

Cover Memo

File #: RPT 15-056, Version: 1

- **DATE:** December 10, 2015
- **TO:** Council Sustainability Committee
- **FROM:** Director of Utilities & Environmental Services

SUBJECT

Annual Update: Administrative Rule 3.9 - Environmentally Preferred Purchasing Policy

RECOMMENDATION

That the Committee reviews and comments on this report.

SUMMARY

In compliance with Administrative Rule 3.9, this report serves as an annual update to the Council Sustainability Committee (CSC) regarding the current efforts by City Departments in purchasing to minimize environmental impacts, toxics, pollution, waste, and hazards to workers and the community. The last report submitted to the CSC was in April 2014. Practices are summarized by Department and include continued efforts that began prior to April 2014, and all new efforts implemented after April 2014.

BACKGROUND

Administrative Rule 3.9, titled "Environmentally Preferred Purchasing Policy," was established in 2010 for the purpose of setting a standard of environmentally preferable procurement, and to demonstrate the City's commitment to environmental, economic, and social stewardship. The intent is to encourage, reward and foster vendors and manufacturers who: produce, deliver, and dispose of products that will improve the environmental quality of the region; integrate environmental considerations into every aspect of acquisition, while maintaining value standards; and ultimately becoming a driving force responsible for lowering environmental impact. The Policy calls for an annual report that identifies the purchasing practices that minimize environmental impacts, toxics, pollution, waste, and hazards to workers and the community. The report shall be submitted to the CSC for review and then submitted to City Council for approval.

Staff compiled and submitted the first annual report, summarizing the sustainable practices of City Departments, to the Committee in April 2013. A second report providing a summary of sustainable practices between April 2013 and April 2014 was submitted to the Committee in April 2014. Many of the sustainability practices described in the April 2014 report continue to be implemented throughout City Departments; however, for sake of brevity, those practices will be summarized and full descriptions of previously reported practices can be found at

<http://www.hayward-ca.gov/CITY-GOVERNMENT/COUNCIL-STANDING-COMMITTEES/COUNCIL-SUSTAINABILITY-COMMITTEE/2014/CSC-CCSC040214full.pdf>. Sustainable practices occurring throughout the City since April 2014 are also summarized below.

DISCUSSION

<u>City Clerk's Office</u> - As the main record-keeper in the City, the City Clerk's office is in charge of publishing a significant amount of official documents. In order to minimize printing these materials, the City Clerk's office switched to electronic agenda packets, and Council members are able to view these documents electronically instead of receiving printed copies of the

packets as had been done previously.

<u>City Manager's Office/Code Enforcement Division</u> - The Code Enforcement Division continues to reduce annual paper consumption by integrating Rental Inspection and Community Preservation into the Government Outreach database. The Division also continues to reduce inspector vehicle emissions by implementing software that schedules rental inspections based on geographic areas, thereby reducing travel time and distance.

Since April 2014, forty-seven abatements (removal of trash from private property) were performed. The City's abatement contractor ensures that all refuse removed from subject properties is sorted to ensure recyclables are diverted from the landfill.

<u>Development Services</u> - The Development Services Department continues to implement sustainable practices in many ways, including in the purchase of office supplies through Staples Sustainable Earth line. In addition, staff utilizes the duplex printing function, actively participates in the all of the City's recycling and organics program, and reuses single-sided recycled copy paper to make their notepads.

Building staff plan checks and enforces the requirements of the City's Green Building Ordinance and the Building Division helps ensure implementation of Hayward's Indoor Water Efficiency Ordinance. The City has an ordinance that requires all new or renovated municipal buildings that exceed either \$5 million in construction value or 20,000 square feet in size to be LEED Silver certified. Also, the City Council adopted new 2013 Codes, including the State's new Green Building Code (CalGreen), which became effective on January 1, 2014 and the State Energy Code, which became effective on July 1, 2014. Building staff has also implemented a trial program to allow electronic plan submittal and plan check and is working toward full implementation. Finally, implementation of the City's MUNIS system in 2014 has reduced paperwork and allows for easy access to permit-related information.

Finance - The Finance Department has continued to employ green practices and reduce their impact on the environment through an assortment of measures. Paper purchases have been modified to exclusively all recycled content. In general, the Department has reduced the number of printed copies of various budget and Finance documents and forms and instead made those documents available online.

On the procurement side of the Department, language is incorporated in best value bids to allow a broader variety of consideration of performance and environmental attributes (i.e., product origination, delivery, emission footprint, life cycle, recycled/ environmentally preferred products). The language allows the City the right to review specifications and to substitute or add sustainability criteria if they become available during the course of the contract.

The major improvement prior to April 2014 was the implementation of the Enterprise Resource Planning software (MUNIS). With the added green functions such as scanning, electronic filing and retrieval, real time on-line searches and paperless reporting of outputs, staff has seen the use of paper resources decrease substantially.

Process/Action	Status	Summary
Purchase Order Transmittal and Filing	In Process	Purchase Orders will no longer be printed. Copies will be electronically routed, stored and retrieved, eliminating printing, stuffing, mailing, and paper filing.
Online Receiving	Implemented	Online receiving and verification of items ordered without having to print and submit paper copies of packing slips or receiver form.
Requisitions Processing	Implemented	Requisitions will be submitted and approved via electronic hierarchy. Eliminating printing of forms and redundant data entry/processing.
Tyler Content Management (TCM)	Implemented	Electronic filing or depository of scanned documents, eliminating printed copy filing, storage, and destruction/shredding service.

Listed below are the implemented and green practices that have occurred since April 2014:

Utility Account	*	Paperless and online set-up, turn on/turn offs, and office actions.
Online Employee Timecards	-	Employees will enter and submit their timecards online through the Employee Self Service Module.

Fire Department - In addition to basic sustainable office principles (recycling, duplex printing, utilizing copy paper that has a high percentage of recycled content, etc.), the Department has strongly encouraged all staff to reduce or eliminate the use of single use water bottles and instead utilize water pitchers with containers brought from home. This point of emphasis will also be applied to the upcoming training academy, where both recruits and training staff will be deterred from using single use bottles. In Fire Administration, a water cooler was installed and office staff refills their personal water bottles instead of using single use bottles or disposable cups.

The Department continues to regularly reinforce the practice of minimizing engine idle time with goal of reducing emissions and fuel use. In addition, the Department continues to utilize an innovative software program called "Telepresence," which allows staff to meet in a virtual setting, instead of driving to meet in a single location. This reduces emissions and improves efficiency because staff will not have to leave their main stations to participate in a meeting or training. Other emissionreducing practices implemented by the Department include:

- Outfitting all new fire apparatus with diesel regeneration systems, which results in clean air exhaust without the presence of diesel particulate matter
- The purchase of two new hybrid-powered staff vehicles

The Department is also evaluating the potential implementation of other sustainable practices in the near future. For one, solar installations are being considered as part of the retrofit projects for Fire Stations 1 through 6; such installations will increase energy generation and offset energy costs. Furthermore, the Department is exploring the installation of water lines from the Wastewater Treatment Plant to the Training Center in an effort to provide an adequate water supply without utilizing and depleting potable sources.

<u>Human Resources</u> - An innovative transportation fringe benefit program, eflexTRANSIT, is offered by the Human Resources Department as an incentive for employees to utilize public transit. The program allows employees to set aside pre-tax wages to pay for work-related commuting expenses via public transportation. Employees do not pay federal and state income, Social Security, or FICA taxes on money that is set aside for these pre-tax benefits, and can save significantly while reducing their carbon footprint and utilizing public transit. In 2015, twelve employees participated in the program, which began in January 2013.

The Department also continues to make an effort to print on both sides of paper to reduce paper costs and eliminate wasteful printing, and is beginning to file documents electronically utilizing Laserfiche software, versus the traditional paper file. General "green" office practices in the Department also include recycling toner cartridges, purchasing biodegradable plates, cups and silverware including coffee Keurig K-cups, purchasing recycled content office supplies, and conscious energy choices (such as turning the lights off when not in the office and utilizing the stairs as opposed to the elevator).

<u>Library and Community Services Department</u> - The Community Services Division of the Library and Community Services Department continues to utilize recycled paper, as well as green and recycled products from vendors whenever that option is available. Staff also receives reports, monitoring documentation, and requests for reimbursement through the paperless CityDataServices.

The Main Branch Library was re-certified as a Green Business in July 2015, which requires meeting certain efficiency and conservation criteria. The Library now offers the application for a library card exclusively online, eliminating unnecessary paper applications. The Department utilizes recycled paper, and has recently reduced the amount of print newsletters it produces, instead capitalizing on the ability to communicate with residents via email newsletters. The Department has also recently implemented electronic library overdue notices to save paper, and now allows online fine payment and online renewal of library materials, thus reducing the need for patrons to travel to the library for those simple transactions.

<u>Maintenance Services Department</u> - The Maintenance Services Department consists of the Facility Management, Fleet Management, Landscape Maintenance, and Street Maintenance divisions. Each division's efforts to support sustainability are

described below. In the office, recycled office supplies are purchased. The Department actively participates in the City's recycling program for plastic, paper, and batteries, and has eliminated the use of aerosol canisters/containers.

Facility Management Division - Energy and lighting efficiency related improvements make a large impact on the overall sustainability of the City's facilities. The Facility Management Division has completed energy savings lighting retrofits on eleven buildings and plans to complete lighting retrofits on three additional buildings, including the Corporation Yard, Police Substation North, and the Weekes Branch Library.

Another area where the Facility Management Division has helped to support sustainability is in heating, ventilation, and air conditioning (HVAC) systems. Over the last several years, five fire stations have received HVAC upgrades. Computerized energy management systems were installed at City Hall, Main Library, Weekes Branch Library, and the Police Department to increase overall energy use efficiency. The Division has installed upgraded computer-based HVAC control systems at the Police Department and City Hall to enable even more efficient use of heating and air-conditioning. Facility Management retrofitted the air-conditioning chiller at the Police Department, which is anticipated to save approximately 30% in annual energy costs. Furthermore, the Division is currently working on a pilot program to implement real-time energy monitoring at City Hall.

An upcoming renovation of the Fleet Management facility breakroom will include new cabinets that are certified by the Forest Stewardship Council and the Sustainable Forestry Initiative. New countertops will be certified as Cradle to Cradle, indicating use of recycled products and future potential for reuse at the end of the life cycle of the countertop. Recycled content carpet and flooring was installed in City Hall, Police Department, and Facilities Division offices last year.

Related to purchasing, the Facility Management Division continues to purchase recycled content products (RCP), to include:

- Carpet Tiles (40% RCP)
- Janitorial Cleaning Chemicals (30% RCP)
- Paper towels (40% RCP)
- Toilet tissue (30% RCP)
- Graffiti Paint (60% RCP)
- RCP Lumber
- RCP Window Blinds

Roofs for three fire stations were replaced over the last couple years with cool roofs, which are made of highly reflective materials, remaining cooler than traditional materials, especially during the summer months. Cool roofs lower energy usage, therefore reducing utility bills. The Facility Management Division is anticipating installing cool roofs at three more City facility locations over the next several years, including Fleet Management, Fire Station 3, and Landscape Maintenance.

<u>Fleet Management Division</u> - Current practices include the purchase of vehicles that follow the City of Hayward's Fleet Procurement Guidelines of Environmental Consideration. These include fuel economy, with both alternative fuel and hybrid vehicles receiving strong consideration at all times.

In the past seven years, Fleet Management has increased the number of green vehicles from fourteen to thirty-one, a 120% increase. Green vehicles in the City fleet include:

- Two Nissan Leafs all electric vehicles
- Ten Honda hybrids
- Four C-Max hybrids
- Five Ford E85 fueled (85% ethanol, 15% gasoline)
- Six Chevrolet E85 work trucks (85% ethanol, 15% gasoline)
- Two Ford Escape SUV hybrids
- One 2014 Ford E350 Cargo Van (E85 Fuel)
- One 2014 Chevrolet G/H Van (E85 Fuel)

Over the last couple years, twelve diesel-powered trucks received exhaust system retrofits to further reduce emissions. Furthermore, Division staff recycles all antifreeze, waste oil, and oil filters by way of a contract with an environmental services provider. Staff also recycles waste from solvent tanks and parts washers, as well as scrap metal. Lubricants are stored on site in double containment drums, with the amount of lubricants kept to a minimum in order to be in compliance with Hayward Fire

Department guidelines.

Landscape Maintenance Division - The Landscape Division of the Maintenance Services Department follows "Bay-Friendly Landscape Guidelines;" which consist of purchasing bay-friendly plants, trees, and landscaping materials that:

- Nurture the soil
- Conserve water
- Conserve energy
- Protect water and air quality
- Create and protect wildlife habitat

The City of Hayward also requires all landscape maintenance contractors to follow these same guidelines. In an effort to conserve water, drip irrigation is employed to apply water only to desired plants. The Division continues its efforts to remove invasive plants, replacing them with non-invasive plants in City medians and rights-of-way. The Division has a comprehensive Integrated Pest Management (IPM) Policy, and utilizes the least hazardous chemicals for weed control. Landscape Maintenance takes pride in promoting the City's Urban Forest by planting trees that match the local microclimate and soil characteristics.

Tree Maintenance - The Division maintains approximately 38,000 City trees in a healthy, vigorous growing condition, free from disease and large concentrations of pests. Tree trimming is done to minimize safety hazards and provide clearance for vehicles and pedestrians. It is also done to improve the health of trees and to control their shape and size. Root pruning is done to minimize future damage to sidewalks, curbs and gutters, and to preserve good specimen trees. The Root Pruning program begins in spring and ends in the fall due to weather conditions. Residents are encouraged to water the trees in front of their homes while division staff water trees in public areas on a rotating watering schedule.

Public Landscaping Maintenance - The Division continues to participate with Calsense, a water management company that provides quality irrigation controllers, water saving accessories, and advanced management software. Since April 2014, ten Calsense controllers have been installed while three additional controllers are scheduled to be installed in FY 2015. The Calsense software allows Division staff to gather and store data from Calsense controllers, print reports and make controller programming changes - all from a central location.

The Division continues to re-use chipped branches as bark mulch. Clean tree trimmings and green waste are recycled into organic compost or mulch. These recycled materials are later used to enrich our soils; thus conserving precious landfill space and giving back to the earth.

Compost Giveaway - The Maintenance Services Department, in collaboration with the Environmental Services Division offered a sustainable solution to City of Hayward gardeners and landscapers who want to reduce their carbon footprint while enriching the landscape. In September 2015, compost made locally from 100% recycled, Bay Area-sourced yard trimmings, food scraps and lumber debris were offered to City of Hayward residents. More than 400 residents received approximately 2,500 bags of compost for use in residential landscapes and gardens.

Irrigation Retrofitting - The Division has been retrofitting irrigation systems at City-owned facilities from overhead spray and stream rotors to more water efficient inline drip and drip bubbler systems. Netafim inline drip tubing, now the City standard for new landscape projects, applies water directly to the root system and significantly reduces water usage by preventing water loss to the atmosphere like the conventional spray heads and turf rotors.

Urban Forest Program -The City acknowledges that trees are important for the environmental and quality of life benefits they provide and the Landscape Division manages an active urban forest program along with a comprehensive ordinance that protects trees on streets and public right-of-ways. The Landscape Division employs two certified arborists and three tree crews that ensure street trees are maintained in a healthy and safe condition. Focused on building and managing the urban forest, the Division operates the Keep Hayward Green Program (KHGP), which offers to plant a free street tree for residents who agree to nurture the tree with water, care, and regular inspection. Approximately 300 trees have been planted since April 2014, which can decrease urban runoff, protect water quality, and assist in absorbing air pollutants. In accordance with the drought restrictions imposed by Governor Brown, the Division has reduced the planting of new public trees while replacing trees that have been removed. Newly planted and young trees in the public right-of-way are being manually watered by tanker trucks filled with recycled water from the City's wastewater treatment facility.

Tree City USA - City of Hayward has been named a Tree City USA by the Arbor Day Foundation in honor of its commitment to effective urban forest management for the past 28 years. Hayward achieved Tree City USA recognition by meeting the program's four requirements: a tree board or department, a tree-care ordinance, an annual community forestry budget of at least \$2 per capita and an Arbor Day observance and proclamation.

Annual Arbor Day - The City of Hayward, as a cooperative effort with the Hayward Unified School District and the Hayward Area Recreation and Park District, celebrates Arbor Day each year. Arbor Day has been held in Hayward since 1985. Since 1989, the celebrations have been held at a Hayward school and a Hayward park. Arbor Day Celebrations have included a Community Faire with information booths and tree plantings.

Sheet Mulching - In collaboration with the Utilities and Environmental Services Department, the Division completed a lawn conversion project in front of the Utilities Center on Soto Road. Sheet mulching, a layered mulch system, is a simple, effective technique for improving soil health, managing weeds without herbicides and increasing soil permeability. Sheet mulching can be used either in establishing a landscape or to enrich existing plantings. In both cases, mulch is applied to bare soil or on top of cut or flattened weeds or turf. Trees, shrubs, herbaceous perennials and annuals are planted through the mulch, and small area can be left open to accommodate established plants.

Hesperian Boulevard Project - In collaboration with the Keep Hayward Clean and Green Task Force, on October 1st and on Make a Difference Day on October 24th, the Division performed a beautification project on Hesperian Boulevard from Panama Avenue to Bolero Avenue. Work included site clean-up, tree and shrub trimming, and debris removal, fence painting, and spreading of over 200 cubic yards of recycled mulch and repurposed boulders from other City-owned sites.

American Elm Tree Removal - An American Elm, over one hundred years old at the Hayward City Main Library, was declining in health and removed. The tree was harvested and reclaimed for furniture to be used at the Hayward's new 21st Century Library.

<u>Street Maintenance Division</u> - The Street Maintenance Program continues to use recycled paint for all graffiti abatement, and whenever possible, uses discarded and illegally dumped paint for these purposes as well. The Program is responsible for the maintenance and installation of trash capture devices in storm water inlets to capture trash prior to it entering the San Francisco Bay. The Streets Program is focused on the City Council's top priorities of Safe, Clean, and Green, to include reducing illegal dumping. The Street Maintenance Program has been proactive in actively responding to illegal dumping in the public rights-of-way, and is working with the community to reduce illegal dumping, acknowledging the link between dumping and the amount of trash on City streets, and trash entering local waterways.

The Traffic Program is responsible for a variety of measures that assist the City in meeting its sustainability goals. For example, all sign plates are recycled when in need of replacement to reduce waste. The Program utilizes thermoplastic stencils for pavement marking rather than paint. Thermoplastic markings are visible for the life of the asphalt it's applied to, and because the thermoplastic markings are formulated using 100% solids, no solvents are diffused into the air. The Program routinely applies recycled rubber speed humps rather than asphalt humps, which can be removed and re-used when streets are paved or their use is needed at another location.

The Street Sweeping Program has expanded the enforcement of posted no parking sign areas on street sweeping days to encourage drivers to relocate their vehicles so that the City can clean the streets. With active enforcement, high traffic areas are able to be swept and cleaned, promoting a cleaner City and reducing the amount of items that would otherwise enter the storm water system.

<u>Police Department</u> - The Police Department has implemented sustainable practices in the following ways:

- Placed recycle containers adjacent to each garbage can inside their facilities
- Contract with a shredding service for sensitive documentation that recycles the shredded pulp
- Recycle excess property and evidence such as:
 - Metals (recycled)
 - Flammable and hazardous materials turned over to Alameda County (disposal)
 - Batteries (disposable and rechargeable)
 - Drugs (converted to energy)

- Firearms (destroyed/scrap is recycled)
- Toner cartridges (recycled)
- Surplus/obsolete electronics (e-cycled)
- Obsolete cell phones (recycled)
- Reuse excess office furnishings by making them available to other departments
- Facilities measures:
 - Installed energy efficient overhead lighting throughout the building
 - Implement motion detection throughout the building for lighting
 - HVAC temperatures comply with the City standards for energy efficiency
 - Use of tire charging station in the back parking lot to ensure optimal mileage
- Policy related:
 - Substituting electronic intranet distribution for documents when feasible
 - Migrating from paper to digital records including incident reports, online citizen reporting, audio and visual evidence and fingerprints (ongoing)
 - Officers write reports in the field using Mobile Data Computers (MDCs) in their patrol vehicles; increasing their availability to the community and reducing unnecessary driving.
 - Use recycled paper
- Employee Health:

0

- Maintain a functional gym for employee use in PAB and built a new officially affiliated CrossFit gym facility
- Biohazards are properly secured and stored.

<u>Engineering & Transportation</u> - The Engineering & Transportation Department continues to implement the various measures identified in the April 2014 EPPP Report.

The new Main Library and Heritage Plaza represents the most significant sustainability achievement since the last report, and represents exceptional feats in design that will put Hayward on the map for green building innovation. The design of the new Main Library building and Heritage Plaza is inherently green, and includes the following green building and sustainability achievements:

- Minimum building lifespan goal of seventy-five years
- Achieve LEED Gold Certification but striving for LEED Platinum
- Eliminate building use of fossil fuels
- Harvest and reuse 500,000 gallons of rainwater annually
- Model of civic stewardship to the Bay Area and the nation
- Reduce the Library's energy consumption by 50%
- 100% solar powered Library to achieve annual "Zero Net Energy"

The Transportation Division is currently conducting a study to determine the feasibility of launching a new shuttle service to provide neighborhoods such as the Cannery and the Industrial Parkway area with additional transit connections to Downtown Hayward, the Hayward BART station and the South Hayward BART station. The shuttle service would allow residents in those regions to use more a sustainable public transportation option. Recommendations based on the survey will go to Council in January 2016. Furthermore, an Intersection Improvement study is currently underway with the goal of reducing carbon emissions at intersections at selected locations.

<u>Utilities & Environmental Services</u> - The Department strives to implement environmentally sustainable practices to promote a reduction in waste, recycling, efficient use of energy, and protection of local waterways, open space and air quality. The Utilities and Environmental Services Department is comprised of employees dedicated to environmental services throughout the City and to the overall health and welfare of the Bay Area region, its population and ecosystem.

As called for in Administrative Rule 3.9, Section V, staff created a Green Team, consisting of employees from all City departments, to create guidelines and provide direction in carrying out the policy and to drive the City's internal sustainability initiatives.

Hayward was one of four cities in California to be honored with the Beacon Award during the League of Cities Conference in San Jose on October 1, 2015. The Beacon Award is a program of the Institute for Local Government to recognize local

jurisdictions for their efforts to reduce greenhouse gas emissions, save energy, and adopt policies and programs that promote sustainability. More information about the program can be found at <<u>http://www.ca-ilg.org/beacon-award-program</u>>.

Hayward was honored with a Silver-Level Beacon Award, which recognizes the City's holistic approach to addressing climate change. Silver, gold and platinum award levels require 5%, 10% or 20% energy savings and greenhouse gas reductions respectively.

In addition to the Beacon Award, Hayward received five Spotlight awards for the following achievements:

- Agency GHG Reductions: Platinum Level (43% reduction)
- Community GHG Reductions: Platinum Level (21.3% reduction)
- Agency Energy Savings: Platinum Level (25% savings)
- Natural Gas Savings: Silver Level (7.6% savings)
- Sustainability Best Practices: Gold

Water Pollution Control Facility - Hayward was honored with the US EPA's Green Power Leadership Award for renewable energy generation at the Water Pollution Control Facility. Council Member Mendall received the national award on behalf of the City on October 19th at the 2015 Renewable Energy Markets Conference in Arlington, Virginia. Hayward's Water Pollution Control Facility was among the three organizations nationwide to receive a Leadership Award for on-site green power generation. The award recognizes US EPA Green Power Partners who distinguish themselves using on-site renewable energy applications, such as solar photovoltaic (PV) or landfill gas. The WPCF is currently generating nearly 11 million kilowatt-hours (kWh) of green power annually from solar and biogas energy systems, which is enough green power to meet more than 100 percent of the facility's electricity use. Excess energy, along with all of the solar energy (approximately 2.3 million kWh annually), is being routed to other City facilities.

<u>Water Pollution Source Control -</u> The Water Pollution Source Control (WPSC) program is responsible for the protection of the City's sewer collection system and Water Pollution Control Facility (WPCF) by regulating the wastewater discharges that enter the City's sewer system. WPSC also manages and actively enforces the City's stormwater pollution prevention program, to minimize pollutants to the San Francisco Bay and the Pacific Ocean from the City's storm drain system. In addition to managing two mandatory federal programs to protect the waters of the state from pollution, its employees consciously conduct sustainable practices on a daily basis to reduce waste and conserve energy. WPSC prints all documents using the double-sided feature on the printer when possible and uses 100% recycled-content paper. Furthermore, all recyclable waste is separated into proper recycling bins located throughout the WPSC offices at 24499 Soto Road, and energy is conserved by turning off lights, utilizing City-owned hybrid vehicles, carpooling, and reducing driving when possible.

<u>Utilities Operations and Maintenance Division</u> - The Operations and Maintenance Division is constantly working to improve efficiency and reduce energy use, including:

- All existing lighting systems that are upgraded or replaced are using LED lighting.
- Old inefficient pumps have been replaced with new high efficiency pumps. Recent examples include the Centex lift station (Dobbel Avenue area), the Tennyson grade separation station and the Tennyson lift station now use pumps that use at least 25% less electricity and are more reliable.
- Remote monitoring equipment is being added to every facility/pump station/regulator station as improvements are made.
- Cleaner burning and more efficient heavy equipment are being used where possible.
- Diesel fuel in the large emergency standby generators is now filtered so that we no longer need to "use it up" before it goes bad. Each generator fuel tank can hold as much as 10,000 gallons of diesel fuel.
- Whenever possible, pumps are operated only during off-peak hours when there is more electricity available on the grid. This saves by not having to add more inefficient and dirty power plants to supply peak demand and it also saves money with lower rates and rebates that are as high as \$10,000 per year.
- The sewer collections group uses a new sewer cleaning Vactor® truck that is certified by the Air Resources Board and emits almost no harmful diesel particulate matter.

<u>Solid Waste/Recycling</u> - The Solid Waste Program works toward achieving the goal of improving the City's diversion rate from landfills through comprehensive recycling and organics collections programs. The City's 2014 diversion rate is 76%, a significant increase from previously years and on track to meet the new 80% diversion target by 2020, which was

established in the new Franchise Agreement. While staff works with businesses and residents to improve their diversion efforts, staff also has implemented several measures internally to improve the diversion at City facilities.

Staff has implemented new programs and policies designed to improve the diversion rate at City facilities and City events. In an effort to improve recycling rates at City Hall, staff ordered waste containers with all three waste streams (trash, recycling, and organics) together in one system to ensure ease of proper disposal. The three bin system will be implemented in all City facilities in the coming months.

Furthermore, staff is encouraging all City staff to make all meetings and events "zero waste" events. The Green Team compiled a list of requirements and tips that apply to all City-sponsored meetings or events that take place in or at any City facility. These requirements are supported by City policies, resolutions and ordinances, and include provisions to minimize waste, and minimize the environmental impact of City-sponsored events and meetings.

Water Conservation - Hayward implements an aggressive and effective water conservation program, in accordance with statewide mandatory water reduction targets designed to ease the extensive emergency drought conditions in California. The City's efforts consist of mandatory requirements, voluntary programs, education and outreach and water-use reduction strategies at City facilities. Hayward's current per-capita water use is among the lowest in the Bay Area; as such, Hayward was tasked by Governor Brown issued Executive Order B-29-15 to reach a reduction target of 8% from 2013 levels, the lowest reduction tier enacted on California municipalities. In addition to assisting external customers with water conservation, the City has focused significant resources towards water use efficiency at City-owned properties, notably in landscape irrigation and water system management.

The City continues to incorporate Bay-Friendly principles, including water use efficiency, into landscape rehabilitation projects at several City-owned sites. These gardens serve as demonstrations of attractive, water conserving landscapes, and help the City reduce its water costs. Examples of recently completed and planned projects include:

- <u>Route 238 Corridor Improvement Project</u> A five-mile long capital improvement project included the biggest Bay-Friendly Rated Landscape to date, saving 2.1 million gallons annually and avoiding 362 tons of CO2 emissions.
- <u>The Utilities Center Lawn Conversion</u> Bay-Friendly landscaping was installed in October 2015 to replace the two lawns outside of the facility.
- <u>Winton Avenue Median Landscape Improvement</u> The median renovation included planting Bay-Friendly Rated Landscape and was completed in April 2015.

NEXT STEPS

Staff will also continue to facilitate necessary training or education to help further implement the policy and review the policy language on a biannual basis.

Prepared by: Jennifer Yee, Sustainability Technician

Recommended by: Alex Ameri, Director of Utilities & Environmental Services

Approved by:

Fran David, City Manager

Attachments:

Attachment I

Administrative Rule 3.9