

STATEMENT OF CONSIDERATIONS

REQUEST BY W.R GRACE AND CO. FOR AN ADVANCE WAIVER OF
THE GOVERNMENT'S DOMESTIC AND FOREIGN PATENT RIGHTS
UNDER DOE AWARD DE- EE0005991;
DOE WAIVER NO. W(A)2013-014;

The Petitioner, W.R. Grace & Co. (GRACE), has requested an Advance Waiver of the Government's domestic and foreign rights to inventions in the above cited research and development award. See Appendix- GRACE's Petition, Petition Answer 1.

Subject of the Award

This collaboration with GRACE, DOE's Pacific Northwest National Laboratory (PNNL) and Tesoro is to investigate the ability to co-process bio-oils in an FCC pilot unit, the DCR. The objective is to investigate blend so bio-oils that have been "stabilized" via mild, moderate and severe levels of deoxygenation with petroleum based feedstocks in an FCC pilot unit. The purpose is to identify optimal levels of deoxygenation of bio-oil to yield gasoline and diesel fuels with renewable content. See Appendix, Petition Answer 2 for more information.

The Allocation of Patent Rights

GRACE has requested the worldwide rights in all inventions in the Award. The total budget for GRACE's work is \$2.6 million. GRACE is committing \$812K (in-kind) in materials and manpower to develop the catalysts, which meets the minimum 20% cost share required by DOE. See Appendix, Petition Answers 3 & 7.

GRACE is a world leader in producing and selling catalysts used in refining, petrochemical and other chemical manufacturing applications. Grace has numerous patents and publications in the general areas of catalyst synthesis and catalyst development for different applications. See Appendix, Petition Answer 5. Due to GRACE's previous work in FCC pilot plant technology and catalyst development and commercialization in transportation fuels industry, GRACE will be able to offer unique catalysts/process to further improve the cost competitiveness of the fuel production from biomass. Several other companies are pursuing a wide range of competitive technology options for fuel from biomass limiting any monopoly that one company would have in this field. See Appendix, Petition Answers 9 and 10.

The patent rights waiver is subject to the retained government-use license, march-in rights, reporting requirements, 35 U.S.C. 204, and following DOE's standard U.S. Competitiveness provision:

U.S. Competitiveness

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 DOE that it is not commercially feasible to do so. The waiver

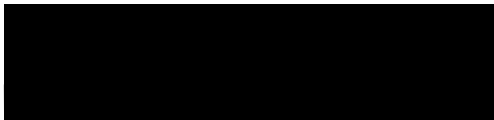
recipient further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.

Conclusion

GRACE was selected as the most qualified U.S. company capable of performing the tasks under this Award. The technology being developed in the Award is closely aligned with GRACE's business and extensive research in this field. Therefore, the Government believes that the inventions created under this Award should be owned by GRACE to commercialize the technology and advance their products in this field.

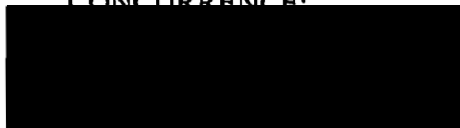
For the foregoing reasons, and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Date: 1/28/14


Gary Drew
Assistant Chief Counsel for Intellectual Property
DOE Integrated Service Center

Based on the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by waiver of the United States' domestic and foreign patent right as set forth herein, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the GRACE Award where, through such modification or extension, the purpose, scope or DOE cost of the Award has been substantially altered. This waiver shall not affect any waiver previously granted.

CONCURRENCE:



Date: March 24, 2014

Prasad Gupte
Technology Manager
Thermochemical Conversion R&D Platform
DOE/EERE/Bioenergy Technologies Office (BETO)

APPROVED:



Date: 3/31/2014

John Lucas
Assistant General Counsel
for Technology Transfer and Intellectual Property