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 dairy product conservation and waste minimization at a local food manufacturing facility.

Company: Kemps – Minneapolis, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on product loss minimization with Kemps in Minneapolis, MN. The intern will work with MnTAP and Kemps staff to track the flow and loss to drain of dairy ingredients and finished products (shrink) through the Kemps facility. The intern will also evaluate water reuse and recycling opportunities as they pertain to this study. The intern will quantify these opportunities and develop suggestions to reduce loss of raw and finished dairy products to wastewater drains as well as outline plans for implementation.

JOB DUTIES:

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

- 1. Map the flow and quantity of milk from arrival at the facility to departure in product or waste.
- 2. Identify and quantify main sources of wastewater loading to drain from milk processing within the facility.
- 3. Develop solutions to reduce high-strength loading associated with milk discharge to wastewater.
- 4. As time permits, identify and quantify water conservation opportunities associated with dairy processing and packaging.
- 5. Make recommendations for specific improvements based on research, testing, and calculation that will result in shrink reduction, wastewater loading reduction, and water conservation.
- 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 \$18/hour, with a lump sum stipend of \$1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$20.00/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/life 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