## STATEMENT OF CONSIDERATIONS

REQUEST BY WHITEFOX TECHNOLOGIES, LIMITED, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE CONTRACT NO. DE-FC26-07NT43090, SUBCONTRACT QZ001 W(A)-08-033, CH-1445

The Petitioner, Whitefox Technologies, Limited (Whitefox)) was awarded a subcontract under the subject cooperative agreement with SRI International for the performance of work entitled, "Fabrication and Scale-Up of Polybenzimidazole (PBI) Membrane Based System for Pre-Combustion Based Capture of Carbon Dioxide". The overall project objective is to test a polybenzimidazole (PBI) hollow fiber membrane, previously developed by Whitefox, for hydrogen and CO2 applications and scale-up into a functional modular system. The module system will be evaluated for its performance and economics in a small scale IGCC testing system with a syngas feedstream. It is anticipated that this system will be demonstrated in a subsequent project at an end user's facility. Further details of the project, including petitioner's specific task under its subcontract, are found in response to question 2 of the waiver petition. Whitefox is a foreign corporation based in Great Britain, and the waiver will apply only to inventions made by Whitefox employees made under its subcontract.

The work under this agreement is expected to take place from April 1, 2007 through March 31, 2010. The cost of petitioner's task under this subcontract is \$1,063,677, with Whitefox cost-sharing 20%, or \$212,735. DOE is providing the remaining 80% cost share of \$850,942. (See attached e-mail from DOE Program Official Jose Figueroa to the undersigned).

In its response to questions 5 and 6 of the attached waiver petition, Whitefox has described its technical competence in the field of membranes and integration into ethanol plants. Whitefox has expertise in the fabrication of hollow fiber PBI-based membranes and in developing modular skid-based membrane systems. It has a portfolio of over 60 patents and patent applications, a sample of which are listed in Appendix A to the petition. Whitefox has also provided a sample of recent conference material on membrane characteristics for ethanol dehydration, a subject on which it is considered to be an authority (Appendix B). In addition, Appendix C provides other sample articles in the field of ethanol dehydration. Whitefox's response demonstrates its technical competency in the field of membranes and integration into ethanol plants.

In its response to question 9 of the attached waiver petition, Whitefox states that other groups around the world are developing similar technologies. However, the purpose of petitioner's work is the creation of a new product, and the petitioner states that grant of the waiver will create a new market and encourage more players to enter and therefore encourage competition. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Whitefox has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Whitefox agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Whitefox agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak

Assistant Chief Counsel
Intellectual Property Law Division

Date Any 20, 2008

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

. CONCABBENCE:

Samuel Biondo Director, Clean Energy Systems Office of Clean Energy Systems FE22

Date 10 - 9 - 08

APPROVAL:

Paul A. Gottlidb
Deputy Assistant Secretary
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date 10-21-08