## STATEMENT OF CONSIDERATIONS

REQUEST BY HRL LABORATORIES, LLC (HRL) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS TO INVENTIONS MADE UNDER A SUBCONTRACT TO COOPERATIVE AGREEMENT NUMBER DE-FC04-03AL67635, DOE WAIVER NO. W(A) 04-036.

The Petitioner, HRL, has requested a waiver of all domestic and foreign patent rights to inventions that may be conceived or first actually reduced to practice in the course of HRL's work as a subcontractor to General Motors (GM) under Cooperative Agreement Number DE-FC04-03AL67635 entitled "Innovative Emission Control Device" with the U.S. Department of Energy (DOE). GM has already requested a similar advance waiver of rights for GM's inventions as the prime contractor. GM's advance waiver petition was given the tracking number W(A) 03-019 and was approved on February 25, 2004.

The work to be done under the overall cooperative agreement will be the development of new microwave soot combustion components in compression-ignition, direct-injection (CIDI) diesel engine systems. HRL's work under the subcontract will focus on research and development of advanced optical materials, coatings and microwave propagation within the emission control device. This work will allow for the improvement of existing particulate traps in diesel engines, broader use of emission control devices, and vast improvements in passenger car and light-duty vehicle diesel emissions.

The cooperative agreement covers a period from October 1, 2003 through September 30, 2006 at a total estimated cost to DOE of \$2,239,952. The subcontract will cover the same time period at a cost of \$800,000. GM, as the prime contractor, will provide approximately \$600,000 as a cost share (20%) over the life of this agreement. The Petitioner will contribute no cost share of its own. However, GM has approved HRL's advance waiver request, in writing, on September 3, 2004. Government funding is scheduled to be provided as follows: \$500,000 in FY03; \$1.2M is FY04; and \$540,000 in FY05. The government contribution will be made through Budget & Reporting Code EE0503 sponsored by the Office of FreedomCAR and Vehicle Technologies (OFCVT).

HRL is a Malibu, California-based corporation with over 44 years of experience in research and development in the field of defense, space and automotive technologies. GM, Raytheon and Boeing jointly own HRL. HRL is considered a pioneer and leader in microwave technology development. GM, as the prime contractor, will be primarily responsible for commercialization of any CIDI emission reduction developments. As such, based on the nature of the technology, as well as the research and development being done in this field worldwide, and the existing myriad of competing technologies, it is not foreseen that the grant of this waiver would decrease competition, cause undesirable market concentration, nor place HRL in a dominant market position – primarily since HRL, as a research and development company, is not seeking a market position.

HRL has agreed to abide by 35 U.S.C. §§ 202, 203 and 204, as well as the provisions of the Standard Patent Rights clause for an Advance Waiver. Additionally, as part of the petition itself, HRL has agreed to the provisions of the U.S. Competitiveness Clause, which requires Petitioner to substantially manufacture any products embodying or produced through any waived invention in the United States, unless Petitioner can convince DOE it is not commercially feasible to do so. Petitioner agrees to make this condition binding on any assignee or licensee. HRL will abide by the Export Control laws and will require its licensees, if any, to do the same. HRL will expend such sums as may be required to maintain the necessary patent protection and provide incentive for commercial development of the invention.

Considering Petitioner's status as a leader in the research and development of automotive and microwave technologies, it is concluded that the grant of the requested waiver is most likely to achieve commercialization success and actual implementation of cleaner-burning diesel engine systems on both a national and global scale.

As such, upon evaluation of the Waiver Petition in view of the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver be granted.

Jim C. Durkis
Patent Attorney
NNSA Service Center

Based on the foregoing Statement of Considerations and the representations of 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 a modification or extension of the cooperative agreement where, through such modification or extension, the purpose, scope or DOE cost of the cooperative agreement have been substantially altered.

## **CONCURRENCE:**

Edward J. Wall
Program Manager
Freedom Car & Vehicle Technologies

Date: 1/28/05

APPROVAL:

Date: 2-16-05

Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property (GC-62)