UNIVERSITY OF MINNESOTA | MnTAP
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 to improve water efficiency and reduce nutrient wastewater loading. (Summer 2020)
COMPANY: Minnesota Specialty Yeast

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior- or senior-level college student to lead a project focused on improving water efficiency and wastewater nutrient reduction at Minnesota Specialty Yeast in Hutchinson, MN. Minnesota Specialty Yeast produces yeast in both liquid and powder form. The intern will work with MnTAP and Minnesota Specialty Yeast staff to design a cooling water reuse process to save hundreds of millions of gallons of well water each year. The project will also involve identifying and implementing a strategy to reduce nutrient loading. The project will ultimately result in water conservation and pollution prevention. The intern will propose solutions to company staff and management and support implementation efforts for identified solutions.

JOB DUTIES:

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

1. Become familiar with the design, function, and requirements of the continuous fermentation process.
2. Assist in the development and design of a feasible project plan to deliver treated effluent from the Hutchinson POTW to Minnesota Specialty Yeast for use as non-contact cooling water to replace the use of well water.
3. Become familiar with and understand the role of permits and other design considerations/limitations for this project.
4. Assist in planning and deployment of small scale trial runs using pilot plant equipment to determine feasibility of alternatives to phosphoric acid used within the process.
5. For alternatives showing potential, assist in planning for large scale trials, including any equipment modifications and/or additional equipment needed.
6. Provide technical input and support to the fermentation, processing and drying operations, applying problem solving and technical skills.
7. As time allows, investigate further opportunities within the plant to conserve or recycle water.
8. Develop reports and outreach materials to share findings and promote implementation.
9. Manage project tasks, activities, and project documentation effectively, maintaining a communication system that facilitates the “upward” flow of ideas and concerns.
10. Work professionally and safely.
11. Summarize findings in a poster, an executive summary, and a detailed final report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
12. Present project findings to company staff, as well as 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 drug test and 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 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.
Cover letters 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

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