## STATEMENT OF CONSIDERATIONS

REQUEST BY EASTMAN CHEMICAL COMPANY FOR AN ADVANCED WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS MADE UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-05NT42469, SUBCONTRACT QZ002, W(A)-2010-024, CH1562

This advanced waiver request by Eastman Chemical Company (Eastman), is for any invention developed under Eastman's subcontract with Eltron Research. Eltron was awarded a cooperative agreement for work entitled, "Scale-Up Hydrogen Transport Membranes for IGCC and FutureGen Coal to Hydrogen Production Plants". Eltron is a small business whose patent rights under this cooperative agreement are governed by the terms of 48 CFR 952.227-11. The terms of 48 CFR 952.227-13, Acquisition by the Government, were then flowed down by Eltron in the subcontract to Eastman, a large business. As explained in response to question 2 of the attached waiver petition, Eastman has contractually committed to the first phase of a proposed three phase program to develop Eltron's hydrogen transport membrane technology from laboratory scale to a pilot-scale using coal-derived synthesis gas in an industrial setting. In the first phase a slipstream of Eastman's coal derived syngas will be diverted to a membrane pilot unit scaled to separate approximately 12 pounds of hydrogen per day from the syngas stream. Eastman and Eltron will work jointly to design, procure, and install the pilot unit1.

According to its response to question 3 of the waiver petition, Eastman states the total cost of the project is \$7,654,713. The total cost of Phase 1 of the project is \$2,656,785, and Eastman is cost-sharing \$531,357 or 20%. Phase 1 is scheduled for completion on December 31, 2010.

In response to questions 5 of the waiver petition, Eastman describes technical competence in designing, developing, constructing, and operating coal gasification and related plants. Eastman has access to a coal gasification facility as well as extensive experience in the design, development, construction and operation of such a plant, and the ability to install commission, shakedown, and operate the pilot units. Eastman also states it has extensive technical expertise in designing, developing, constructing and operating coal gasification and related facilities in compliance with various health, safety, environmental, and security policies and regulations. Eastman has also developed and implemented numerous improvements to the gasification, syngas clean-up, and chemicals from coal processes. Eastman's response

<sup>1</sup> Identified Waiver W(I)-2008-011 by Eltron subcontractor Praxair under this agreement is currently pending with the Program Office.

demonstrates its technical competency in the operation and design of coal gasification plants.

In its response to question 10 of the attached waiver petition, Eastman states that grant of the waiver will not have a negative effect on competition and market concentration in Hydrogen Transport Membrane Technology. Grant of the waiver should help to ensure that interested parties eventually employ the technology developed under the cooperative agreement. Grant of the waiver will also facilitate the licensing of any subject invention. Eastman will acquire ownership in the inventions and can assign to Eltron, for further licensing in an attempt to commercialize its Hydrogen Transport Mernbrane Technology. Grant of the waiver will have a positive effect on competition and market concentration.

Eastman has agreed to accept the terms of the Large-Business, Confirmatory license, including the Government license, march-in rights and preference for U.S. industry set forth in 35 USC §§ 202, 203, and 204. The confirmatory license includes the attached U.S. competitiveness clause.

Upon evaluation of the waiver petition, in view of all the objectives and consideration set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Mark P. Dvorscak	
Deputy Chief Counsel	
Office of Intellectual Property Law	

5/3/10

Date:

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted.

CONCURRENCE://	APPROVAL:
<i></i>	
Stewart J. Clayton FE 221	John Ť. Lucas, GC-62
Clean Coal Energy Research	Acting Assistant General Counsel
Office of Fossil Energy	for Technology Transfer and
	Intellectual Property
Date: 6 00+ 10	10/20/20/2
Date: U UU ( +0	Date: 10 45 25(5

## U.S. Competitiveness Clause

The waiver recipient agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the waiver recipient can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The waiver recipient agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. The waiver recipient further agrees that in the event a controlling interest is to be acquired by a foreign entity in the waiver recipient or in any assignee or licensee of a waived invention, then in that case any rights in the waived invention to be acquired by the foreign entity will be subject to the written approval of the DOE.