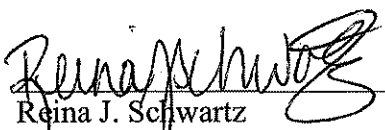
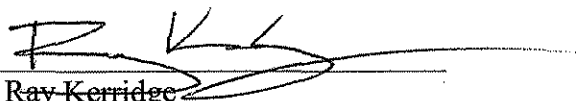


CITY OF SACRAMENTO

ADMINISTRATIVE POLICY INSTRUCTIONS

Topic: Sustainable Operations for City Departments Effective Date: January 22, 2009
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CITY POLICIES FOR SUSTAINABLE OPERATIONS

1. SCOPE AND PURPOSE

- 1.1 Scope: This Administrative Policy Instruction (API) sets forth the policies departments will comply with for sustainable operations of all City facilities and operations.
- 1.2 Purpose: This API implements the Mayor and City Council adopted Sustainable Operations Policy (an action item in the 2008 Sustainability Implementation Plan), the Fleet Sustainability and Fuel Conservation Policy, and the BEREC Certification of City Facilities (which was an action item in the 2008 Sustainability Implementation Plan). The purpose of this API is to provide City employees with clear and consistent instructions on how to operate in a sustainable manner consistent with the above mentioned Mayor and City Council adopted policies.

2. BACKGROUND

In October 2007, the Mayor and City Council adopted the Fleet Sustainability and Fuel Conservation Policy that outlines the policies to be followed by departments when purchasing and operating City vehicles. The overall goal of the policy is to improve the air quality in the City of Sacramento by reducing vehicle carbon emissions.

In February 2008, the Mayor and City Council adopted the 2008 Sustainability Implementation Plan. The Plan included numerous action items for 2008, including the development and implementation of sustainable operations policies and the certification of City facilities through Sacramento County's Business Environmental Resource Center (BERC). The purpose of the sustainable operations policies and BERC certification is to reduce the amount of greenhouse gasses the City is emitting through reducing the City's use of energy and materials which in turn will reduce the City's negative impact on the environment. The sustainable operations policies include: keeping indoor facility temperatures two degrees cooler in the winter and two degrees warmer in the summer, printing and copying double-sided, and turning off all lights and computers when they are not in use (i.e when you go home at the end of the day, are away from your desk for a significant amount of time, and during the weekends).

3. OPTIMIZING FACILITY TEMPERATURE SETPOINTS

Background. Heating and air conditioning typically accounts for 35 to 40 percent of building energy consumption. By limiting the use of heating and air conditioning through set point adjustment and time clock control, energy costs

can be reduced. By changing the temperature one degree Fahrenheit in a 100,000 square foot building the energy savings would reduce associated power plant carbon dioxide emissions by 45,000 pounds per year. That is the environmental equivalent of taking five cars off the streets.

Temperature Set Point Policy

The thermostat temperature set points for City owned and leased facilities shall be 78 degrees in the summer/spring and 68 degrees in the fall/winter. However, if these set points are not currently maintained staff shall work toward these set points gradually by increasing the set points by two degrees in the summer and decreasing the set points by 2 degrees in the winter. Thermostat temperature set points in all City owned and leased facilities shall be maintained during normal business hours (approximately 7:00 a.m. to 6:00 p.m. Monday through Friday). To allow for special circumstances the Temperature Set Point Policy does not have to be implemented when the following exceptions apply:

- Exception #1: If any working space within the HVAC zone can not be maintained within a range of 68 to 78 degrees, a temperature set point adjustment will be made by the Department of General Services.
- Exception #2: If health-related conditions of staff require temperatures to be within a narrower band than 68 to 78 degrees.
- Exception #3: If temperature sensitive equipment can not operate within 68 to 78 degrees.
- Exception #4: If the building's energy management system has been programmed to implement "demand response,"¹ then normal temperature set points will be maintained during the bulk of the year
- Exception #5: If a facility is in operation beyond normal business hours and have staff working in these facilities,
- Exception #6: If special events and meetings require these set points beyond normal business hours.

4. PRINTING, COPYING, STORING & DISSEMINATING DOCUMENTS

Background. Currently, the City uses over 50,000 reams of paper annually. By changing the way we print and copy from single-side to double-sided the amount of paper its cost may be reduced up to 50 percent. Environmentally, a 50 percent reduction in paper usage equates to:

- 1,300 fewer trees per year used to produce paper.
- 440,000 gallons less water per year used to process paper.
- 250,000 kWh per year less electricity used to produce paper.

¹ Demand Response typically provides normal thermostat set points during the bulk of the year, except during hot weather when electric demand is high and electric costs are highest, when cooling set points are higher, and during cold weather (when natural gas demand is high) when heating set points lower.

- 3,700 fewer pounds per year of air pollution emitted.
- 110 fewer tons of CO2 per year emitted to process paper.

By using 100 percent recycled content paper, the above environmental savings increase. In addition, using “econo-mode” when printing can reduce toner usage by 50 percent, which would double the number of pages that can be printed using the same amount of ink.

Double-Sided Copying Policy

For any document to be copied, double-sided copying shall be implemented as much as is practical, unless the copier does not have double-sided functionality.

Double-Sided Printing Policy

For any document that is to be printed, double-sided printing shall be implemented as much as is practical, unless the printer does not have double-sided functionality. To maximize compliance with this policy:

1. Departmental IT, at the request of staff, will install drivers on all staff computers so that staff can print double-sided on printers that are capable; and
2. Departmental IT, at the request of staff, will set the driver such that default setting for printing is to double-sided printing on printers that are capable.

Printing in Draft Mode

As much as practical, staff should print in “draft mode”. Draft mode uses less toner. To inquire about how to activate draft mode contact your department IT staff.

Electronic Storage of Files Policy

As much as it is practical and in accordance with the City’s Records Retention Policy and Electronic Document Content Management Policy, staff should move towards electronic storage of all files and invoices instead of the traditional paper filing system. To maximize the compliance with this policy:

1. Departmental IT will periodically train staff on using copiers to make electronic copies that can be saved to network directories instead of making traditional paper copies that are made for paper filing systems.
- Exception #1: Copiers that do not have this functionality

Electronic Dissemination of Documents

As much as it is practical, information and documents shall be disseminated to staff and customers electronically. Electronic dissemination will reduce the use of paper and toner as well as eliminate the need for interoffice delivery or travel to a City office to retrieve a document. Documents should also be published to the Intranet or Internet so that recipients only need to click on a link to access the information.

5. LIGHTS AND COMPUTERS OFF

Background Lighting and computer use typically accounts for 40 to 50% of a building's energy consumption. By leaving lights and computers on only when in use, energy costs can be reduced tremendously. For example, by shutting off one computer (monitor and processor) nights and weekends costs could be reduced approximately \$200 per year and the associated environmental benefit would be reduced carbon dioxide emissions of 3,000 pounds per year (if previously left on continuously).

In addition, eliminating the use of screen savers and replacing incandescent light bulbs with compact fluorescent bulbs will save the city energy.

Lights and Computers Off Policy

City staff will turn off office lights and computers when they are not in use. Staff will turn off lights and computers at the end of the day when they leave the office, when they are away from their office for a significant period of time, and on weekends when they are not in the office. If staff finds lights or computers that are on and should be off, they are encouraged to take the initiative to turn them off.

In addition, staff will activate the energy-saving features of monitors so that monitors go into sleep mode after five minutes of not being used. Also, to the extent it is practical, staff will replace incandescent light bulbs with compact fluorescent bulbs.

6. FLEET SUSTAINABILITY AND FUEL CONSERVATION POLICY

Background. As a government agency, the City must be a leader in minimizing the impact of its operations on the environment. Fleet vehicle and equipment users are expected to be environmentally conscious. As such, they are expected to support of use fuel efficient low emission technologies, alternative fuels units, and regularly scheduled maintenance of vehicles to ensure maximum fuel efficiency and safe use of all vehicles and equipment. The City recognizes that reducing the impact to the environment from vehicle and equipment operation may increase the costs of ongoing vehicle operations.

Department Directors are responsible for adhering to the policy and procedures pertinent to the utilization and operation of fleet vehicles and equipment. Department Directors' responsibilities include active support of all City Fleet Management policies, rules and regulations with regard to the efficient operations and use of fleet vehicles and equipment as follows:

Low Emission Vehicle Acquisitions Policy

- Vehicle purchases shall be based on the actual type of use and need of a particular position classification based upon an established vehicle standard with an emphasis on purchasing units offering the greatest fuel economy and lowest emissions in its respective class.
- Continue to expand the use of vehicles using Liquefied Natural Gas (LNG) or other available clean fuel sources for trucks and heavy equipment.

Fuel Consumption Policy

- Reduce fuel consumption 15 percent from the 2003 levels by 2010 with an annual adjustment to the 2003 level to reflect the City's growing fleet operations.
- Continue to reduce the number of miles driven annually by fleet vehicles through ongoing review of fleet equipment usage and decentralization of City operations.
- Utilize new technologies such as 'web-based' meetings to reduce the number of miles driven to attend meetings. Contact the City's Web Governance Manager to find out more information about these types of capabilities.

Vehicle Operations Policy

- Promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation to operating departments within the City.
- Reduce fleet size by removing under-utilized units from the fleet or by reassigning units instead of purchasing additional units.
- Equip all newly purchased vehicles with GPS/engine diagnostics technology (other than police patrol vehicles)
- Ongoing evaluation of overnight retention vehicles with the goal of insuring only those assignments that meet clear operational needs and reducing the financial and environmental costs of the program.
- Check vehicle tire pressure and alignment regularly to ensure that vehicles are achieving maximum fuel efficiency.

7. **RECYCLING**

Background. City employees will recycle all waste materials to the greatest extent possible. This section outlines the reasons why recycling is important as well as how to recycle properly.

If you do not have the proper number of recycle bins in your work area or have questions about recycling please contact Solid Waste customer service at 808-5454 and/or the Waste Reduction Coordinators at 808-4935 to find out how to purchase office recycling containers for your office and work area.

State and Local Requirements. Currently, the state requires the City of Sacramento to recycle 50 percent of its waste. In addition, the Mayor and City Council have set a higher goal of 70 percent by 2012. As of 2007, the City of Sacramento recycles 52 percent of the waste generated in the City. This includes both residential and commercial waste.

Recycling Saves the City Money. By recycling the City avoids the cost of disposing of waste at a landfill. The 2008 disposal cost for one ton waste is approximately \$39 per ton. In addition, an increase in recycling results in an increase in revenue (the City gets money for recycled materials). This is used to offset the cost of the City providing residential recycling which reduces or stabilizes rates.

Recycling Policy

The following are materials that City employees will recycle. Each department is responsible for ensuring that adequate recycling bins are available to staff. Please note that it is critical that items are clean and dry before being placed in the recycle bin. Please make it a habit to rinse and dry all items before placing them in the recycle bin. Items that are not properly cleaned will contaminate the recyclables in the bin as well as other recycled material with which they are comingled.

Glass

All colors of glass bottles and jars can be recycled with labels and lids on. If necessary, rinse out the container, dry it, and then toss it in the recycle bin.

Paper Products - Newspaper/Mixed Paper

All paper and cardboard except food-contaminated paper.

Plastics

All plastics can be recycled. If necessary, rinse out the container, dry it, and crush it to make more room in the recycling container and in the recycling truck.

Cans

Empty aluminum, steel, and tin cans can be recycled. If necessary, rinse out the container, dry it, and crush it to make more room in the recycling container and in the recycling truck.

Do not place the following items in your blue recycling container

These items are contaminants to the recycling process and increase the cost of the recycling program to the City and its residents.

Batteries

Fluorescent lamps and tubes

Styrofoam

Window glass

Mirrors

Porcelain

Ceramics

Pyrex

Drinking glasses

Tarps

Needles

Wet Food Waste

Garden Refuse

Clothing & Diapers

Hazardous Waste Disposal

Many common products that we use in our daily lives contain potentially hazardous ingredients and require special care to dispose of. It is illegal to dispose of hazardous waste in the garbage, down storm drains, or onto the ground.

Chemicals in illegally or improperly disposed hazardous waste can be released into the environment and contaminate our air, water, and possibly the food we eat. And by throwing hazardous waste in the garbage, you can cause additional hazards to your garbage handler.

"Hazardous Wastes" include any waste material or mixture of wastes which is toxic, corrosive, flammable, an irritant, a strong sensitizer, which generates pressure through decomposition, heat or other means, if such a waste or mixture of wastes may cause substantial personal injury, serious illness or harm to humans, domestic animals, or wildlife, during, or as an approximate result of any disposal of such wastes or mixture of wastes. Currently, most departments have systems in place to deal with this type of waste. If you have any questions about proper and safe disposal of hazardous waste please contact the Safety Office at 808-5278.

Some examples of Hazardous Waste include Anti Freeze, Batteries, Oil and Paint (ABOP), fluorescent tubes and compact tubes, household batteries, computer

screens, and televisions. Others include insect spray (Black Flag, Raid, etc), bleach, and gasoline. Again, if you have any questions about proper disposal of these types of items please contact the Safety Office at 808-5278.

8. CERTIFICATION OF CITY FACILITIES THROUGH BEREC

Background. In February 2008, Mayor and Council adopted the 2008 Sustainability Implementation Plan. One of the many action items in the Plan is a challenge to City Departments to obtain certification for City facilities through Sacramento County's Business Environmental Resource Center (BERC). This section provides departments with information on how to obtain certification of City facilities through BERC.

BERC administers the Sacramento Sustainable Business program. This program certifies businesses and other organizations that pledge to adopt environmentally friendly practices and conserve resources. This certification program offered by BERC operates on a facility by facility basis and is similar to Leadership in Energy and Environmental Design (LEED) in that there are checklists that businesses complete to gain certification.

Departments are encouraged to contact BERC directly to get information on the program and gain certification. However, Department of General Services staff is also available to help departments learn about the program and gain certification.

Those that would like more information and/or would like to explore the idea of "BERC Certification" should contact the Director of General Services. The Director will ensure that staff provide departments with information and technical assistance on BERC Certification. Staff will also help departments walk through the process of BERC certification.

9. BOTTLED WATER PURCHASING RESTRICTION

Background. According to the Container Recycling Institute, supplying Americans with plastic water bottles for one year consumes more than 47 million gallons of oil. This is the equivalent of taking 100,000 cars off the road and one billion pounds of carbon dioxide out of the atmosphere. The bottling process uses more than 1.5 million barrels of petroleum and 75 billion gallons of water annually (it takes approximately 9 gallons of water to bottle one gallon). In addition, after the water is bottled, it is shipped around the world. Transporting bottled water by boat, truck and train involves burning massive quantities of fossil fuels. The three largest exporters to the U.S are Fiji, France, and Italy. Finally, industry experts estimate that over 75 percent of the single serve bottles are discarded, adding almost 2 billion pounds of plastic to landfills across the country.

Cities and water districts across the country, funded by ratepayers and state and federal governments, are spending billions of dollars to provide safe, clean drinking water from the tap. Unfortunately, the migration from tap to bottled water fosters a perception that tap water is not safe or necessary. In truth, tap water quality standards are much more stringent than those for bottled water and the cost of bottled water ranges from 240 to over 10,000 times more expensive, depending on the brand of bottled water.

Bottled Water Purchasing Policy

City staff will not use public funds to purchase bottled water, including five gallon bottled water and single serve bottled water.

The following circumstances shall constitute exceptions to this policy:

1. Situations where there are no reasonable alternatives to bottled water such as City facilities and/or locations that do not have tap water available and events such as the Citywide picnic or other city sponsored events that are outdoors.
2. Public safety emergencies, investigations, and extended deployments or activation of the Office of Emergency Services.

10. Leadership in Energy and Environmental Design (LEED)

Background: The City of Sacramento recognizes that long-term operating savings (energy, maintenance, employee productivity, and health) can be realized through improved energy efficiency, sustainable operations, and design practices. In September 2004, the Mayor and City Council passed resolution 2004-751 which requires all city facilities to be designed and operated to achieve the highest level of Leadership in Energy and Environmental Design (LEED) rating and energy efficiency. In analyzing the LEED and energy efficiency levels, life cycle costing will be utilized to determine the best selection of features and components. For appropriate buildings, 5,000 square feet and larger, a minimum level of LEED Silver shall be the goal.

City staff that would like more information and/or would like to explore the idea of "LEED certification" should contact the Director of General Services. The Director will ensure that staff provide departments with information and technical assistance on LEED certification. Staff will also help departments walk through the process of LEED certification.