

Strengthening Minnesota businesses by maximizing efficiency and lowering costs through energy, water and waste reduction

Internship: Lead a project focused on water conservation and reduction of landfill waste at a recycled linerboard manufacturer.

Company: Liberty Paper Inc. - Becker, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation and landfill waste reduction with Liberty Paper. The intern will work with MnTAP and Liberty Paper staff to catalog water use and water quality requirements throughout the manufacturing process, then identify potential opportunities for water reuse, including technologies to increase the water quality. The intern will also investigate opportunities to reduce waste to landfill, including beneficial reuse, recycling, compost, anaerobic digestion, and waste-to-energy. The intern will quantify these opportunities and develop plans for implementation.

JOB DUTIES:

As part of this project, you will be asked to complete the following tasks:

1. Review water map/balance and identify different water uses, quantities, and water quality requirements.
2. Identify suitable areas to replace freshwater with treated process water and run experiments.
3. Research technologies for improving the quality of treated process water to increase reuse opportunities.
4. Identify diversion opportunities for short fiber waste.
5. Identify diversion opportunities for plastic/metal waste.
6. Estimate waste, energy, and water reduction potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
7. As appropriate, initiate implementation of approved process changes or develop plans for future implementation.
8. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
9. Present findings to the company and at MnTAP-hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is \$19/hour, with a lump sum stipend of \$1,500 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$22.00/hour when averaged over the project. Candidates must pass a background check.

QUALIFICATIONS:

- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Appropriate majors: *Engineering, environmental or physical sciences and others as applicable*

TO APPLY:

Apply online at:

www.mntap.umn.edu/interns/student/apply/

Remember to submit your application form, cover letter, resume, and unofficial transcript.

Applications can be addressed to:

Matt Domski, Intern Program Manager
 200 Oak Street SE, Suite 350-1
 Minneapolis, MN 55455 • mdomski@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY

This project was funded in part by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).