

Turbidimeter/Inlet Manifold Detailed Task List

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1 Turbidimeter Task List

- Turbidimeter Goal is to improve on the existing turbidimeter design from previous semesters. As it stands now the design can only measure turbidities down to 15 NTU and we would like it to be able to measure down to 5 or 1 NTU. We would also like to see if we can make the scale even more accurate than in past designs. Ideas for making the turbidimeter design better include using mirrors to extend the distance you may view down to within the tube. We might also want to test more designs or see if it is possible to use a longer tube. We are also going to create an AutoCAD drawing of the design which we create and include with it a complete parts list. Write a journal article which will be submitted to the ASCE Journal of Environmental Engineering.
- We will immediately begin working on the mirror idea, as we do not know much about how this would work exactly and Monroe thinks that this idea could really help the design. If we can not seem to make any progress on the mirrors idea by the 23rd of September then we will go back to doing more work with different designs.
- The deadline which we are setting for ourselves to have a working prototype is October 14th. After this we may continue to work on the prototype but we will need to focus more on the Inlet Manifold fabrication at this time. We are also hoping to have the AutoCAD drawing of the design done by the 14th.
- The deadline we are setting for ourselves to have our article done for the Journal of Environmental Engineering is November the 23th. This way we will have the article done and hopefully submitted before the Thanksgiving holiday. The first draft deadline that we want to set for ourselves is November 1st.

2 Inlet Manifold Task List

- The goal we have been given for this semester is to create a method to fabricate the new inlet manifold. We need to figure out the best way to heat and mold PVC into the shape that the inlet manifold needs to be by late October. Other options for solving the problem would be to find rectangular PVC or to see if a PVC supplier could produce custom parts for us.
- We will begin work on the ideas for the Inlet Manifold right away, as for this part of our research we have a hard deadline of the end of October. However, we will not begin focusing solely on the fabrication of the Inlet Manifold until the beginning or middle of October, since that is when we hope to be finished with the turbidimeter prototype.
- We will work through several prototypes for the Inlet Manifold design; we hope to have the first prototype done by October 1st. The deadline we are setting for ourselves to have the mold for the Inlet Manifold final design done by is October 28th.