2015 MnTAP Summer Internship: Sanimax, South St Paul, MN
Reduce water usage, wastewater loading and energy at Sanimax

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water and energy conservation, with an emphasis on wastewater loading reduction at Sanimax in South St Paul, MN. Sanimax reclaims animal by-products from food processors to renew them and return protein and fat products for animal feed, food, and industrial applications. The intern will work to reduce water chemical and energy usage, as well as to limit solids and chemicals to drain which contribute to wastewater loading. The intern will study systems that use and generate water and energy, as well as practices on-site. They will consult with staff and suppliers to assess, recommend and begin implementing potential procedure and equipment changes that will lower production costs.

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

1. Conduct a screening analysis of 4 process streams: hot water for cleaning; non-contact cooling water use; product condensate; and process leaks, to identify the magnitudes, sources and characteristics (including energy) of these streams and to prioritize reduction efforts.
2. Identify water and energy use reductions for one or more of the areas prioritized by the screening analysis.
3. Identify the primary sources, causes, and amounts of wastewater loading.
4. Identify ways to reduce water and energy use and wastewater loading through reduction at the source, water reuse or recycling, improved process control, energy recovery, or other methods identified.
5. Identify and evaluate additional means of electrical and fuel use reduction as time permits.
6. Develop economic and feasibility justifications and implementation plans for changes with the highest benefits to the company and present them for approval; as appropriate initiate approved changes and system upgrades, and measure or estimate the performance of upgraded systems.
7. Summarize findings in a detailed report, including recommended procedures and system configuration along with an economic analysis and justification of installation(s).
8. Present findings to the company and at MnTAP-hosted public presentation event.

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 $13/hour, with a lump sum stipend of $1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to $15.00/hour when averaged over the project.

QUALIFICATIONS:
- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Appropriate majors: Chemical Engineering, Mechanical Engineering, Biosystems Engineering, Food Engineering/Food Science, Environmental 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:
Linda Maleitzke, Intern Coordinator
200 Oak Street SE, Suite 350
Minneapolis, MN 55455 • lmaleitz@umn.edu

MnTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY.