

STATEMENT OF CONSIDERATIONS

PETITION FOR ADVANCE WAIVER OF PATENT RIGHTS BY CARGILL INC.
("CARGILL") UNDER COOPERATIVE AGREEMENT NO. DE-FC3607GO17055
BETWEEN CARGILL AND DOE; W(A)-08-021; CH-1447

The Petitioner, CARGILL, has requested a waiver of domestic and certain foreign patent rights for all subject inventions that may be conceived or first actually reduced to practice under the above-identified cooperative agreement, and subcontracts thereof. The cooperative agreement is entitled "Biocatalyst for fermenting hydrolyzate at low pH and high temperature."

The objective of the project is development of a novel yeast to ferment xylose and arabinose and demonstrate that arabinose/xylose can be effectively fermented to ethanol. More specifically, CARGILL will research the effectiveness of fermenting xylose and arabinose at a pH of less than 5, and a temperature of about 40°C in the presence of 10g/l acetate. The benefits of this novel ethanologen will be greater than 20% reduction in capital costs and a 7 cent per gallon ethanol reduction in operating costs compared to other cellulosic ethanol biocatalysts.

The total cost of the project is approximately \$4.1 million with the Petitioner providing 20% cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentages over the course of the cooperative agreement.

As noted in its waiver petition, Petitioner is one of the world's largest privately held corporations with significant experience in the areas of bio-technology, including several previous collaborations with DOE's Biomass Program. CARGILL operates the CARGILL Biotechnology Development center and invests several million dollars annually into research and development relating to the conversion of bio-mass to biofuels. In fact, CARGILL and its subsidiaries have invested over \$30 million in developing technology related to ethanol production. Furthermore, the project leaders each have between 12-23 years of experience in molecular biology and/or fermentation of industrial products.

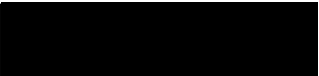
Considering Petitioner's technical expertise and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

As noted in its waiver petition, Petitioner has also requested waiver of patent rights in the subject inventions of its lower tier subcontractors, provided that they agreed to the same terms and conditions by which Petitioner will be granted the advanced waiver. It is believed that this approach will facilitate timely commercialization of the technology by furthering the establishment of business and technical relationships between the parties and providing a mechanism for obtaining meaningful cost sharing between the parties. This waiver contemplates that the parties will allocate title or other rights to subject inventions among themselves as they deem appropriate during the course of their association consistent with the terms of this waiver. Accordingly, title will be waived directly to a sub-contractor upon mutual agreement of the Petitioner and the subcontractor. However, the waiver will only apply to such subcontractor(s) who provide a letter to DOE acknowledging their right to ask for a waiver and agreeing to the terms of this waiver. This waiver shall not impact the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by National Laboratories.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision paragraph (t). In brief, Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless the Petitioner can show to the satisfaction of the DOE that is not commercially feasible to do so. Furthermore, this cooperative agreement is awarded under the Energy Policy Act, PL 102-486, and subject to protected data provisions which allows for data produced under the agreement to be protected for 5 years.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. If anything, the technology forming the subject matter of the collaboration can be expected to stimulate competition. CARGILL has an extensive history of partnership and licensing arrangements with companies in various commercial markets.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and 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 be granted.



Assistant Chief Counsel Intellectual Property
Law Division DOE Chicago Office
Date: July 21, 2008

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. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:



Paul F. Bryan
Program Manager
of Biomass Program
EE-2E

Date: 12|27|10

APPROVAL:



John T. Lucas
Acting Assistant General Counsel Office
for Technology Transfer and
Intellectual Property

Date: 12|29|10

WAIVER ACTION - ABSTRACT

W(A)-08-021

REQUESTOR
RCARGILL

CONTRACT SCOPE The objective of
the project is the development of a
novel yeast to ferment xylose and
arabinose to ethanol

RATIONALE FOR DECISION
≥ 20% Cost Sharing

(t) U. S. Competitiveness

The Contractor 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 Contractor 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 Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.