Reporting Period: Jan 1 thru Dec 31, 2011

2011 Environmental Report Card for U.S. EPA Region 8 HQ Office 1595 Wynkoop Street, Denver, Colorado

This Environmental Report Card provides a brief summary of the 1595 Wynkoop building's performance with respect to key sustainability indicators. The purpose of the report card is to educate Federal employees and the public of the environmental impacts that result from the operation of buildings and the EPA's efforts to reduce those impacts as required by Executive Order (EO) 13514. EPA Region 8 has identified the 10 most significant environmental **IMPACTS** of its operations at 1595 Wynkoop and the ratings scale is pass/fail/incomplete defined in the key below:



<u>Greenhouse Gas Emissions:</u> **EO Requirement:** 28% reduction by 2020, baseline 2008

Comments: 2008 baseline for 1595 Wynkoop is 6,144 tonnes/year CO2. Our emissions in 2011 were 1.3 percent below that baseline, this represents an almost 10% reduction from 2010. The large decrease compared to 2010 is primarily due to a significant decrease in business travel—approximately 40% reduction in both air miles flown and fleet vehicle miles driven. In addition, the electric grid in Colorado is slowly becoming cleaner as more renewable energy projects are constructed. That said, CO2 emissions associated with the operation of our building are still enough to fill 1 and a 1/4 air-ships the size of the Hindenberg every month.

<u>Alternative Commuting:</u> EMS Objective: Maintain incentive programs like EcoPass and Commuter Check Program to promote the use of public transportation, commuter vans, bicycling or walking. Determine the number of employees that commute via alternative means.

Comments: Office location is very close to light-rail, a bus terminal as well as bicycle paths. There is secure bicycle parking in the garage and showers for bicycle commuters. A government-wide survey conducted in Fall 2011 determined that 68% of Region 8 employees regularly use alternative transportation to get to work.

Fleet Vehicles

EO Requirement: 30% reduction in vehicle fleet petroleum use by 2020.

Comments: In the period from Sept. 2010 thru Oct. 2011, 17 vehicles in the Region 8 fleet were driven a combined 166,459 miles. The cumulative fuel economy of the fleet was 20.7mpg (compared to 20.5 the previous year). The result is a 34% drop in fuel consumption compared to 2010.

Pass = has taken action to meet the EO requirement
Pass+ = has taken action to exceed the EO requirement
Incomplete = has partially met the EO requirement or is in progress

Fail = has not taken action to meet the EO requirement

GRADE

Pass

GRADE

Pass

GRADE

Pass

Water Consumption: EO Requirement: Reduce potable water consumption by 2% annually through fiscal year 2020, or

26% percent by the end of fiscal year 2020, baseline 2007

Comments: Building has water efficient fixtures with 72 dual flush toilets and 18 waterless urinals, auto faucets with aerators and low-flow shower heads.

Pass

GRADE

GRADE

Total volume of water consumed at 1595 Wynkoop in CY 2011 was 3,299,000 gallons, which equates to about 4.256 gallons for each of the 775 occupants. For illustration, the tanker truck (pictured) holds 5,000 gallons. The total water use in 2011 represents a nearly 40% reduction since calendar year 2007, although it is an almost 9% increase from 2010. Irrigation of the 20,000 square foot green roof made up an estimated 7% of water use in 2011.

Stormwater Management: EO Requirement: Implement stormwater provisions of the Energy Independence and Security Act (EISA) of 2007

Doesn't meet EISA, but performs much better than

Comments: EISA 2007 requires that all new applicable Federal Facility construction projects be designed to achieve predevelopment hydrology. The EPA building was built before this requirement was enacted. Stormwater management systems include a sand filter detention vault and green roof. Monitoring from the green roof shows that runoff has been reduced by 85% for all storms 0.6" or less. For large storms exceeding one inch in size, runoff is reduced by less than 50%. This performance would not meet the EISA requirements since there is not complete capture of the 95th percent storm event (1.1" for Denver). Denver Urban Drainage and Flood Control District is currently monitoring volume and quality of water from our green roof.

Electronics Stewardship: EO Requirement: To improve our environmental, energy and economic performance, in part through specific electronics stewardship activities such as green procurement, power management, energy efficiency, and responsible disposition.

Comments: In 2011, the Region 8 office finalized a policy to reduce the number of desktop printers, favoring network printers that are more energy efficient and cost effective to operate. In response to outreach, approximately 80 Region 8 employees voluntarily turned in their desktop printers. We estimate that there are around 42 desktop printers still in use to date; this is a reduction of nearly two thirds. We also recycled 7,926 pounds of our non-reusable mixed electronic products. 100% of the eligible electronic equipment we purchased was EPEAT GOLD registered, meaning they meet the

highest environmental standards for equipment on the market. In addition to responsibly recycling our old electronics, our IT staff makes an effort to extend the life of electronics by reusing them internally or donating them. In 2011 Region 8 was awarded PLATINUM status by the Federal Electronics Challenge (FEC) for our electronic stewardship activities. EPA Region 8 is promoting safe electronics management and recycling by only using recyclers who are certified to an accredited management standard, such as R2 or eStewards.

GRADE

average

Pass

Solid Waste Generation/Diversion: EO Requirement: 50% recycling and waste diversion by 2015, increase diversion of compostable/organic material.

Comments: Through a combination of the composting program initiated in 2010 and an ongoing "alltogether" recycling program, we were able to divert just over 80% of material away from landfills in 2011.

GRADE

Pass +