

Too good to be true?

By Thomas Lee | SEPTEMBER 18, 2009 — 9:19PM

Or maybe I'm just too cynical.

Those thoughts raced through my mind after my tour today of Ever Cat Fuels' new biodiesel plant in Isanti that's scheduled to open this month.

Ever Cat, co-founded by Augsburg College and University of Minnesota alumnus Clayton McNeff, is a start-up devoted to commercializing a method to produce the next generation, more environmentally friendly biofuel. Think Ethanol 2.0.

Dubbed the "[Mcgyan Process](#)," the technology, inspired by the work of [Augsburg graduate Brian Krohn](#), converts most feedstocks into biodiesel fuel without using much water or producing lots of waste.

Normally, companies make biodiesel fuel by mixing soybean oil with a sodium hydroxide "catalyst" in a tank that's heated at a high temperature. But this "batch" process takes hours to complete and produces waste. The catalyst itself must be neutralized with either hydrochloric or sulfuric acid, two toxic chemicals.

The Mcgyan method employs a metal oxide catalyst that converts a mixture of alcohol and feedstock oils in a tubelike reactor to biodiesel fuel. This continuous or "flow" process makes it more efficient because it takes seconds to complete and produces little waste, McNeff said. Patents on the process are pending.

Without betraying a spec of bravado, McNeff describes the plant as the "perfect" way to produce biodiesel. He claims the technology doesn't use water, produces no emissions, does not rely on food feedstocks, takes little physical space, and can continuously run because the catalyst never stops working. The plant is strategically located next to a sewage treatment facility, a good source for algae, one of the feedstocks Ever Cat can convert into fuel.

McNeff thinks this biofuel can replace 70 percent of our gasoline usage in twenty years, reducing our dependence on foreign oil.

Is McNeff drinking too much of his product? Time will tell. Normally, when something sounds too good to be true, it usually is.

But one thing's for sure. Ever Cat is certainly putting its money behind its mouth. (McNeff even named his new puppy after the process.) The company spent \$9 million, some from McNeff family, some from investors like the Initiative Foundation, to build the plant that will produce about 3 million gallons of fuel a year.

That's a significant accomplishment since scaling up biofuel production has always been the industry's Mt. Everest because companies have to prove they can make

been the industry's Mt. Everest because companies have to prove they can make enough this stuff to be affordable and profitable. McNeff says Ever Cat will make most of its money from licensing and consulting, in addition to selling the fuel to actual customers.

As for the science, it seems sound. McNeff and Krohn have published a paper in Applied Catalysis A: General, a scientific journal. Doug Cameron, the MIT-trained scientist and clean tech guru at Piper Jaffray, has endorsed it. Piper and Ever Cat have even held discussions about a possible investment. If it happens, McNeff said, the most likely scenario would be an investment group backing a company that will license the technology.

So will Ever Cat revolutionize US energy usage? Or go by the way of ethanol- all flash, no substance. Minnesota would love to find out.