



Idaho Department of Environmental Quality Pollution Prevention Champion

University of Idaho
Moscow
2017

Environmental Commitment

The University of Idaho is well known as a leading research institution, and it has also become a leader in its commitment to environmental stewardship within the state and nationwide. From developing and refurbishing buildings that meet the most stringent requirements for Leadership in Environmental and Energy Design (LEED) to reducing energy intensity and improving efficiency in the campus energy plant, the University of Idaho is investing its talent and resources in sustainability.

Reducing Pollution from Energy Use

One of the most innovative aspects of the University of Idaho's infrastructure is its district heating system. Several decades ago, the university partnered with Idaho's large forestry businesses and redesigned the energy plant to operate on waste wood products instead of natural gas. Switching from natural gas to a locally harvested renewable resource was an inventive way to improve the resiliency of the campus heating needs while identifying new uses for forest products.

While the wood boiler proved successful, it often needed to be supplemented with steam produced from two gas-fired boilers. In 2003, a major effort was undertaken to improve the efficiency of the wood boiler to better meet all of the thermal energy needs for the campus. These improvements included acid washing the boiler to remove scale, treating boiler makeup water to reduce future scaling, and right-sizing intake fans to ensure complete combustion without cooling the fire. These changes significantly increased the efficiency of the boiler and brought the university much closer to meeting the thermal energy needs of the campus.

By 2010, improved building efficiency had reduced the thermal energy demand from buildings on campus, and as of 2017, nearly all of the campus thermal energy needs are provided by the single wood-fired boiler. Data gathered by the University show that efficiency improvements in the energy plant and in campus buildings reduced particulate matter emissions by 55% and decreased carbon dioxide emissions 84% between 2002 and 2017. The following link provides more information about these results: <http://www.uidaho.edu/infrastructure/facilities/ues/energy/steam-production>.

Hazardous Waste and Emergency Response

In addition to maintaining the energy plant and campus buildings, the University of Idaho is the designated Hazardous Waste and Emergency Response authority for any situation involving spills or releases of known or suspected hazardous chemicals in the city of Moscow.

The university has implemented several changes to reduce the risks that hazardous chemicals can pose in the environment and from release. They now use less hazardous chemicals for classroom instruction and other purposes such as replacing thermometers containing mercury and using GelGreen nucleic acid in place of ethidium bromide in DNA stains. Additionally, the university has worked to reduce hazardous waste generation by recycling and reusing chemicals with remaining shelf life, saving money and reducing pollution from the formulation of new feedstock for lab use.

For More Information

To learn more about the University of Idaho and their sustainability efforts, visit <http://www.uidaho.edu/infrastructure/facilities/ues>.

Information on this fact sheet represents an example of pollution prevention projects undertaken by Idaho organizations and does not constitute Departmental certification or approval of compliance at this or any other time with federal, state and/or local regulations.