

Minnesota Technical Assistance Program 200 Oak Street, Suite 350-1 · Minneapolis, MN 55455-2008 612/624-1300 · www.mntap.umn.edu · mntap@umn.edu

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

Internship: Lead a project focused on chemical use reduction and water conservation at a can manufacturing facility.

Company: Ball Corporation - St. Paul, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on chemical use reduction and water conservation with Ball Corporation in St. Paul, MN. The intern will work with MnTAP and Ball Corporation staff to reduce chemical use and conserve water in the cleaning process and with wastewater reuse. The intern will quantify these opportunities and develop suggestions to increase efficiency, as well as outline plans for implementation.

JOB DUTIES:

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

- 1. Evaluate the current wastewater treatment operation for baseline wastewater quality, chemical use and wastewater sludge quantities.
- 2. Develop a plan to trial switching from powdered lime to liquid lime for wastewater treatment including optimizing lime use and determining appropriate pH control.
- 3. Investigate water optimization opportunities in the can cleaning process.
- 4. Evaluate requirements and potential for wastewater reuse for irrigation, cooling towers, and other areas in the facility.
- 5. Estimate chemical reduction and water reduction and/or reuse potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
- 6. As appropriate, initiate implementation of approved process changes or develop plans for future implementation.
- 7. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
- 8. 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 \$16/hour, with a lump sum stipend of \$1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$18.00/hour when averaged over the project. Candidates must pass a background check and a drug test.

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: <u>www.mntap.umn.edu/intern/student_apply.htm</u> 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

MnTAP is located at the University of Minnesota School of Public Health, Division of Environmental Health Sciences, and funded in part by a grant from the state of Minnesota