## University of Minnesota



#### 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 water conservation.

# Company: Hennepin County - Minneapolis, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation with Hennepin County. The intern will work with MnTAP and Hennepin County staff to reduce water use in the Hennepin Energy Recovery Center. The intern will quantify opportunities and develop suggestions to reduce water use as well as outline plans for implementation.

#### JOB DUTIES:

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

- 1. Explore strategies, including use of a booster pump, to reduce plugging due to suspended solids in heat exchanger to facilitate increasing cycles of concentration in the cooling towers, saving water and reducing maintenance needs.
- 2. Investigate the opportunity associated with using acid to lower pH and increase cycles of concentration in the cooling tower system to save water.
- 3. Determine the most effective way to reuse snowmelt/runoff and blowdown water.
- 4. As time allows, explore other water conservation measures.
- 5. Make recommendations for specific improvements based on research, testing, and calculation that will result in water conservation.
- 6. Estimate water, energy, and waste reduction potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
- 7. As appropriate, support implementation of approved process changes or outline 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:**

- U.S. work authorization
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Cumulative GPA of at least 3.0
- Preferred 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

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MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY