



HAVE YOU HURD?

April 2023 Newsletter

1ST LOAD OF BALES DELIVERED

March 27, 2023



We have been BUSY!

As we come into spring seeding, the Smoky Hemp Decortication Ltd. Board of Directors thought it was an opportune time to send out an update.

Early last fall, some of our directors traveled to Quebec to meet with our decortication equipment manufacturer. When we spoke to them last summer, we were informed our project had to be put on the back burner due to staffing changes and materials supply delays. We needed to ascertain how far back it was placed, and this led us to look at alternatives, at least for the short term.

In our quest for knowledge, we have taken some of the 2022 hemp bales to various decortication facilities to gauge their effectiveness, and, to ascertain the quality and “mix” of our hemp straw. How much bast fibre vs hurd vs greens did our agronomics yield? Was the hemp retted sufficiently prior to baling? Are some types of decortication equipment better than others?

In addition to the “regular” hemp decortication equipment, we also tried running some straw through a few different combines, to see if decortication was possible with an “off the shelf” system. Why would we even try something like that? Well, more on that later.



The **HempTrain** in Calgary was the first site for our trials. The equipment seemed to have a difficult time with the large round bale, and we found it did an inadequate job of separating the bast fibre and hurd, and also was not set up to deal with the greens/dust which our fibre varieties will produce (as opposed to dual purpose varieties that have been combined, leaving nearly no greens on the stalks). Our thoughts were the unit provided inadequate product separation while being expensive and having a low throughput.

Next stop was bringing a bale to **BioComposites** in Drayton Valley. BioComposites has a one-of-a-kind line of decortication equipment which is used to provide the fibre for their weed suppression mats and grow-cube operation. Although it has fairly low output, this equipment gave the best quality fibre from our straw and did a superb job of separation. Even though it appears our straw is not sufficiently (or consistently) retted, this line still gave a superb product. It would only need a minor addition to capture the greens/dust that currently are mixed back in with the hurd – for later in-line separation. Again, the equipment mostly sees dual purpose/combined straw, so they never have the greens to deal with. We were able to check out the inside of several pieces in the line, and it dawned on us that one of the main pieces (the scutchers) were for all intents and purposes doing the same job as a combine cylinder or rotor rubbing the straw against concaves would do, so we set up our own trial.



Our Trial: Using a borrowed conventional combine as well as two combines owned by Directors (one rotary and another conventional of a different brand) we ran some hemp straw through – and found we could achieve about a 50% job of decortication. Our thoughts are that if we add a roller-crimper unit which was the initial stage at BioComposites, the combine being fed crimped straw could potentially decorticate the straw and give us nearly saleable product.



Next, we took 2 bales of straw to **InnoTech's** decortication line at Vegreville. On this trial we found the InnoTech line to be too aggressive in that by the time we had sufficient separation of the bast fibres and hurd, the bast fibres had been reduced to such short pieces our intended markets would most likely refuse them.

In addition to all these tests, some directors also traveled to Montana to meet with IND Hemp, and to view their equipment and the quality of work they are achieving.

In our search for equipment, we came across two used lines of equipment which the Board decided should be investigated. One, comprised primarily of **Truetzschler** equipment was located at Chesnee South Carolina, the other, a **Laroche** line was in Milton Kentucky. Directors Frank Cote and Normand Boulet undertook the trip. The line at Chesnee was deemed most suitable, however it would only be capable of about $\frac{3}{4}$ of a tonne per hour. The line at Milton was almost new (with a price tag to

match) and is the same type as what IND is operating in Montana. When we were visiting BioComposites we noticed some IND fibre bales which they had purchased to make mats. BioComposites opined they would have to blend this product with their own due to the IND fibre being too short. We thought too much hurd remained in the sample as well; certainly too much for some of our potential clients.

Although the Truetzschler line at Chesnee is tempting, it is an older line that could require a significant investment to put into operation (in addition to the cost of purchase and freight from South Carolina). Interestingly, this line was last utilized in Alberta and was apparently producing good quality fibre. The line at Milton, Kentucky was still being “tweaked” and the company had not been able to produce quality fibre out of it before they went bankrupt. One interesting find on the Laroche line was the use of John Deere straw-walkers early in the process to help separate the bast and hurd, confirming we could be on the right track with the “use a combine” in the line.

So where are we with decortication equipment? Our Quebec manufacturer came to Alberta to look at the BioComposites and Innotech lines, and we discussed plans for continued development of his equipment. They currently have one piece of equipment (a section of the line we plan to purchase) ready to go, and it is the Board’s belief we could start with this piece, incorporate a combine (converting it to electric and stationary) to begin producing fibre this fall. To do this we first need to get a floor into the SHDL Building. In order to pay for the floor, purchase and set up equipment, we need more investment.

Share sales, potential grants, and upcoming costs: Our initial share offering was successful, and we will very shortly be opening up our 2nd share offering. Our budget includes paying for the hemp straw produced (approx. \$56,000 in 2022, and forecast \$120,000 in 2023), \$250,000 to \$300,000 in equipment, \$300,000 for concrete in the building plus gravel, lease to purchase costs on the building, insurance, and road and site groundwork. This offering will consist of Class A shares and seek to raise a minimum of \$400,000.

We continue to explore grant opportunities, and while we were hopeful the Sustainable Canadian Agricultural Partnership Value-Added Program might be a potential source of funding this year, the parameters under which applications are considered have changed and require 75% matching funds, and minimum sales of \$100,000 to apply. SHDL needs further investment in order to access this, or other sources of funding.

2023 Hemp Crop: We have seed ordered for the production of 200 acres of fibre hemp in 2023. If any producers are interested in trying a few acres, we may still have room to contract a few. Please contact us if you or a producer you know is interested in growing hemp this year.

Board of Directors and Annual General Meeting: We will hold Board Member elections during our AGM this coming fall. We are very much a working board, and board members can expect to be very involved with planning and budgeting, policy development, decision making, and even getting arm deep in hemp straw. Persons interested in being involved with the progress of SHDL are encouraged to contact us.



Special Acknowledgement:

SHDL wishes to acknowledge and thank Ron Challier for his assistance, traveling with us to exotic places like Drayton Valley and Vegreville, to share with us his mechanical expertise on the equipment we have investigated.

It's one thing for Board members to donate their time to this enterprise, it's quite another to receive this level of free support just because a person is willing & interested.

We very much appreciate your time and expertise Ron!

On behalf of the Board of Smoky Hemp Decortication Ltd, I hope you enjoyed this edition of Have You Hurd Newsletter. We welcome comments, questions, and suggestions. <mailto:ceosmokyhemp@gmail.com>

Avis Gagne, Board Chair/CEO



Growing our Future

Follow us on **Facebook** at Smoky Hemp Decortication Ltd.
On our **Website** at www.smokyhempdecortication.com