

## STATEMENT OF CONSIDERATIONS

### **Request by Nalco Chemical Company for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Cooperative Agreement No. DE-FC26-06NT42721; W(A)-06-019, CH-1370**

The Petitioner, Nalco Chemical Company (NALCO) was awarded this cooperative agreement for the performance of work entitled, "A Synergistic Combination of Advanced Separation and Chemical Scale Inhibitor Technologies for Efficient Use of Impaired Water as Cooling Water in Coal-Based Plants". The goal of this program is to develop novel membrane separations and scale inhibitor technologies that will enable coal-based power plants to economically use impaired water for cooling without adverse impacts to the environment or plant operations. The technology will provide cost-effective scale control solutions for recirculating cooling water systems using impaired water to operate at high cycles. This will reduce the amount of make-up water required and the volume of blowdown generated, resulting in lower treatment costs and reduced environmental impacts from the use of impaired water.

The total estimated cost of the cooperative agreement is \$1,370,996 with the DOE share being \$837,756 or 61%. Nalco is cost-sharing \$1,370,996 or 39%. Note that the DOE cost share includes an FFRDC contractor portion of this effort under an existing DOE contract. Specifically, the petitioner will work with Argonne National Laboratory under Argonne's prime contract with DOE through a Cooperative Research and Development Agreement (CRADA). This FFRDC cost is \$300,000 over the project period. The period of performance is from March 1, 2006 through March 31, 2008. This waiver is only for inventions of Nalco made in the course of its performance under this cooperative agreement.

In its response to questions 5 and 6 of the attached waiver petition, Nalco has described its technical competence in the field of water treatment products and services. It has extensive experience and strong technical expertise, and has developed and commercialized technologies, for cooling water treatment, scale control, and chemical optimization of membrane separations. Nalco has included five of its relevant U.S. Patents in this area as exhibits to its petition (Exhibits A-1 to A-5). Nalco has also provided sales brochures to provide additional information on its commercial offerings in the field of this work (Exhibits B-1 to B-3). Nalco's response demonstrates its technical competency in the field of water treatment products and services.

In its response to question 10 of the attached waiver petition, Nalco states that the U.S. as well as global water treatment business is highly competitive, with many types of companies supplying chemical, equipment and services. Many participants in this market offer wide ranges of separation technologies and scale inhibitor chemistries for cooling water treatment, and many of these technologies are close competitive alternatives to another. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Nalco has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Nalco agrees to substantial U. S. manufacture of subject inventions (attached hereto). Additionally, Nalco agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the

agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, 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, as set forth above, be granted.

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Mark P. Dvorscak  
Assistant Chief Counsel  
Intellectual Property Law Division

Date June 28, 2006

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

[Redacted signature block]

Victor Der  
Deputy Assistant Secretary  
Director, Clean Energy Systems  
Office of Clean Energy Systems  
Office of Fossil Energy, FE-22

Date 3/14/07

APPROVAL:

[Redacted signature block]

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

Date 3-16-07

(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.

# ***WAIVER ACTION - ABSTRACT***

**W(A)-06-019 (CH-1370)**

REQUESTOR

Nalco Chemical Company  
under DOE Contract  
No. DE-FC26-06NT42721

CONTRACT SCOPE OF WORK

A Synergistic Combination of Advanced  
Separation and Chemical Scale Inhibitor  
Technologies for Efficient Use of Impaired  
Water as Cooling Water in Coal-Based Plants

RATIONALE FOR DECISION

39% Cost Sharing

DISPOSITION