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L. Craig Shealy  
President & CEO

October 29, 2009

U.S. House of Representatives  
Committee on Agriculture  
Subcommittee on Conservation, Credit, Energy, and Research  
c/o Jamie Mitchell, Hearing Clerk  
Room 1301, Longworth House Office Building  
Washington, D.C. 20515-6001

**RE: Testimony of Craig Shealy, Osage Bio Energy, LLC**

Ladies and Gentlemen,

Good morning. My name is Craig Shealy, and I am the founder, President, and CEO of Osage Bio Energy. Thank you for extending me the privilege of addressing you today on the future of second and third generation biofuels. I would like to provide a brief background on Osage Bio Energy, discuss our positive impact on agriculture, review several key challenges facing Osage and the biofuels industry, and conclude with policy recommendations on facing these challenges.

1. Company

Osage was formed in January 2007 to build market-based ethanol plants on the East Coast. Each plant will employ proven bio-processing technologies and carries a capital investment of approximately \$200 million.

Our plants will be optimized around local, winter barley, but can also process a variety of small grain feedstock. Last fall, Osage broke ground on its first plant in Hopewell, Virginia. The Hopewell plant will be operational in May 2010 and will be the only commercial scale, barley-fed ethanol plant in the United States. Our business model is to develop at least two more similar facilities.

Our process uses state-of-the-art technologies from a number of industries, the most important example being in grain processing. Incorporating advanced food processing technology, our milling and fractionation of barley grain allows us to efficiently process the independent grain fractions into high quality product and co-product streams. It also allows

us to capture the exceptional protein profile found in barley, and our specialized processing and drying methods preserve this in a high quality livestock meal product.

We have engineered and packaged these technologies into a unique bio-products plant that will create four highly marketable products:

- 65 million gallons per year of fuel grade ethanol;
- 50,000 tons per year of renewable biomass fuel pellets from barley hulls;
- 170,000 tons per year of Barley Protein Meal; and
- 150,000 tons per year of food-grade liquid CO<sub>2</sub>.

Osage is a deployment company, which distinguishes us from other biofuel companies you are hearing from today. While other companies work on developing tomorrow's 2<sup>nd</sup> and 3<sup>rd</sup> generation technologies, our niche is finding the best that is out there and incorporating it into the engineering, design, and construction of an operating plant. We look forward to the successes of our technology counterparts, hoping that someday soon we will have the opportunity to bring their platform into commercial scale reality.

## 2. Agricultural benefits

Each Osage project will create an immediate annual market of 300,000 acres of winter barley. These acres will come from underutilized winter acres, many of them followed by a full-season soybean crop. Winter barley is harvested early enough to allow full-season beans to follow, providing an ideal double-crop opportunity. This translates into an additional cash crop, with a \$100 million dollar annual revenue opportunity for the local farming community.

Many of the farmers responding to this opportunity for our Hopewell, Virginia plant are located in the Chesapeake Bay watershed. Winter crops are promoted in the watershed as a common and accepted soil and water conservation practice. As a winter crop, barley will capture remnant nutrients left in soils after the fall crop harvest, reducing non-point-source nutrient runoff. The Chesapeake Bay Commission has gone on record endorsing our project as a "generation 1.5 biofuel" serving as an "important stepping stone" toward cellulosic ethanol. The use of barley as a feedstock contributes to very positive and accepted land use practices and ***avoids indirect land use change***. Furthermore, barley hulls and barley straw have been identified as attractive cellulosic feedstock options. Our access to this resource provides us valuable and abundant raw materials for our our entry into 2<sup>nd</sup> and 3<sup>rd</sup> generation plant deployment.

According to the most recent Ag Census statistics, Virginia, alone, lost more than 100,000 acres of farmland per year over the five-year census period. Because winter barley utilizes otherwise idle cropland, equipment, and manpower, it can be grown with minimal investment by the farmer. Coupled with a clear revenue stream, this may be just what is needed to reverse the trend of declining farmland acres. Let's not let concrete become the last crop. Bottom line: our projects have positive land use effects, avoid negative implications associated with ILUC, and keep farmers on the farm.

### 3. Challenges

The biofuels industry, as a whole, is challenged on a number of fronts:

- Absence of financial market liquidity – Growth opportunities are limited to small, privately funded research and demonstration activities.
- Inability to meet the RFS-2 advanced biofuel carve-out – Osage is poised to develop additional commercial scale projects that will meet the greenhouse gas performance standards of advanced biofuels and can be part of the solution to this problem.
- Industry myths and bad press – As the result of efforts of certain advocacy groups and much of the media, biofuels have been given a bad name. Some of the misinformation leads the public to believe that biofuels have negative greenhouse gas impacts and are the culprit for high food prices. To those of us in the industry, the spread of these clear falsities is damaging.
- Market uncertainty – The E10 blend wall represents an industry volume cap and limits growth opportunity and how far ethanol can go in helping to displace imported oil. Maintaining this cap will have the impact of rendering 2<sup>nd</sup> and 3<sup>rd</sup> generation advancements meaningless as there will be no market driven reason to deploy them. Additionally, the declining value and pending elimination or expiration of the blenders tax credit (VEETC) is forcing the industry in the direction of increased uncertainty.

### 4. Policy Issues and Recommendations to Face Challenges

Existing Federal programs that could bridge the financial downturn are either too restrictive or too structured around specific technologies, excluding commercial scale biofuels projects from eligibility. An example of technology eligibility limitations is the recently announced DOE Loan Guarantee program for commercial technologies. This program is structured around renewable electricity technologies, such as solar and wind, and excludes biofuels

from eligibility. In fact, it appears to us that DOE is abandoning alternative fuels altogether in pursuit of hybrid and battery/electric technologies.

As an example of being overly restrictive, I offer the USDA Biorefinery Assistance Program. Osage has spent considerable time in researching and trying to apply this program to our projects. Our conclusion is this: In good times, you don't need it; in bad times, you can't use it. Even in these bad times, Osage stands ready to commit \$100 million of equity toward a second project. In order to proceed, we need \$100 million of debt. A 70% BAP loan guarantee of \$70 million doesn't help, because no bank will take the risk on the remaining \$30 million. In working closely with exciting partnering opportunities in South Carolina, Kentucky and Pennsylvania, one approach considered was for the State to backstop and guarantee a loan on the remaining \$30 million. Unfortunately, the BAP program restricts this, eliminating it as an option. In short, the program doesn't work because of a single and rather simple program restriction. (*Congressman Holden and Mr. Chair...*), we have been working closely with Lancaster Biofuels on their pursuit of a barley-based plant in Lancaster, Pennsylvania. Osage is their partner of choice in deploying this project. If we could eliminate or waive this one restriction, it could be the single most important thing to get us started on our next project.

The RFS-2 represents another policy area with significant implications on the industry. In an attempt to overcompensate for the lack of sound science on the life-cycle emissions impact of biofuels, the RFS-2 seeks to overcomplicate the rules that will govern biofuel markets. An example is RFS-2 feedstock certification requirements. The rule seeks to have all shipments of biofuel feedstock certified to ensure it was produced from croplands in existence prior to December 19, 2007. The purpose of this is to help prevent the creation of new bioenergy crop acres through deforestation practices. With no sound science to quantify or confirm this, we view this as an unnecessary administrative burden that will add cost layers and complexity, with no true benefit. Osage feedstock in particular will be sourced from legacy farms, many in existence prior to 1807, much less 2007. In fact, one participating farm, only 8 miles from our Hopewell, VA plant, was founded in 1638. With Renewable Electricity Portfolio standards requiring no such certification, biofuels will be placed at a disadvantage. Oil companies bristling at the recent suggestion of requiring certification of crude oil country of origin provides a stark reminder of the lack of subsidy and regulatory parity within the fuel industry.

The Osage business model is based on the opportunities associated with advanced biofuel designation, and we feel strongly that this designation should be performance based, not policy based. Osage is a member of the Advanced Biofuels Association, and we agree with the platform that biofuel-related policies and regulations need to be technology neutral, feedstock neutral, and subsidy neutral. Developers of 2<sup>nd</sup> and 3<sup>rd</sup> generation products need a level playing field with the entire spectrum of feedstock and conversion processes at their

disposal. The RFS-2 seeks to unnecessarily stove-pipe these into a complex matrix of fuel pathways, each with their own unique challenges and validation requirements. The intent of facilitating renewable fuels has been completely lost in a policy driven, regulatory complex conundrum.

In conclusion, we recommend the following policy actions:

- In order to develop market certainty, raise the E10 volume cap through the EPA grant of an E15 waiver, or at a minimum an intermediate E12 waiver. This will provide a market reason for companies such as Osage to invest and expand into the 2<sup>nd</sup> and 3<sup>rd</sup> generation space.
- In order to develop market certainty, extend the blenders tax credit.
- In order to bridge financial market downturns, revise selected federal programs to make them accessible and applicable to existing commercial scale biofuels technologies.
- In order to facilitate biofuels in the marketplace, simplify the RFS-2. As written, proposed rules do more to impede advancement. The complexity of the rules will delay growth and add cost layers to an industry already burdened with thin margins and uncertain economics.

To be clear, Osage Bio Energy can build high performance, commercial scale advanced biofuels plants **today**, standing ready to deploy 2<sup>nd</sup> and 3<sup>rd</sup> generation technologies as they emerge from development and demonstration phases.

Ladies and gentlemen, that concludes the testimony of Osage Bio Energy. We sincerely thank you for the opportunity to stand before you today.

Very truly yours,  
OSAGE BIO ENERGY, LLC

  
L. Craig Shealy



Appomattox Bio Energy, Hopewell, Virginia  
10-8-09



**Committee on Agriculture  
U.S. House of Representatives  
Information Required From Non-governmental Witnesses**

House rules require non-governmental witnesses to provide their resume or biographical sketch prior to testifying. If you do not have a resume or biographical sketch, please complete this form.

1. **Name:** Craig Shealy
2. **Business Address:** 4991 Lake Brook Drive, Suite 250, Glen Allen, VA 23060
3. **Business Phone Number:** (804) 612-8626
4. **Organization you represent:** Osage Bio Energy, LLC
5. **Please list any occupational, employment, or work-related experience you have which add to your qualification to provide testimony before the Committee:**  
  
Osage Bio Energy - President, CEO and co-founder  
Nextel Partners – Senior Management  
Microsoft - Sr. Manager of the Corporate Development & Strategy team
6. **Please list any special training, education, or professional experience you have which add to your qualifications to provide testimony before Committee:**  
  
Princeton University – B.A., History
7. **If you are appearing on behalf of an organization, please list the capacity in which you are representing that organization, including any offices or elected positions you hold:**  
  
Osage Bio Energy, LLC-President and CEO

**PLEASE ATTACH THIS FORM OR YOUR BIOGRAPHY TO EACH COPY OF THIS TESTIMONY.**

Committee on Agriculture  
U.S. House of Representatives  
Required Witness Disclosure Form

House Rules\* require nongovernmental witnesses to disclose the amount and source of Federal grants received since October 1, 2006.

Name: Craig Shealy  
Address: 4991 Lake Brook Dr., Ste. 250, Glen Allen, VA 23060  
Telephone: 804-612-8626  
Organization you represent (if any): Osage Bio Energy

1. Please list any federal grants or contracts (including subgrants and subcontracts) you have received since October 1, 2006, as well as the source and the amount of each grant or contract. House Rules do **NOT** require disclosure of federal payments to individuals, such as Social Security or Medicare benefits, farm program payments, or assistance to agricultural producers:

Source: \_\_\_\_\_ Amount: \_\_\_\_\_

Source: \_\_\_\_\_ Amount: \_\_\_\_\_

2. If you are appearing on behalf of an organization, please list any federal grants or contracts (including subgrants and subcontracts) the organization has received since October 1, 2006, as well as the source and the amount of each grant or contract:

Source: \_\_\_\_\_ Amount: \_\_\_\_\_

Source: \_\_\_\_\_ Amount: \_\_\_\_\_

Please check here if this form is NOT applicable to you: n/a

Signature: 

\* Rule XI, clause 2(g)(4) of the U.S. House of Representatives provides: *Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof. In the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include a curriculum vitae and a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by any entity represented by the witness.*

PLEASE ATTACH DISCLOSURE FORM TO EACH COPY OF TESTIMONY.