

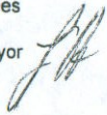


Fairbanks North Star Borough

Office of the Mayor

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MEMORANDUM

TO: All FNSB Employees
FROM: Luke Hopkins, Mayor 
DATE: June 17, 2010
SUBJECT: Resource Conservation Management Program
Policy Guide for Employees

The Assembly unanimously passed Resolution 2010-17 calling for the school district and a borough government to develop and maintain resource conservation management plans to reduce usage of resources therefore directly and indirectly the amount of energy consumption, that ensure our daily work activities use less, save more, and to that end provide a better work environment.

As Mayor, I have committed the Fairbanks North Star Borough to supporting a resource conservation management program and as a result has compiled a policy guide for Borough employees on reducing energy use and waste in local government operations. Attached is a booklet detailing many guidelines to assist in recycling and energy conservation efforts that can be used not only in the workplace, but also at home.

In April, the Assembly showed their support for reducing the waste of energy and other resources by both the Borough and School District. This attached booklet will help provide awareness and education, as well as establish energy saving goals for all of us to join the Assembly's commitment.

Although oil prices have dropped from the record 2008-2009 highs, energy costs continue to remain quite high. By implementing the guidelines as detailed in the pamphlet all FSNB employees can contribute to and benefit from energy conservation.

Alaskans generate 6 pounds of trash per person each day compared to the national average of 4.4 pounds. Pages 15 and 16 of the booklet detail a number of options for recycling items from aluminum to eye glasses to used vehicle batteries. Just a small effort from each and every one of us can lead to thousands of dollars in savings and keep thousands of pounds of recycled good from going to the landfill.

Please take the opportunity to read the pamphlet and put these conservation guidelines to good use.

Enclosure
LH:ss-csm

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By: Mike Musick
Introduced: 04/08/10
Adopted: 04/08/10

FAIRBANKS NORTH STAR BOROUGH

RESOLUTION NO. 2010 - 17

A RESOLUTION OF COMMITMENT IN SUPPORT OF A RESOURCE CONSERVATION MANAGEMENT PROGRAM

WHEREAS, the Fairbanks North Star Borough Assembly recognizes the responsibility of the Fairbanks North Star Borough and School District to reduce the waste of energy and other resources to as low a level as possible without compromising the basic mission of the Borough; and


WHEREAS, the Assembly desires to help the Borough and school district staff, students, and members of the community to understand the need for the wise use of resources and recycling; to promote an understanding of the relationship between resource conservation program efforts and the quality of our environment; and

WHEREAS, the Assembly recognizes that resource conservation programs are best accomplished when resource conservation management is coordinated with education and training.

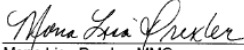
NOW, THEREFORE, BE IT RESOLVED that the Assembly of the Fairbanks North Star Borough supports the allocation of existing resources to implement a program of effective Resource Conservation Management and education and that it respectfully encourages Fairbanks North Star Borough Mayor Luke Hopkins and Fairbanks North Star Borough School District Superintendent, to formulate and maintain a Resource Conservation Management Plan that includes resource reduction and recycling goals and a strategy to increase resource conservation and recycling awareness among the Borough and school district staff, students and teachers.

BE IT FURTHER RESOLVED, that the Assembly encourages development of procedures to conserve resources and encourage recycling and to initiate and maintain a system to monitor resource consumption and recycling the progress of which would be reported to the Assembly on an annual basis.

PASSED AND APPROVED THIS 8th DAY OF APRIL 2010.


Mike Musick
Presiding Officer

ATTEST:


Mona Lisa Drexler, MMC
Municipal Borough Clerk

45
46 Ayes: Brown, Beck, Howard, Blanchard II, Winters, Want, Sattley, Musick
47 Noes: None
48 Excused: Bartos



Money, Energy and Sustainability
A policy guide for
Fairbanks North Star Borough
employees on reducing
energy use and waste in
local government operations

Dear Fairbanks North Star Borough Employee:

This handbook has been prepared to address a number of concerns:

- ▶ the escalating costs of energy, from electricity, to fuel oil, to gasoline, which are impacting municipal programs and services.
- ▶ the need to trim costs of local government operations in order to reduce the burden on taxpayers, who are also feeling financially squeezed.
- ▶ recognition of the impacts of fossil fuel combustion and depletion on the environment, public health, and national security.

Around the country and around the world, governments, businesses, schools, and households are looking for ways to reduce energy consumption and, in the process, save money. Many are also learning about global climate change, ocean acidification, world oil depletion, etc. and are thinking about the impact our choices today will have on future generations.

Please note that this handbook provides policy guidelines that should be carried out with common sense. It will not be possible or even wise to strictly follow every guideline in every circumstance, particularly when safety, security, or work performance would be unduly impacted.

While the policies in this handbook have been prepared specifically for Borough employees, many of them can also be applied, with little or no modification, to households and businesses. It is our hope that they will be helpful to others beyond the Borough workforce.

Ideas for future editions of this handbook are welcome. The most current version of the handbook will be made available on the Borough website www.co.fnsb.us.

NOTE: Employees are urged to use common sense in following all guidelines in this handbook. Guidelines should not be applied so strictly that they unduly impact work performance, safety, or security.

PART 1: OFFICE AND COMPUTER EQUIPMENT AND APPLIANCES



POLICY: Borough employees will, at all times, practice energy conservation measures in their use of all office and computer equipment and appliances.

Responsibilities: All Borough employees are responsible for utilizing Borough office and computer equipment and appliances in a manner that will ensure maximum

energy-efficiency without unduly impacting work performance, safety, or security. Within this framework, the following strategies will be practiced:

- ▶ All employees are expected to understand and follow operating and maintenance procedures for the equipment they use.
- ▶ Enable “Energy Star” energy-saving features on personal computers, computer monitors, printers, fax machines, vending machines, copiers, scanners, plotters, etc, whenever possible.
- ▶ Set copiers and printers (as default) to make double-sided copies whenever possible.
- ▶ Set copiers and printers (as default) to make black and white copies rather than color, unless color is the logical default.
- ▶ Turn off computer monitors that are not Energy Star compliant if inactivity of 30 minutes or more is anticipated.
- ▶ Turn off desktop computers, printers, scanners, etc. and shut off power at the end of each work day.

Did you know...?

It costs approximately ten times more to print color copies on one of the Borough’s leased Xerox machines than it does to print black & white copies.

- ▶ Energy efficient equipment and operational features will not be defeated, removed, modified, changed, or discontinued without prior authorization.
- ▶ Employees will use refrigerators, microwave ovens, coffee-making equipment, etc. designated for group use rather than keeping such equipment for their own personal use.
- ▶ Whenever possible printing, copying, faxing, and scanning will be done on centrally located machines unless personal machines are assigned to ensure confidentiality.

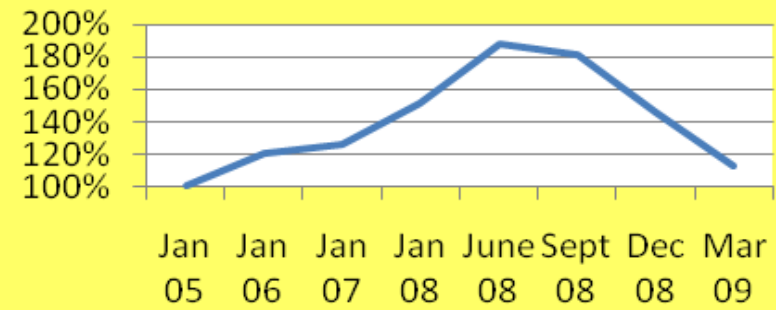
DEPARTMENT MANAGER/ DIRECTOR

RESPONSIBILITIES:

- ⇒ To the extent possible, and in compliance with procurement regulations, new computer equipment and appliances purchased will be Energy Star compliant.
- ⇒ Employees will be provided with adequate training to ensure proper use of equipment, including use of energy-saving features.

Did you know...?

Between 2005 and 2008 GVEA Power Cost Adjustment (*fuel surcharge*) increased by nearly 200%.



RESPONSIBILITIES OF COMPUTER SERVICES

STAFF

- ▶ Maintain a complete inventory of all Borough computer/printing equipment and utilize a tracking system for repair and replacement.
- ▶ Replace older/inefficient power strip/surge protectors, monitors, computers, and printers.
- ▶ To the extent possible, ensure that energy saving features are enabled on computer equipment, including defaults for double-sided and black-and-white printing.
- ▶ To the extent possible, and in compliance with procurement regulations, new computer equipment purchased will be Energy Star compliant.

Common Myth and Misconceptions About Computers and Energy Use

Switching computers on and off frequently reduces their service life. Not True. Today's computers are designed to handle 40,000 on/off cycles, and that's a number you likely won't reach before advances in technology call for replacing the computer anyway.

Leaving a computer on all day uses less energy than turning it off and back on at different periods during the day. Not true. The small surge of power it takes to power up a computer is still much smaller than the amount used to keep it on for lengthy periods.

"Screen savers" save energy. Not true. Screen savers (which don't save screens either) require at least 42 watts of power, those with 3D graphics can draw as much as 1143 watts.

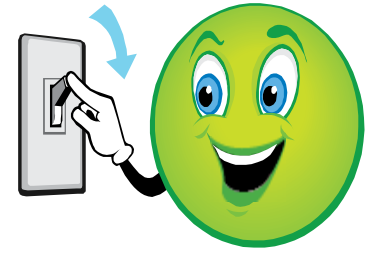
Your computer uses zero energy when "off" Not true. Unless it's unplugged the PC utilizes "flea power," or about 2.3 watts to maintain local-area network connectivity. Likewise, in "hibernate" mode, it uses 23 watts. In "sleep" mode, it uses about 3.1 watts. The good news is that computer monitors, really do, use zero energy when turned off.

Source: "Do you need to turn your PC off at night?"
by Monte Enbysk, lead editor for the Microsoft.com network

PART 2: LIGHTING

POLICY: The Fairbanks North Star Borough commits to the following:

- ▶ Borough employees will practice energy conservation measures in their use of all facilities lights.
- ▶ Lights in building areas and workspaces will not be turned on or left on unless needed.
- ▶ Exterior lighting systems, including: parking, and security lighting, shall be controlled by photocells, electronic timers, or other automated control systems. Exterior lighting not required for egress, safety or security will not be operated during daylight hours.



RESPONSIBILITIES: All Borough employees are responsible for utilizing lights in Borough buildings in a manner that will ensure maximum energy efficiency without unduly impacting work performance, safety, or security. Within this framework, the following strategies will be practiced:

- ▶ Except for egress, safety or security lighting during non-work hours, lights will be turned off in rooms that are likely to remain unoccupied for more than 30 minutes. Workers who use offices or shop areas outside of normal hours should minimize unnecessary lighting.
- ▶ Use the minimum amount of light needed by limiting the number of lights turned on.
- ▶ Use task lighting instead of overhead lighting when possible.
- ▶ Use daylight when possible in place of artificial light sources.
- ▶ For maximum light levels, keep lamps reflectors, shields, and shades clean.
- ▶ The last person to leave a department (or section of a building) should make sure lights are turned off, except those deemed essential for security and safety.



DEPARTMENT MANAGER/ DIRECTOR RESPONSIBILITIES:

- ▶ Ensure that all employees are familiar with how the lighting system in their building and workspace is supposed to operate for maximum efficiency.

ENGINEERING/FACILITIES MAINTENANCE STAFF RESPONSIBILITIES :

- ▶ Evaluate existing interior and exterior lighting systems to identify opportunities where efficiency can be increased; e.g., through use of Energy Star or LED bulbs and fixtures, motion sensors, or timers.
- ▶ Perform lighting replacement and maintenance, including regular cleaning and timely lamp replacement. Group relamping will be implemented wherever feasible, when determined to be cost- effective.
- ▶ Use manual and automatic lighting controls to manage electrical usage during occupied and unoccupied periods.

Did you know...?

- If all of corporate America installed energy efficient lighting systems, approximately \$250/year in energy costs per square foot of floor space would be saved.
- The amount of electricity it takes to light a single 7-watt incandescent bulb lights would power 140 LED bulbs.

source: Greenstar.org; Energystar.gov

Part 3: HEATING AND COOLING

POLICY: The Borough will utilize the following strategies to reduce energy use relating for heating and cooling:

- ▶ Invest in energy-efficiency measures pertaining to heating and cooling.
- ▶ Conduct energy audits of borough facilities and implement recommendations for weatherization and other measures to reduce energy use.
- ▶ Ensure that new and renovated Borough facilities are constructed with energy-efficiency and other conservation goals in mind.



RESPONSIBILITIES: Borough employees are responsible for utilizing Borough buildings in a manner that will ensure maximum energy-efficiency without unduly impacting work performance, safety, or security. Within this framework, the following strategies will be practiced:

- ▶ Set heating thermostat set points to 70 degrees Fahrenheit in offices and work areas for work comfort and energy efficiency.

Did you know...?

Building operation and maintenance programs specifically designed to enhance operating efficiency of HVAC and lighting systems can save 5% to 20% of the energy bills without significant capital investment.

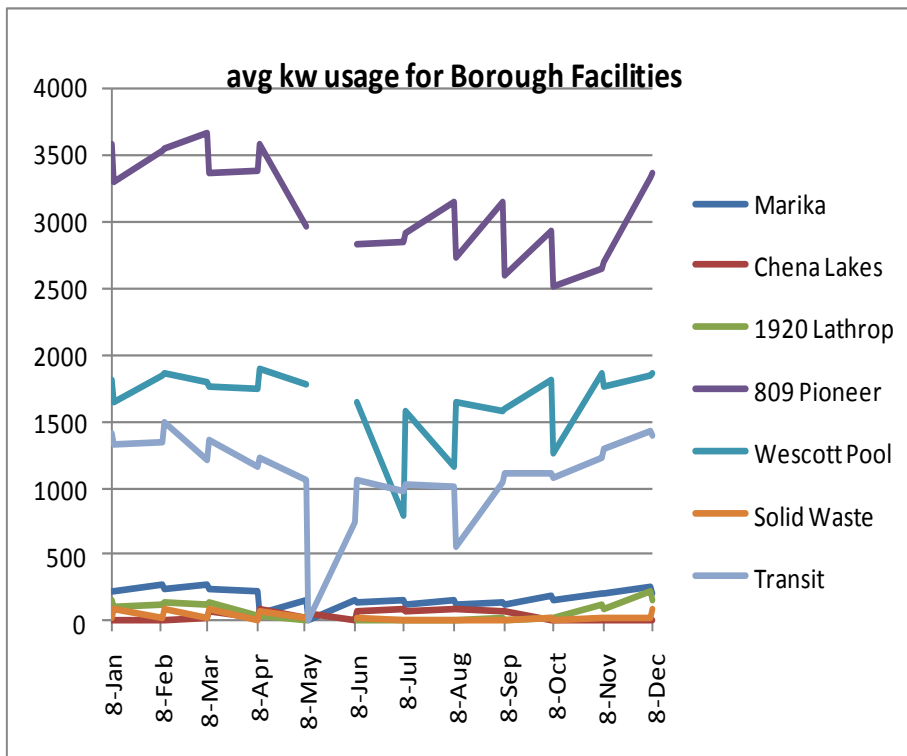
Source: energystar.gov

- ▶ Keep air registers and vents clear to allow air to flow freely throughout the room.
- ▶ Keep windows closed in Borough buildings during periods when indoor heating or cooling systems are operating.
- ▶ Do not use individual space heaters or air conditioners for heating or cooling.

DEPARTMENT MANAGER/ DIRECTOR RESPONSIBILITIES:

ENGINEERING/ FACILITIES MAINTENANCE STAFF RESPONSIBILITIES:

- ▶ Optimize the use of energy management systems to reduce energy consumption by scheduling shut-down of appropriate HVAC equipment during times when the space served is unoccupied.
- ▶ Ensure that up-to-date operational procedures and manuals are available.
- ▶ Implement preventive maintenance programs complete with maintenance schedules and records of maintenance performed for building equipment and systems.
- ▶ Monitor building controls when available to improve building system performance.



PART 4: VEHICLE USE

POLICY: The Fairbanks North Star Borough will implement fuel conservation strategies for the Borough pool and fleet vehicles, provided such strategies will not disrupt services to the health, welfare, and safety of Borough residents.

RESPONSIBILITIES: Vehicle operators are responsible for operating Borough vehicles in a manner that will ensure maximum fuel-efficiency without unduly impacting work performance, safety, or security. Within this framework, the following strategies will be practiced:

- ▶ Limit unnecessary trips. Plan trips to minimize mileage.
- ▶ Remove extra weight from the vehicle; only carry those items you need.
- ▶ Warm up engines on gasoline-powered cars and trucks according to the following guidelines:
 - ◇ At temperatures above 20°F, warm up for no more than 30 seconds or as long as it takes to manually remove snow and ice from windows. (In cold weather, longer warm-up times may be appropriate for older vehicles or those that use conventional rather than synthetic oil.)
 - ◇ At temperatures of 20°F or less, plug in vehicles for 2-3 hours before warming up 30 seconds to 10 minutes, depending on temperature.
- ▶ Practice moderation in driving; i.e., do not over-accelerate; avoid constant braking. Drive at or under the speed limit. Try to anticipate stops and let vehicle coast down as much as possible.

What is “sustainability”?

One of the simplest and most often cited definitions of sustainability refers to practices that “meet the needs of the present without compromising the ability of future generations to meet their own needs.”

Source: World Commission on Environment and Development—Our Common Future (1987)

- ▶ Keep tires properly inflated. Check pressure once a month and before long trips.
- ▶ Take vehicles to Transportation Vehicle Maintenance for maintenance as scheduled.
- ▶ Do not allow vehicles to remain in idle mode to warm up the vehicle except for time needed.
- ▶ Use the most fuel-efficient vehicle available that will serve the purpose for any given trip.
- ▶ If so equipped, use overdrive at cruising speeds.
- ▶ If so equipped, use cruise control at cruising speeds.

DEPARTMENT MANAGER/DIRECTOR RESPONSIBILITIES:

- ▶ Develop and implement a plan to retire older less efficient vehicles.
- ▶ Buy the most fuel-efficient vehicle that will meet most of the department needs, and rent other vehicles for infrequent needs.
- ▶ Buy electric, hybrid, or other alternative-fueled vehicles for greater fuel efficiency when available, practicable and where lasting environmental impact is minimized.
- ▶ Buy 2-wheel drive vehicles unless job or tasks truly require 4-wheel drive
- ▶ Assign the most fuel efficient vehicles to employees who drive the most miles.
- ▶ Promote teleconferencing as an alternative to driving to meetings, when appropriate systems can be made available.
- ▶ To reduce vehicle miles traveled for employee commutes, promote pedestrian, bicycle, transit, and rideshare options.
- ▶ Make bike parking visible, accessible, and if possible, under cover at Borough buildings.

TRANSPORTATION EMPLOYEE RESPONSIBILITIES:

- ▶ Monitor the preventive maintenance program to ensure that vehicle maintenance is performed according to established schedule.
- ▶ Keep tires properly inflated and wheels aligned.
- ▶ Track fuel consumption on all vehicles as a means of detecting problems. Monitor and report fuel consumption by department.
- ▶ Use API-certified “energy conserving” motor oil, either conventional or synthetic. Use the service classification and viscosity specified for each vehicle

Did you know...?

- An idling vehicle gets zero miles per gallon
- Gentle acceleration and braking can improve fuel economy by up to 33% Slow-and-go (versus stop-and-go) saves fuel because it takes more energy to move a stopped vehicle than to keep a vehicle moving.
- Every 5 miles over a 60 miles-per-hour speed is like paying an additional 36 cents per gallon for gas (assuming a fuel price of \$4/gallon).
- You can achieve the same effect as a 50% drop in gasoline prices by driving a car that gets twice the gas mileage as the one you drive now.

Source: fueleconomy.gov and ecodrivingusa.com

PART 5: RECYCLING AND WASTE REDUCTION

POLICY: It will be the policy of Borough employees to implement recycling and waste reduction to the maximum extent practicable taking into consideration the amount of recyclables generated in each facility, what materials can be recycled, storage space, and fire and safety regulations. In 2009 the Assembly authorized a recycling commission to review recycling policies and opportunities. The commission will provide input to the Mayor and recommendations on future recycling efforts.

COLLECTION OF MATERIALS: When possible materials will be collected where they are generated. Electronics, and other recycling items can be stored as necessary and then transported for recycling during scheduled Fairbanks Electronics Recycling Events.

RESPONSIBILITIES: Borough employees will make use of recycling receptacles and programs as much as possible.

Employees are also encouraged to practice waste reduction by reducing the amount and toxicity of trash thrown away and by reusing containers and products when practicable.

Following are suggested practices for conserving valuable resources, saving energy, and reducing waste:

- ◇ Reuse paper clips, folders, rubber bands, and binders.
- ◇ Print and copy only what you need.
- ◇ Make double-sided copies.
- ◇ Conserve paper by reducing printed page margins.
- ◇ Use email or voice mail rather than paper.
- ◇ Proof documents on screen.
- ◇ Reuse file folders-fold them in reverse or cover up old labels with new ones.
- ◇ Reuse envelopes, boxes, and packaging materials.
- ◇ Donate old magazines to hospitals or nursing homes.
- ◇ Route and share newspapers and magazines.

Continued on next page

- ◇ Mail items in the smallest envelopes or boxes they will fit in.
- ◇ Remove your name from unwanted mailing lists.
- ◇ Use mechanical pencils and refillable tape dispensers.
- ◇ Use overheads or whiteboards for presentations.
- ◇ Return unneeded supplies to the supply closet.
- ◇ Use a washable mug, or cup, for beverages.
- ◇ Drink tap water rather than bottled water.
- ◇ Bring your lunch in reusable containers or bags.
- ◇ Share other waste prevention ideas with your supervisor.

Major source: epa.gov/epawaste/partnerships/wastewise/checklist.htm

Did you know...?

Alaskans generate 6 pounds of trash per person each day, compared to the national average of 4.4 pounds.

Americans throw away enough aluminum to rebuild our entire commercial air fleet every three months.

According to the EPA, recycling cuts global warming pollution by the equivalent of removing 39.6 million passenger cars from the road.

The energy saved from recycling one aluminum can will run your TV for three hours. A ton of 100% recycled paper saves the equivalent of 4,100 kwh of energy, 7,000 gallons of water, 60 pounds of air emissions, and three cubic yards of landfill space.

Changing the margin default in Microsoft Word from 1.25 inches each side down to .75 inch would reduce paper use by 4.75%.

Sources greenstarinc.org, city of Portland Office of Sustainable Development, WashingtonPost.com and the Natural Resources Defense Council

Solid Waste Division
Recycling/Waste To Energy Opportunities

Material	FY 06	FY 07	FY 08	Comments
Aluminum	1,058 lbs	684 lbs	228 lbs	Aluminum cans and miscellaneous pieces are recycled through a contractor
Antifreeze	7,595 gallons	6,282 gallons	7,655 gallons	Antifreeze is collected consolidated and recycled through a hazardous waste contractor
Scrap Metal/ Automobile Program	391 tons 720 autos	1,947 tons 1,186 autos	1,374 tons 908 autos	Junk automobiles along with other miscellaneous metal are recycled as scrap metal after hazardous materials are removed.
Vehicle Batteries	186 tons 372,000 lbs 9,300 batteries	176 tons 352,000 lbs 8,800 batteries	171 tons 342,000 lbs 8,550 batteries	Batteries are packaged and shipped to a recycling facility.
Flammable Liquids	Unknown	880 gallons	2,585 gallons	Old gasoline, oil-based paint thinner and other hazardous wastes that are combustible, are used as a waste-to-energy fuel
Fuels	Unknown	25-1,000 lb boxes	44-1,000 lb boxes	Old gasoline, oil-based paint thinner and other hazardous wastes that are combustible, are used as a waste-to-energy fuel
Oily Water	Unknown	5,335 gallons	4,800 gallons	The landfill utilizes a contractor to transport the oily water to an energy recovery facility, where the oil is separated from the water and used in a used oil boiler
Used Oil	19,028 gallons	18,824 gallons	20,575 gallons	Used oil is collected and burned for energy recovery in used-oil boilers that heat onsite buildings. The USED OIL RECOVERY PROGRAM has resulted in significant savings of used oil disposal costs and negated the need to purchase heating fuel

Recycling Opportunities In Fairbanks

ABS Alaskan Inc	452-2002	Batteries
Arctic Biofuels	488-1001	Used cooking oil
Arctic Travelers	456-7080	Boxes, bubble wrap, egg cartons, packing pellets
ASUAF Recycling	474-6037	Printer cartridges, cell phones, batteries, aluminum cans, packing pellets, bubble wrap, plastic bags
Aurora Borealis Lions	385-3164	Eyeglasses
C & R Pipe	456-8386	Appliances, food cans, metal, aluminum cans
Cartridge World	457-4657	Printer ink cartridges
Credit Union 1	455-9485	Cell phones
Fairbanks Food Bank	457-4237	Food, egg cartons, boxes, plastic bags, paper bags
Lions Club		Aluminum cans
Literary Council	456-6212	Electronics
Fairbanks Pumping	488-6844	Used cooking oil
FedEx Kinkos	456-7348	Printer ink cartridges
Fred Meyers		Plastic bags
Closet Collections	451-7766	Household items, clothing
Gulliver's Books	474-9574	Books
Habitat/Humanity	452-1685	Building materials, appliances, cars
Home Depot	451-9003	Compact fluorescent light bulbs
Alaska Green Star	452-4152	Printer cartridges, electronics, computers, phones
Joy Elementary	456-5469	Printer cartridges, cell phones, aluminum cans
K & K Recycling	488-1409	Appliances, food cans, metal, cars, aluminum
Office Max	456-6662	Printer cartridges
Rescue Mission	452-5343	Cardboard, newspaper, books, junk mail, aluminum, phone books
Safeway		Plastic bags
UPS	479-2250	Packing pellets, bubble wrap, boxes
Wal-Mart	451-9900	Aluminum cans, plastic containers, plastic bags, paper, cardboard,



For more information on recycling in Fairbanks check out Interior Alaska Green Star www.iagreenstar.org, Craig's List, or Fairbanks Free cycle.

PART 6: WATER USE

POLICY: The Fairbanks North Star Borough will practice water conservation measures in the use of water.

RESPONSIBILITIES: Borough employees are responsible for utilizing water in Borough buildings and work processes in a manner that emphasizes conservation without unduly impacting work performance, safety, or security; including compliance with the following strategies:

- ▶ Check for water leaks, report leaks, and request repairs.
- ▶ Consider alternatives to discretionary uses of water that are not related to health and safety. For example, use a broom instead of a hose to routinely clean sidewalks, driveways or parking lots.
- ▶ Turn off water-using equipment when not in use.
- ▶ Do not leave a water faucet running unnecessarily.
- ▶ Do not use more water than necessary for a task.

DEPARTMENT MANAGER/DIRECTOR RESPONSIBILITIES:

- ▶ Work with employees to develop methods and procedures to reduce water use in kitchens, shop areas, and other sites.
- ▶ Incorporate water-saving strategies in landscaping and gardening projects. (See next page for tips.)
- ▶ Reduce fleet washing or use water reclaim systems. Eliminate car lot washing and hosing.

Did you know...?

- ◇ Withdrawing less water from streams and lakes helps keep those water bodies healthy.
- ◇ When we use less water, we also use less energy for pumping and treating water, which reduces costs and greenhouse gas emissions.
- ◇ Reducing wastewater means fewer resources spent on collection, treatment, and disposal.

source: epa.gov/watersense



ENGINEERING/FACILITIES MAINTENANCE

STAFF RESPONSIBILITIES:

- ▶ Evaluate existing water systems to identify opportunities where efficiency can be increased.
- ▶ Perform maintenance and/or replacement of all leaking water lines, valves, spigots, and other water system components.
- ▶ Utilize manual and automatic controls to manage water usage during occupied and unoccupied periods.

Tips for saving water in landscaping and gardening

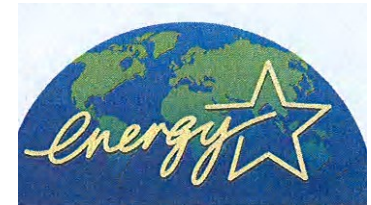
- Use organic mulch around plants to retain moisture.
- Use drip irrigation for shrubs and trees to apply water directly to the roots where it's needed.
- Reduce the amount of lawn by planting shrubs and ground covers appropriate to the site and climate.
- Choose low water use plants for landscape color.
- Adjust your lawn mower to a higher setting. A taller lawn shades roots and holds soil moisture better than if it is closely clipped.
- Water only when necessary. More plants die from over-watering than from under-watering.
- Use a trowel, shovel, or soil probe to examine soil moisture depth. If the top two to three inches of soil are dry it's time to water.
- Direct water from rain gutters and HVAC systems toward water-loving plants.
- Adjust sprinklers to direct water where it's needed. Avoid watering sidewalks and streets as much as possible.
- Make use of timers to avoid overwatering.

Source wateruseitwisely.com

PART 7: PROCUREMENT

POLICY: The Fairbanks North Star Borough commits to the following:

- ▶ Procure Energy Star-qualified products when available and practicable.
- ▶ Procure environmentally preferable products and services using the following principles:
 - Include environmental considerations as part of the normal purchasing process.
 - Emphasize pollution prevention early in the purchasing process.
 - Examine multiple environmental attributes throughout a product's or service's lifecycle.
 - Compare relevant environmental impacts when selecting products and services.
 - Collect and base purchasing decisions on accurate and meaningful information about environmental performance.
- ▶ Integrate environmental factors into the Borough's buying decisions such as:
 - Replace disposables with reusables or recyclables.
 - Support eco-labeling practices by buying products bearing such labels in preference to others, where they are available and provide value for money.
 - Take into account lifecycle costs and benefits.
 - Evaluate, as appropriate, the environmental performance of vendors in providing products and services.
 - When appropriate integrate energy efficiency as a requirement in Borough contracts.



Money Isn't All You're Saving

- Encourage suppliers and contractors to offer environmentally preferable products and services at competitive prices.
- Encourage providers of services to consider environmental impacts of service delivery.

Nothing in this policy shall be construed as requiring a department, agency, or contractor to procure products that do not perform adequately for their intended use or are not available at a reasonable price in a reasonable period of time.

Examples of products described in the EPA's Comprehensive Procurement Guidelines

- *aluminum roofing with recovered materials content of 20-95%*
- *plastic trash bags with a post-consumer content of 10-100%*
- *toner cartridges that can be returned when empty for remanufacturing*
- *bathroom tissue with 20-60% post-consumer fiber*
- *reprographic (copy) paper with 30% post-consumer fiber*
- *plastic fencing with 60-100% post-consumer content or 90-100% recovered materials*
- *fertilizers made from up to 100% recovered organic materials*

Source: www.epa.gov/epawaste/conservation/tools/cpg/products

Sample Energy Star procurement language: *the vendor must provide products that earn the ENERGY STAR and meet the ENERGY STAR specifications for energy efficiency. The vendor is encouraged to visit energystar.gov for complete product specifications and updated lists of qualifying products.*

Sample RFP language: *Our company has adopted policies to support an ethic of sustainability. To advance these goals, products and services contracted for will be evaluated in part based on their environmental attributes. Specific factors to be considered include greenhouse gas emissions, habitat impacts, regulatory compliance, recycled content, energy efficiency, water efficiency, and toxic chemical reductions. Please address these concerns when submitting your proposals.*

Sources: energystar.gov and nrdc.org

RESPONSIBILITIES: Fairbanks North Star Borough departments and offices shall identify and purchase products and services that are available for the intended purpose and that meet the performance requirements. Factors that should be considered when determining the preferable good or service include, but are not limited to the following:

- ▶ Maximization of recycled products used in product or service lifecycle.
- ▶ Environmental cost of entire product or service lifecycle.
- ▶ Reuse of existing products or materials in product or service lifecycle.
- ▶ Recyclability of product.
- ▶ Minimization of packaging.
- ▶ Reduction of energy/water consumption.
- ▶ Toxicity reduction or elimination.
- ▶ Durability and maintenance requirements.
- ▶ Ultimate disposal of product.

Did you know...?



Utilizing Energy Star and Federal Energy Management Program (FEMP) purchasing criteria would save \$1 billion a year and keep more than 4 million tons of greenhouse gas emissions out of the atmosphere if used by all state and local governments as well as the federal government.

Replacing old refrigerators in the employee break rooms could save approximately \$200 per year/location in energy consumption costs.

A typical Energy Star fax machine can cut energy costs by almost 50%. It will also scan double-sided pages, which reduces both copying and paper costs.

In FY 2008, the Fairbanks North Star Borough purchased 600 cases of 8 ½ X 11 copier paper or 16.5 tons of copy paper representing the destruction of approximately 395 trees. Switching to 100% post-consumer content paper, if compatible with copiers and printers, will mean no trees have to be destroyed to meet the Borough's copy paper needs.

Although paper with recycled content requires less energy and other resources to produce, it generally costs 7-10% more than virgin paper. Much of the cost of virgin paper is hidden, consisting of federal (taxpayer) subsidies to the timber industry. Economies of scale are also more favorable to virgin paper, which is produced and sold in greater quantities. Governments, businesses, and households that adopt recycled paper purchasing policies will help bring costs down by creating a larger market for recycled paper.

Source: energystar.gov; Golden Valley Electric,
General Services



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Credits
U.S. Environmental Protection Agency
through ICLEI-Local Governments for Sustainability,
Northwest Cities for Climate Protection Initiative.
City of Homer