## Biomass fuel saving report for winter '16/'17

The biomass will be shut down this year on or about 4/27 as the temperatures are becoming too warm to sustain a fire in the boiler. This year our locked in fuel oil price was an amazing (I never thought it would get this low again) \$1.69/gal. We get the same amount of energy (BTUs) from 31.8 lbs. of wood chips as we do from one gallon of #2 fuel oil. This year has, by most accounts, been about average temp., or slightly warmer, for the entire northeast. Much of the North Country experienced very little snow except in bursts and about average cold. We consumed about 185 Ton more chips this year compared to last year's usage of 969 Tons to heat the school, bus garage, pool and domestic hot water. Compared to almost 1400 Tons in the winter of 14/15. So by using the formula of 1 gal. of fuel oil to 31.8 lbs. of chips we would have used 72579 gal. of fuel oil at \$1.69/gal. For a cost of \$122477.00 The 1154 Tons of chips at \$55.00/Ton cost the district \$63470.00 for a simple savings of **\$59007.00**. This is a simple BTU to BTU comparison and there are extra electrical costs involved in running the biomass as there are more motors and pumps involved. But, I also have not added in the electrical savings of the solar and wind power produced at the biomass plant. While there is no way to measure the exact amount of extra electricity used by the biomass I believe it is close to a wash. Also we have never added any extra manpower to run the biomass in fact we cut ½ person the year we started the plant.

I am disappointed in the savings this year. Not because it is not significant but because it should be greater. I believe we should be getting our chips at a lower cost. We have not seen a reduction in the cost of our chips, while the cost of oil is less than half of what it was in 2014. We have a new supplier that will be bidding this summer and I hope the competition will generate a much more reasonable price for us.

Thank you for your continued support,

John Daniels