ComPAKco llc. (a North Dakota entity)

Transmittal Letter:

North Dakota Industrial Commission / Renewable Energy Council:

Board Members:

ComPAKco llc. It's managers / partners attest that the project described further within these documents, will be served to completion.

Manager / Partner

James H. Flaherty Senior
Managing Design Engineer

ComPAKco LLC.
725 n 25th street
Fargo ND 58102

Temp. Phone
701-282-8134
Contact: Norm Miller Manager.
e-mail – normm@fedmac.com

Title Page:

Project Title: ComPAKer (and support equipment)

Applicant: ComPAKco llc.

Principal Investigator: James H. Flaherty Sr. Manager / Engineer

Contact Aide: Norman G. Miller: Project Supervisor / Consultant

Date of application: 11-26-2007

Amount of request: $144,550 or $72,275 grant and $72,275 within ComPAKco llc.

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Abstract:

Objective:

ComPAKco llc. Is a company created to bring to "life" a state of the art "ComPAKer" to compact biomass into the proper density, size and consistency so as to be user friendly to the producers, municipalities and end users. By running the bio-product through selected gasifiers the end result will be bio fuels. (IE. Syndiesel) The biomass quantity that our ComPAKer will produce is beyond gasifier consumption. We have identified over 100 bio-products to make from the bio-bypass. (IE. Floor dry, kitty litter, enriched cattle feed, pharmaceuticals, (furnace fuel – coal fine enriched and non coal fine enriched.) an on. This with almost zero waste and no "unfriendly" byproducts.

Expected results:

The results will, in part will create more good jobs in North Dakota, than most other efforts. Our project and it's companion efforts will be a giant step in the greening of the world. We are in phase one and our prototype ComPAKer is making useable PAKS as I write this paper. These "PAKS" are being sent to end user gasifiers and others to test in their respective needs, large companies calling daily with great interest. One supplies the U.S.Army. The potential of our machine is truly awesome.

Duration:

Expected duration to produce and market the JHf100 ComPAKer is 18 to 24 months.

Total project cost:

The total project – Machines – building etc. equals $869,000

This phase to get to marketable ComPAKers approx. $150,000 grant @ 50% = $75,000.

Participants:

James Flaherty Sr. – Design Engineer – James Flaherty P.E. Mike Fleaerty Engineer MBA

Norman Miller – Project consultant – Douglas Petterson – CPA. Plus staff.
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Project Description:

The project central focus is the creation of the (JHF100) Biomass ComPAKer.
It is unique in the industry. Unlike pelletizers the density of our ComPAKer is controllable making it user friendly to gasifying, and to the other end users. We are using a unique, "tough," design that can be marketed competitively. The methods we are using have been gleaned from around the world from, PHD's, 3 universities, gasifier producers. 7 people from NDSU as an example have worked with us on a weekly basis. Ag Commissioner Roger Johnson has been here and he and his staff have been very helpful. We have done and continue to do our due diligence. The fact that we have 3 extraordinary engineers in house is paramount. The results of our project will have a HUGE impact on the practical gasification of biomass for North Dakota and beyond. We can not stress enough the other beneficial products that will be produced. We are operating the new company in 500 sq. ft. within our sister company Federal Machine. Federal occupies 35,000 sq. ft. at 725 n 25th st in Fargo. The engineers, staff and machinery are dedicated to making the ComPAKer come to life on a time cost basis. The owners and officers of ComPAKco have already spent well over $40,000 on the project. We draw off some of the best machining minds available. The "brain power" and functional staff have put us 6 months ahead of schedule. We do have a long way to go. The techniques used are tried and true, hence the ahead of schedule. There will be almost zero negative impact to the environment in production and this project in a near term will impact the environment more positively than most anything that has ever been done. From soil renewal, flora, fauna, to less flooding to slowing global warming.

We realize this is an epic statement but none the less TRUE! Leaning on CRP can be eased by producers that work with the co-op so to speak. Much like the Beet Industry co-op. This project is the "CENTER" of practical gasification, this is from testimonials we have on file. I have over 16 pounds of paper data on file. There is a positive impact economically

already but the impact on North Dakota and beyond will be billions of dollars, so much so that in time it could dramatically reduce our need for so much foreign oil.

Again an epic statement, but true. Much of the technology we are using is tried and true, but has never been brought to functional reality in an efficient process. Our prototype is running, but of course we are designing and building a machine for mass production.

The demand is already great ant we don't have our first production machine ready yet. This machine is needed to drive Biomass gasification. We are sending out BioPAKS – of Forage, Cardboard, military waste, municipal waste, wood, etc already and the response has been extraordinary. Other entities are looking for more to test.

The Standards of Success of this project will be when we are shipping the new machines as fast a we and others can build them. The prototype (1 off) is already performing so we have realized success already. We need to gather all the support equipment. What we want to accomplish long term is to establish an excellence center for Bio-Fuels and Products while maintaining a fully functional "Train" of machines (including the CPC gasifier) to demonstrate and educate the very viable process. We own 5 acres north of Fargo and would be interested in locating the BEC (Bio Excellence Center) there, long term.

The value of this project to North Dakota is exciting. Say there are about 175 grain elevators in as many towns in North Dakota, each running one or more pieces of the train of equipment, making BioPAKs and even gasifying. The PAK's can be used there or shipped on, economically to the larger BEC. Long term the scope of this project will create hundreds and hundreds of good jobs in North Dakota.

Statement: I have personally worked with biomass for over a decade, Jim Flaherty Sr. and I are at the center of this project. I traveled for RCA for 16 years and was president of the Kinderd ND school board, (6 year member) and led a $3,000,000 school addition, President of the board of Trustees, El Zagal Shrine , (6 years). Director or the F.M.

Home Builders assoc. (3 years) NDSU Team Maker (12 years) My point is, I have been exposed to many projects and opportunities. Never have I experienced anything even close to this juggernaut. The opportunity for North Dakota and her people is epic. Many people including myself see North Dakota as the potential CENTER of the Biomass industry. The geological and climatological make up of our state are ideal for the industry. Add the work ethic and it is a winner. The state is just crawling in the industry so far. We intend to rectify that situation. 4 brilliant young North Dakota men (including my middle son) are design engineers working for Caterpillar in Illinois, designing the worlds largest truck. This is wonderful except for the fact that 4 more of North Dakota's brightest, (North Dakota educated) are living in Illinois. WHAT IS WRONG WITH THIS PICTURE? We intend to plug some of the Dakota Brain Drain!

We will to go through 5 phases, the end result will be a state of the art Bio Excellence Center for education, demonstration, production and distribution. This center will be the Hub, working with our co-op through out North Dakota and all the other entities world wide.

Back Ground and Qualifications: ComPAKco llc. principals

James H. Flaherty Sr. Engineer with General Motors moved on to own Federal Machine co. For 35 years.

James Flaherty Jr. P.E. G.M. Federal Machine

Taught engineering at Marquette University – Teaches part time NDSU engineering.

Mike Flaherty, Engineer / MBA – Comptroller. – Teaches part time NDSU

Douglas Petterson CPA – 25 years

Norman Miller – Marketing / Management / H.R. / Machine Efficiency Expert.

The managers have close to 100 years combined machine repair and building experience.

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We manage steel part manufacture to the second. A timed process that drives profit.

Jim Flaherty Jr. P.E. is expert on machine Pneumatics, Electronics, and Hydraulics.

We have a total of 3 in house machine technicians on site. 11 machinists, welders etc.

We time line chart through computer programs to flag target dates continuously.

Synopsis of time line. Approximate

We were planing to have our prototype running by March 1st 2008. It is running now. The prototype needs to be studied and detailed until 2-1-08. The JHF 100 (The first off production Machine is being built at the same time.) In house engineered, designed and built and will operate 6-1-2008 (we are about 25% there on this machine). The R&D team meets every Wednesday P.M. Budget and Progress reports filed monthly. The management team meets the first Wednesday monthly. We communicate electronically daily. The gathering of the "Train" Equipment happens as we can afford.

- **ComPAKco has no outstanding tax liability. _____**
- **Confidential: We request all information to be treated with as much confidentiality as possible.**

Patents are in process but the engineering working drawing etc. are NOT enclosed in this packet.

Appendices Attached

Signature: _____

Signature: _____

Synopsis:

Ladies and Gentlemen: I truly believe that working with us on this project could be the most important work you could do in a long time. Of course we want to make a fair profit on our project. But what we will bring to "Life" is so much bigger than us. We can bring to "Life" an industry with direction, that is so long over due in North Dakota. This project is at the center of efficient and practical gasification. But perhaps as important are the dozens and dozens of products that can be made in North Dakota by our people.
My sons are 5th generation North Dakotans and I do not want to lose them or any other Sons and daughters to other states because they could not find good work here.

Our prototype ComPAKer is 6.5' X 6.5' wide and 8.5' tall. It weighs about 9000lbs. Steel and Cast Iron are the main materials. Our production model will weigh less and it will be aesthetically appealing with a look for the 2000's. It is tough. The 3 engineers and I were making "PAKS" last night and we all 4 were smiling, kind of in awe of this marvelous machine. Of course steel runs in our veins, but I believe we all realize what this machine can mean to North Dakota and the whole country in time.
I am enclosing some "Paks" for your consideration. Please destroy when done.
We have the Engineering, Build, and Marketing abilities. We need some help with dollars to bring the JHF100 to life in a timely manner. If we do not get funding we will not stop our project, because it is just to important. But without some help in funding it will add 3 to 4 years time to our project.

We thank you for your consideration;

Respectfully submitted

Norman Miller
Manager / Consultant
ComPAKco LLC.

“Be a POSSITIVE FORCE.”

ComPAKco Budget

	Amt Needed	Other funding	Amt Requested	Existing	6mons	12/1/2007
Capital Costs						
Freight	0	$1,125	$0.00	$1,125.00		
Prototype Shell	0	$11,000.00	$0.00	$11,000.00		
rent	0	$2,400	$0.00	$2,400.00		
material	0	$3,500	$0.00	$3,500.00		
Laser outsource	0	$2,800	$0.00	$2,800.00		
				$20,825.00		
Direct Costs						
Wage	0	$218.03	$0.00	$218.03		
Supplies	0	$297.55	$0.00	$297.55		
Group wages	$0.00	$38,640.00	$0.00	$59,980.58	To date	
	NDREC Grant			NEW	6 mons	
Jim Sr	$54,600	$27,300	$27,300.00			
Jim Jr	$19,000	$9,500	$9,500.00			
Mike	$19,000	$9,500	$9,500.00			
Norm	$9,000	$4,500	$4,500.00			
Doug	$2,800	$1,400	$1,400.00			
Leo	$2,000	$1,000	$1,000.00			
Mark	$20,800	$10,400	$10,400.00			
			$63,600.00			
Indirect Costs						
250 HP Power Pac	$52,000	$26,000	$26,000.00			
2-24"X24" convey	$12,000	$6,000	$6,000.00			
250HP Elec Pack	$32,000	$16,000	$16,000.00			
Bio-Cart	$18,000	$9,000	$9,000.00			
Steel & Materials	$36,000	$18,000	$18,000.00			
Rent	$2,400	$1,200	$1,200.00			
BioMass	$5,500	$2,750	$2,750.00			
			$80,950.00			
			$144,550.00	50%=	$72,275	

Date	Description	Qty (Labor -hrs)	Amount	Total
11/5/2007	Freight	1	$1,125.00	$1,125.00
11/8/2007	Labor	1.08	$13.50	$14.58
11/9/2007	Labor	3.6	$13.50	$48.60
11/9/2007	Supplies	1	$48.34	$48.34
11/11/2007	Supplies	1	$50.24	$50.24
11/11/2007	Labor	4.02	$13.50	$54.27
11/19/2007	Supplies	1	$198.97	$198.97
11/20/2007	Labor	7.45	$13.50	$100.58
				$1,640.58

Community Power Corporation
The Modular Biopower Company

July 26, 2007

Jim Flaherty
ComPAKco LLC
725 25th St N
Fargo, ND 58102

Dear Jim,

This is to provide a strong endorsement for ComPAKco LLC'sprogram to develop a low energy densification system specifically designed to process agricultural residues. As you know Community Power Corporation believes that this new capability will unlock a very large market for agricultural feedstocks in a variety of applications.

However, the application we are most concerned with is energy production as it relates to our BioMax line of modular biopower systems. By increasing the density for certain agricultural residues, and creating a more uniform size, we hope to convert these materials into heat, power, electricity and liquid fuels. As it stands currently, the bulk density of most agricultural residues is too low for proper conversion in the downdraft gasifier in our biopower systems.

The benefits to CPC and our customers will be significant:

- A uniformly sized cube having uniform moisture will eliminate the need for costly, complex feeding/drying equipment; therefore system capital and operating costs will be reduced.
- Densified agricultural residues will permit controlled thermo-chemical conversion whereas undensified materials resist such conversion.
- Since you will be using much less energy than the standard pelletization process, the costs of the feedstock will be significantly lower than we would expect to pay for commercial wood pellets.
- And finally, since you will be able to process a large number of agricultural residues you will be promoting feedstock flexibility and diversity that will also keep feedstock costs low. This is not the situation with conventional wood pellet where we understand that high demand has significantly depleted supplies of woody biomass residues in some areas.

Our needs may, or may not, be different from the other applications you are evaluating. By providing just enough energy to meet the lowest level of densification necessary for proper conversion in our gasifier you will be maximizing efficiency and keeping equipment and operating costs to a minimum. Our working hypothesis at this point is that the feedstock needs to hold together long enough to promote proper downward flow in the gasifier.

8110 Shaffer Parkway
Littleton, Colorado 80127 USA
www.gocpc.com
Telephone: (303) 933-3135
Fax: (303) 933-1497

Any compaction greater than the required minimum would be a costly luxury. We believe that densities below 10 pounds per cubic foot should be acceptable. Contrast this with wood pellet densities of more than 40 pounds per cubic foot and one begins to see the potential for significant savings through energy reduction.

If you are able to develop a prototype system, and make feedstock samples of various types, sizes, and densities, be assured that we are anxious to test them in one of our gasification systems at our Product Development facility in Littleton, CO. We will be happy to share the results of these tests with you and your colleagues at the University who are assisting you to identify high value target feedstocks.

We wish you much success in your efforts to introduce a new low energy densification system for agricultural residues. Please let me know if there are any other ways we can help you in this important program.

Sincerely,

Art Lilley

Art Lilley, Chairman