2023 Washington Applied Sustainability Internship Program positions

- 1. Wilcox Farms
- 2. Sekisui Aerospace
- 3. Canyon Creek Cabinet Company
- 4. Boeing



Company: Wilcox Farms, Inc.

Wilcox Family Farms is a 110-year-old farm sitting on 1,600 acres of farmland along the Nisqually River and in the foothills of Mt. Rainier. Both 4th and 5th generations of the Wilcox family actively work at the farm where all the hens are cage-free and free range. Wilcox Farms produces eggs and processes eggs into hard boiled and liquid egg products. https://wilcoxfarms.com/

Location: Roy, WA

Project Description:

This summer intern will help find off-site recycling or composting options for egg cartons (>80,000 lbs/month) and determine if liquid egg waste (>14,000 lbs/week) can be used in non-human food manufacturing. Additionally, the intern will determine if the liquid egg waste and cartons can be composted onsite with other materials that are already being composted.

Preferred majors:

- Engineering
- Environmental Science
- Environmental Health
- Physical Sciences
- Life Sciences
- Economics/Business

Desired Skills:

- Ability to work independently
- Ability to think critically
- Strong general computing skills (familiar with Microsoft Office)
- Strong written and verbal communication skills
- Familiarity with composting principles

Additional requirements:

- U.S. Citizenship is not required.
- Applicants should not own any type of bird, nor reside or visit areas where birds live or congregate due to concerns with avian flu.

Company: Sekisui Aerospace

Sekisui Aerospace designs and manufactures composite parts for a variety of aerospace, defense, and medical industries. They have been in the industry for over 35 years and have over 500 employees. They have three manufacturing plants between Washington and Iowa. This internship will take place in either their Renton or Sumner manufacturing facility. https://www.sekisuiaerospace.com/

Location: Renton or Sumner, WA

Project Description(s):

The intern will pursue one or more of the following projects depending on skills and interest:

- 1. Pre-impregnated resin is used in the majority of manufacturing processes at Sekisui Aerospace. Reduce pre-impregnated scrap (pre- and post-cure) by improving the efficiency of processes (such as cutting/trimming). Provide recommendations to reduce waste volume by manufactured part.
- 2. Most parts shipped out are packaged in single-use packaging that is only sometimes recyclable. Identify an additional product line that could use a re-usable packaging system and/or improve packaging system to utilize more recyclable materials. Evaluate shipping methods and provide recommendations on reducing packaging waste.
- 3. Based on test results, there is one product line that produces dust that is classified as extremely hazardous, while other similar lines do not. Analyze processes to determine what is causing the extremely hazardous test result. Work with the production team to evaluate less hazardous alternatives.

Preferred majors:

- Engineering
- Environmental Science
- Environmental Health

Desired Skills:

- Problem solving skills
- Strong written and verbal communication skills.

Additional requirements:

• U.S. Citizenship is required.

Company: Canyon Creek Cabinet Company

Canyon Creek is a leading cabinet manufacturing company on the West coast, specializing in premium, semi-custom cabinetry design and manufacturing with a focus on sustainability. They have over 350 employees and have been in business for over 40 years. https://www.canyoncreek.com/

Location: Monroe, WA

Project Description:

This summer intern will begin an alternatives assessment to find the safest belt cleaning solvent for a new flatline. Additionally, the intern will conduct cost analyses of switching from a 2-step finishing process to a 1-step process in the new flatline. Intern will be responsible for data collection tracking reductions in hazardous substances used, hazardous waste generated, electricity and natural gas usage, and generation of HAPs and TAPs. Intern will recommend actions to conserve energy and reduce solid waste through reduction, reuse of finding recycling markets.

Preferred majors:

- Environmental Science
- Environmental Health
- Physical Sciences
- Economics/Business

Desired Skills: The intern should be solutions oriented and able to work in a fast paced environment. Desire the ability to perform economic/cost analyses with experience in project data management and chemical tracking

Additional requirements:

• U.S. Citizenship is not required.

Company: Boeing Commercial Airplanes

Boeing is a leading global aerospace company that develops, manufactures, and services commercial airplanes, defense products and space systems for customers in more than 150 countries. The Auburn and Puyallup facilities produce Boeing airplane parts which are later assembled at other Boeing facilities into aircraft as well as some of the tools that are used in airplane manufacturing/assembly. https://www.boeing.com/principles/sustainability

Location: Auburn or Puyallup, WA

Project Description:

The intern will pursue one or more of the following projects depending on skills and interest:

- 1. Create an environmental heat map tool to track the status of environmental opportunities by building and business. This will aid in measuring energy conservation, waste reduction, stormwater risks, and water conservation.
- 2. Help reduce excess/expired materials to eliminate unnecessary waste, including hazardous waste. This would include working with chemical inventory and process improvement. Activities will include completing the analysis of conservation benefits and project costs by researching data, metrics, and current vs. future states.
- 3. Evaluate wastewater pretreatment sludge and feasibility of reducing water content, reducing cost of disposal and hazardous waste generation.
- 4. Work with equipment/process engineers to implement an energy conservation project that may include compressed air conservation, machine shutdown procedure development, steam lines surveys, and/or identification of new energy conservation opportunities.

Preferred majors:

- Engineering
- Environmental Science
- Environmental Health
- Physical Sciences

Desired Skills:

- Ability to work independently
- Ability to gather information, synthesize data, draw inferences and recommend actions
- Ability to execute project management skills
- Strong general computing skills
- Strong written and verbal communication skills.

Additional requirements:

• U.S. Citizenship is required.