

To: KNW 2300 Engineering Robotics Teams

From: Clean Water for All Review Team

Date: March 14, 2015

Re: Sprint 3

We were all really pleased with the progress teams made during Sprint 2. Our expectations are just as high as we enter Sprint 3. During this sprint, you'll continue to develop and iterate on your robotics system in preparation for the Sprint 3 demo. Sprint 3 will culminate in a demo to take place during class time in the Week of March 30<sup>th</sup>. These demos will take place in the Innovation Gym, on the playing course that has already been assembled by the wonderful TA's.

We encourage you to try innovative solutions to the different tasks set forth in the competition. Prototype different ideas; try them out; evaluate their efficacy. Remember to develop all of the different subsystems in parallel (more or less) rather than completely sequentially. There is absolutely no need for the physical robot to be completed before you start thinking about building the control software.

As a reminder, the TA's share their office hours via a Google Spreadsheet, the link to which can be found on Blackboard. You should continue working consistently through the coming weeks to be truly successful. You will notice that the TA's have office hours very regularly throughout the week. Don't be afraid to visit them and utilize their expertise!

The remainder of this memo will give you the details for the Sprint 3 Demo.

Good Luck!

## **Sprint 3: Demo Day Deliverables**

In class during the week of March 30<sup>th</sup>, your team will demonstrate some basic functionality of your robot on the playing field. As you know, there are a number of different tasks and strategies that your team can choose to implement related to your overall strategy for winning the competition. Therefore, we will base the requirements of the demo on that list of tasks and the associated point values.

For Sprint 3 Demo, each team shall implement functionality to accrue at least 50 match points. These 50 points must be accrued continuously. Some specifics for Sprint 3 Demo Day:

- Your robot shall move autonomously to accrue the 50 points.
- Your robot must be able to handle any pre-requisite tasks in order to complete a specific task. For example, if you intend to dispense remediation materials, your robot must locate and test the water in the well first.
- Your robot will start in the home location for the demo. Refer to the project description document for details on the home location.
- Your robot must fit within the 18"x18"x18" requirement when the Arduinos are powered but before you start your control program.

While the task may seem difficult, you should be aware that the final competition is a mere 3 weeks after this deliverable. Aim high for this sprint. We are confident in every teams' abilities to succeed.