

**From:** Team 23: Modeling and Simulation of Nutrient Removal  
**To:** MC Martin  
**Subject:** Weekly Progress Report – September 23, 2018

**Period:** 09/16/18-09/23/18

**Hours:** 4.5 **Hours to Date:** 6

### **Accomplishments for week ending September 23, 2018**

- 1) **Team Peer Presentation** - Evan attended the engineer's Literature Review Presentation. The team proposed relocating the project locally to the Philadelphia Water Department for a more local impact.
- 2) **Kickoff Meeting** - Andrea met with Ashley and Mia for a kickoff meeting to discuss the overall goals and plan for the project this semester. Other topics of discussion were recent sponsor and scope changes, project risks, recent project achievements, and a plan of action for the rest of the semester.
- 3) **Industrial Advisor** - A recent achievement for the team. Ofir Menashe, CEO of Bio-Castle Water Technologies, agreed to act as the team's Industrial Advisor of the project.
- 4) **Experimental Technology Donations** - A recent achievement for the team. BioCastle Water Technologies, an Israeli environmental biotechnology company, agreed to donate technology for the teams testing and analysis phase.

### **Goals for week ending September 30, 2018**

- 1) **Import Permit** - Obtain a permit to import donated Bio-Castle technologies as soon as possible.
- 2) **Weekly Schedule** - Assign tasks to individual team members and draft a schedule to enforce team accountability.
- 3) **Experimental Plan** - Draft a schedule of testing to ensure there is time for analysis.
- 4) **Abstract** - Submit project proposals to present at local conferences after project completion.
- 5) **Bio-Castle Lit Review** - The team will continue to research competitive emerging technologies for wastewater nitrogen removal systems.

### **Issues:**

- 1) The team must obtain an import permit in order to use the technology donated Bio-Castle in Israel.
- 2) The team is still actively in search of a sponsor plant to run phase 2 testing. There is a risk that the team will not obtain a sponsor plant and will have to run tests and analysis based on Industry numbers instead of actual figures.

- 3) *The project proposal has changed greatly in scope from the original proposition. GPS-X software will only be used if the team obtains a sponsor plant. The team is still actively trying to define the scope of the project work.*
- 4) *The Nutrient removal project is dependent on another team's successful completion of a reactor project. Our team needs to use a reactor to implement its research into real-life. If the reactor team does not complete the project on time, our team will must either build their own reactor, buy a model, or wait until the reactor is built by the reactor team.*