

Project Status Report: CEEEn-2018CPST-010

Report Date: 1/28/2019

Team
Members: Los Hermanos

Project Title: Asian Clams Report # 11

1) Summary of technical/non-technical challenges encountered

Technical:

- Calculating dosage amount
- Finding the right pump size for the tank
- Pumps capacity for the experiment has been calculated
- Calculate reservoir dimensions and flow for the model to simulate the system

Non-technical:

- Pump with calculated capacity has been purchased
- Need to transport tank to site
- Need to pick up EarthTec for experiment
- Prototype tank experience a failure due to uneven water pressure

2) Team approaches & resolutions to overcome challenges

Solutions:

- Setting up the experiment by the end of the month
- Set up experimental system to simulate constant flow and disperse chemical.
- Find out more about EarthTec QZ product regarding the residue per gallon.
- Coordinate with Earth Tec Salesman to get sample EarthTec QZ
- Set up tank experiment in Lehi.
 - Figure how much water that will be used for the experiment.
 - Coordinate the logistics of the experiment in Lehi.
 - Make a hard deadline to start setting up

3) Status of challenge resolutions & potential project impact

- How to travel to Lehi at least weekly for the experiments
- Will need to figure out the correct amount of chemical to be injected to the model to simulate the actual chemical injected to the prototype
- Having communication issues with our mentors and other resources.
- Getting familiar with the Hach porphyrin ionic copper procedure.
- Coordinating the setup of the model in the field with our clients.
- Finishing the construction of the control and treatment tanks.
- Finding time to start setting up the experiments

4) Project status & summary

- Planning to set up the tank to Lehi
- Waiting for the caulk to dry up
- Finalizing the pump needed for the tank
- Obtain IV bags to have a continuous dosage of EarthTec
- Procedure are created to follow steps in experiment
- Measurement have been specified and created in spreadsheet
- Plan to setup the model in the field with Dr. Miller.
- Get the Earth Tech sample to start the treatment calculations for the model calculations.