UNIVERSITY OF MINNESOTA

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

Internship: Lead a project focused on water conservation and waste reduction at a medical device manufacturer.

Company: Abbott – Little Canada, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior level college student to lead a project focused on water conservation and waste reduction with Abbott in Little Canada, MN. Manufacturing operations at Abbott rely on certain materials that require the use of water, energy and the creation of different waste streams. The intern will work with MnTAP and Abbott staff to develop facility water and material balances. This process will help verify high water use areas and waste streams with potential for improvement. The intern will evaluate solutions to minimize water use and waste, as well as consider reuse/recycling opportunities. Identified solutions will be used to develop recommendations for increased efficiency.

JOB DUTIES:

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

1. Identify and quantify water uses throughout the facility, including water purification process, manufacturing, air scrubbing, irrigation and domestic uses.
2. Review existing data from Abbott on various waste streams. Become familiar with processes that generate waste and the outlets used for reuse, recycling and landfill.
3. Study process steps to consider procedural and equipment changes that would result in water reduction, reuse or recycling.
4. Determine best practices for water purification pre-treatment, including reverse osmosis optimization.
5. Estimate water reduction, reuse and/or recycling potential, as well as costs associated with implementation.
6. As time allows, assess the 1-2 additional Abbott buildings and make recommendations based on best practices for water conservation and waste minimization.
7. Prioritize suggested changes using simple payback methods to justify process changes or equipment.
8. As appropriate, initiate approved changes and system upgrades and estimate the performance of upgraded systems.
9. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
10. 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 $14/hour, with a lump sum stipend of $1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to $16.00/hour when averaged over the project. Candidates must pass a background check and 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:
www.mntap.umn.edu/intern/student_apply.htm
Remember to submit your application form, cover letter, resume, and unofficial transcript.
Applications can be addressed to:
Nathan Landwehr, Intern Program Administrator
200 Oak Street SE, Suite 350-1
Minneapolis, MN 55455 • landwehr@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY

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