

SDSTATE SUSTAINABILITY NEWSLETTER

January 18, 2017



Meet the Sustainability Specialist!



Hello! I'm Jennifer McLaughlin and I am SDSU's first ever Sustainability Specialist. I graduated from SDSU in 2015 with a double major in Ecology & Environmental Science & Organismal Biology. I'm thrilled to be in this roll and am eager to work with campus on advancing sustainability. Since the position began in July, I've been diving into book recycling, assisting in campus clean-ups, & designing a plan for future efforts. I'm eager to hear ideas from across campus, so don't hesitate to reach out with any questions or ideas!

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Recycling Sees Change on Campus

This past semester we changed the campus recycling color coding system. In the past, the hallway bins were color coded as yellow for trash and green for recycling. Now recycling bins will be blue. Trash will remain yellow. While this change may seem confusing at the first, I believe the color change will benefit SDSU in the long haul for several reasons. First of all, blue is a more common color used for recycling bins across the country. Following this unofficial standard, will allow for more consistency for students, visitors, faculty, and staff as they move between campus and other towns. Secondly (and maybe more importantly!), our trash and recycling bins will now sport SDSU colors and not NDSU's! Go Jacks!

Recycling Guidelines

While the recycling lid color has changed, what can be recycled has not. The bins accept single stream, or mixed recycling, which is where all types of recycling can be placed in one bin. The materials are then sorted out at a Material Recovery Facility (MRF). At SDSU, we can recycle glass bottles & jars, all types of paper, cans (i.e. pop & soup cans), and plastic (i.e. water bottles). Everything else must go in the trash. Items don't have to be perfectly clean to be thrown in the recycling, but make sure there are no chunks of food or standing liquid in the containers.

In the hallways, there should always be a trash and recycling bin next to each other. This makes recycling just as easy as tossing something in the trash. The placement's goal is to help reduce contamination. Contamination occurs when trash is placed in the recycling bin causing its contents to be non-recyclable. Here on campus, if our dumpsters have a high enough

contamination rate, we actually are charged a contamination fee. This past year SDSU paid around \$2,000 in contamination fees. Our custodial staff works hard to ensure our dumpsters do not become contaminated. They will look at the contents in the recycling bin and will only recycle it if the materials inside are not contaminated. When checking the recycling, custodial staff often finds the following three contaminants - disposable coffee cups, food, and plastic bottles with standing liquid in them. The last item may be confusing as the plastic bottles can be recycled if there is no liquid. Standing liquid can leak out and contaminate other material. Droplets of liquid are O.K.

If you work in an office, you may have noticed that there are also blue or white burlap bags.

These, too, are for recycling; however, they are only for paper. We collect paper separately as we generate so much of this waste it makes it easier for our recycling hauler. In the same way, our campus also collects corrugated cardboard separately. If your office has a large pile to be recycled, please call Facilities & Services at 688-4136 and our crew will come pick it up. Small quantities can be placed beside the bin (be sure to mark for recycling) and single small pieces of cardboard can be placed directly in the bin.

For more information on what can be recycled, please visit:
www.sdstate.edu/sustainability/recycling



Coal...No More



Photo 1: Coal silos prior to demolition.

Going... Going... Gone. Campus is saying a mighty farewell to their years of coal burning, which ended in 2012. Over Christmas break, contractors began working with Facilities & Services to demolish the two coal silos between the Central Heating Plant and Avera Health & Science Center. It's a tedious task requiring the contractor to collapse the silos inside themselves – a process that can take nearly three weeks.

During its coal burning years, SDSU purchased up to 8,000 tons of coal each year. Each silo stored 350 tons of coal, enough energy to provide heat during an extra cold week in Brookings. In 2012, when campus was due to replace two of its boilers, SDSU made the switch to natural gas. While the EPA's coal plant regulations didn't affect South Dakota at the time, SDSU still decided to move forward and end their coal usage in preparation for potentially more stringent guidelines. In addition, the price of natural gas and the want to reduce campus' carbon footprint played a role in the decision.

The process for using coal and natural gas for heat is almost identical, but the move to natural gas has saved time spent hauling coal and removing coal ash waste. SDSU's coal was barged from the Appalachian region to Minneapolis then trucked to Brookings. Next, dump truck loads would haul the coal to the silos, where it was brought into the heating plant through a series of conveyor belts. Coal ash, leftover from burning, was then hauled out to the Brookings landfill. On the other hand, natural gas is brought directly to the heating plant through pipes connected to campus' natural gas provider. This alone improves campus efficiency and saves man hours!

In addition, natural gas burns about half the amount of CO_2 that coal does; however, it is still a fossil fuel and is not exempt from negative climate effects (Zielinski, 2014). To many, natural gas is considered a "bridge fuel" explaining that it's a small step in the right direction towards renewable energy.

While renewable energy is not in SDSU's foreseeable future, Facilities & Services works hard to maximize energy efficiencies and minimize energy loss. In fact, the energy conservation efforts start right in the heating plant. As the steam is generated, the flue gas is discharged outside; however, prior to doing so, the flue gas' heat is transferred to new water entering the boiler. This helps reduce the amount of energy needed to heat the water to generate steam. Other areas that have helped conserve energy include more efficient buildings as well as increased steam pipe insulation. Through the energy conservation efforts, the heating energy consumption on campus has remained relatively the same, if not declined, despite adding more building square footage to campus.

Coal is gone and natural gas is in. But one thing won't change, energy conservation will remain important to campus no matter the energy source used.

*Zielinski, Sarah. "Natural Gas Really Is Better Than Coal." *Smithsonian.com*. Smithsonian Institution, 13 Feb. 2014. Web. 06 Jan. 2017. <<http://www.smithsonianmag.com/science-nature/natural-gas-really-better-coal-180949739/>>.



Photo 2: Coal silo demolition.

Sustainability Tidbits

Learn about Sustainability

If you're interested in learning more about sustainability, be sure to check out one of SDSU's 52 courses that include some aspect of the broad topic. A full list can be seen at www.sdstate.edu/facilities-and-services/sustainability/sustainability-courses

Study Abroad

Do you have an itch to be green and see the world? Check out the variety of sustainability related study abroad opportunities offered at SDSU! Options vary from helping a Belize community on sustainability projects, studying in Berlin to understand sustainable urban growth, or analyzing the sustainable development of Beijing. Explore the world of sustainability as you study abroad and embrace how we can all make a positive impact in our communities. Search "sustainability" at <https://sdstate-sa.terradotta.com/>

Recycle to Win

2017 will be SDSU 7th year to participate in RecycleMania, a nationwide recycling competition between colleges and universities. The basic goal of the competition is to have the least amount of waste generated on campus and highest recycling rate. It's a very easy competition to get involved with. All you have to do is RECYCLE!

Get Involved

Would you like to get involved in more sustainability across campus? Students can join the Student Sustainability Council (ssc@jacks.sdstate.edu). SSC's first meeting this semester is tonight (Wed 18th) at 6pm in Einstein's. Faculty & staff can attend the Environmental Stewardship & Sustainability Committee (Chair: mark.cochrane@sdstate.edu).

Don't forget to follow SDState Sustainability on Facebook, Twitter, & Instagram @SustainSDState.