

Interim Status Report

October 28, 2016

c2renew corporation

The objective of the project is for a pilot scale operation to measure and validate expansion of c2renew corporations' production and development with existing collaborators; Bobcat Co., John Deere Co., Earth-Kind Inc. and Toshiba Corp., as well as new customers, Fargo 3D Printing, Intelligent Agricultural Solutions, Bogobrush, etc. The pilot facility will include a 75 mm twin screw extruder and ancillary processing equipment. With the previous support of the North Dakota Industrial Commission, c2renew corporation is positioned for growth and implementing a pilot scale operation will provide us the ability to measure production efficiencies, customer growth, job growth, rural development and innovation development in North Dakota.

To advance down the path of getting equipment in place to begin to scale the facility it is important to identify specifics of the equipment that would need to be tweaked and adjusted from the budgetary quotes that were received in the beginning of the project. In addition to assessing needed modifications, it is equally necessary to sketch out what the facility layout would be (i.e. material flow, storage, equipment placement) as well as what are the needed infrastructure upgrades (i.e. electricity, waste water, ventilation).

What was yielded from the preliminary work, was first addressing the building layout (sketch attached). In the layout we plan for our ventilation and blow out panel on the south wall, extruder in the center of the space and ancillary equipment (i.e. dryer, classifier) in-line with the system to automate the process. We have a small staging area at the east end of the facility to prepare for shipping out the loading dock.

In addition to laying out the facility for material flow, we also had to address the limitations in power currently coming into the building, and worked with the building owners to identify the size and location of a new transformer to handle the load. In addition to the power requirement we also needed to work to identify the best location of where to locate the transformer to ensure that we shorten the distance between the extruder and the power supply to limit the cost of pulling power the extruder. The expected location will be in the north-west corner of the adjacent building so the owner can also draw power for their needed expansion.

As indicated in the earlier paragraph we also had to review some questions regarding the blow out installation for our dryer and review building codes to ensure we met specific setbacks. We also looked at those comparable restrictions as it related to where we could position our dust collection system.

The preliminary work will make the transition into the space much smoother and should mitigate or eliminate unnecessary downtime due to power needs, transformer location, materials need to run power, ventilation location, etc.

NDIC-REP Non-Confidential Summary

The objectives in this status report are focused specifically on the tasks outline above and executed by Mike Ehresmann, Rachel Workin and Corey Kratcha and their time was allocated proportionately. In the attached payroll summary approximately 25% of his time was dedicated to the work, Rachel allocated approximately 10% and Corey 10% of time.