead of printed proofs

-Print two-sided emails or documents whenever possible from your desktop or when submitting requests to Duplicating Services

-Use alternative means of advertising events and activities such as e-mail, Facebook, YouTube or a Web site

-Design as a self-mailer to avoid use of envelopes

-Be strategic with your placement of posters to reduce the number of copies you have printed

