



Idaho Department of Environmental Quality Pollution Prevention Champion

Camas Prairie Winery

Moscow, Idaho

2009

Environmental Commitment

Camas Prairie Winery, established in 1983 by Stuart and Susan Scott, is Idaho's oldest independent winery. They consider themselves a small mom-and-pop operation, so they are always looking for new ways to increase efficiency and reduce costs and have frequently realized the parallel between environmental protection and their bottom line. Camas Prairie Winery demonstrates that good business and environmental decisions can go together.

Pollution Prevention Success

Solvent and Hazardous Waste Reduction

Camas Prairie Winery uses hot steam to sterilize equipment instead of chemical cleaning agents, such as chlorine or iodine. In food production, every item of equipment must be sterilized after every use. The sterilization is typically done with a chlorine solution that is used for rinsing and then is disposed of in the city sewer system. Moreover, when using chlorine for sterilization, a water rinse step is added, increasing the process length and water use. Alternatively, Camas Prairie Winery uses a hot steam system, which produces contact sterilization on surfaces and requires no rinse since chemicals are not involved. By transitioning to a steam sterilization system, the use of 75 gallons of chlorine and 32,000 gallons of water a year were eliminated, which generated enough savings to pay for the steam system.

Product Design

Camas Prairie Winery switched to lightweight wine bottles with a flat bottom and no dimple. Typically this change can reduce the cost of buying bottles due to a decreased production cost of the glass, an average of 12 percent drop in water use per container, a 20 percent reduction in energy, and a savings of 20,000 tons of glass packaging per year. For Camas Prairie Winery, the lighter weight bottle reduced how rapidly the price of wine bottles increased and reduced the bottle case weight by three pounds, resulting in reduced shipping costs from the glass distributor to the winery to the consumer. Through this change, Camas Prairie Winery conserves thousands of gallons of diesel fuel each year consumed by their trucks and those of the glass distributor.

Renewable Energy

In 2008, Camas Prairie Winery was awarded a USDA Rural Energy Assistance Program (REAP) grant for a 5,000 watt solar power array. A solar array is a group of solar panels and produces about 10-12 watts per square foot. Using solar systems reduces the demand for coal-fired power, a source of greenhouse gas and mercury emissions, and the need to build new hydroelectric dams. The REAP Grants Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements. The winery's grant was the first successful REAP grant for solar power in Idaho. Since the winery's system went online in April of 2009, they have produced approximately 945 kilowatt hours of solar power a month and reduced energy bills by \$125 per month or \$1,500 a year. Additionally, Avista (the electricity provider for the winery) is offering a one time abatement rebate of \$0.20 for every kilowatt hour of power produced with a solar energy system during the system's first year of operation.

Energy Efficiency

Camas Prairie Winery uses a natural gas tankless hot water system. Tankless water heaters provide hot water on demand in contrast to standard tank-type water heaters, which consume energy around the clock to keep water in the tank hot. When a hot water tap is turned on, cold water is drawn into the water heater. A flow sensor activates the gas burner, which warms the heat exchanger. Incoming cold water encircles the heat exchanger and leaves the heater at its set-point temperature. Combustion gases safely exit through a dedicated, sealed vent system. By using this system, Camas Prairie Winery has reduced its natural gas consumption by 50 percent and electricity consumption by 25 percent and saved \$125 a month or \$1,500 a year.

For More Information

For more information visit Camas Prairie Winery's website at www.camasprairiewinery.com.

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