

## STATEMENT OF CONSIDERATIONS

PETITION FOR ADVANCE WAIVER OF PATENT RIGHTS BY AQUA-CHEM, INC. UNDER SUBCONTRACT NO. PF17047 UNDER PRIME CONTRACT NO. DE-FC07-00ID13904 BETWEEN GAS TECHNOLOGY INSTITUTE (GTI) AND DOE; W(A)-02-051; CH-1124

The Petitioner, Aqua-Chem, Inc., has requested a waiver of domestic and certain foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement entitled "Super Boiler." GTI is a nonprofit research organization dedicated to meeting the nation's energy and environmental needs. This waiver does not apply to the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of the National Laboratories.

The objective of the cooperative agreement is the development and commercialization of the "Super Boiler." The program is designed to integrate several key technologies into an advanced boiler design, including low emission burner and exhaust technologies; heat recovery; efficiency and reliability improvements; improved operating parameters; and materials advances. In particular, Petitioner will evaluate GTI's design concepts and computer models by designing and building a laboratory boiler system. After testing by GTI and results evaluation by Petitioner, Petitioner will bring improvements into the design and construction of a prototype commercial boiler system. The prototype will be lab-test by GTI and then placed in field use through arrangements made by Petitioner.

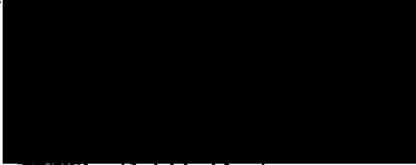
The total cost of the project is \$5.5 million. The anticipated cost of the subcontract with Petitioner is \$1.2 million, with the Petitioner providing about forty percent (40%) cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of its subcontract.

As noted in its waiver petition, Petitioner's has seven decades of expertise in burners, controls, and pressure vessel designs, and fully integrating these components into a unified boiler system. Petitioner has delivered over 100,000 commercial and industrial boilers in North America, with more than 80,000 currently operational. Petitioner has product development centers in Milwaukee, Wisconsin; Monroe, Wisconsin; Lincoln, Nebraska; and Montreal, Quebec. In addition, in the last five years, Petitioner has committed over 90 million dollars to expand its burner and boiler business and has expended \$13 million in new product design and maintenance and in research and development of burner and boiler products. Considering Petitioner's technical expertise, established market position, 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.

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 U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this agreement shall be substantially manufactured in the United States, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Additionally, Petitioner has agreed to contractor data licensing provisions as attached herein.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. There are numerous low Nox burners, exhaust processing means, economizers and other heat recovery apparatus which currently exists in the marketplace. The boiler industry is a very mature industry, and it is unlikely that any patents would develop which would be so broad as to be a blocking patent in this technology. In fact, the success of this cooperative agreement can be expected to stimulate further investment and competition in this technology.

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.



Daniel D. Park  
Assistant Chief Counsel  
Office of Intellectual Property Law

Date: 2/24/03



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 subcontract has been substantially altered.

CONCURRENCE:



Buddy Garland  
Program Manager  
Industrial Technology Program  
EE-20

Date: 3/14/03

APPROVAL:



Paul A. Gottlieb  
Assistant General Counsel  
for Technology Transfer and  
Intellectual Property

Date: 3-14-03

**(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.

**Rights in Data - General** (JUN 1987), is amended by adding paragraph (k) as follows:

(k) Contractor Licensing. Except as may be otherwise specified in this contract as data not subject to this paragraph, the contractor agrees that upon written application by DOE, it will grant to the Government and responsible third parties, for purposes of practicing a subject of this contract, a nonexclusive license in any limited rights data or restricted rights software on terms and conditions reasonable under the circumstances including appropriate provisions for confidentiality; provided, however, the contractor shall not be obliged to license any such data if the contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(1) Such data are not essential to the manufacture or practice of hardware designed or fabricated, or processes developed, under this contract;

(2) Such data, in the form of results obtained by their use, have a commercially competitive alternate available or readily introducible from one or more other sources;

(3) Such data, in the form of results obtained by their use, are being supplied by the contractor or its licensees in sufficient quantity and at reasonable prices to satisfy market needs, or the contractor or its licensees have taken effective steps or within a reasonable time are expected to take effective steps to so supply such data in the form of results obtained by their use; or

(4) Such data, in the form of results obtained by their use, can be furnished by another firm skilled in the art of manufacturing items or performing processes of the same general type and character necessary to achieve the contract results.

WAIVER ACTION - ABSTRACT  
W(A)-02-051

REQUESTOR

Aqua-Chem, Inc.

CONTRACT SCOPE OF  
WORK

Development of a "Super  
Boiler"

RATIONALE FOR DECISION

40% cost sharing