



# Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street  
Chicago, IL 60611

## Legislation Text

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### TRANSMITTAL LETTER FOR BOARD MEETING OF FEBRUARY 18, 2016

#### COMMITTEE ON PROCUREMENT

Mr. David St. Pierre, Executive Director

Authorization to negotiate and enter into a Development and Collaboration Agreement between the Metropolitan Water Reclamation District of Greater Chicago and Clearas Water Recovery Inc.

Dear Sir:

Authorization is requested to negotiate and execute a Development and Collaboration Agreement (DCA) between the Metropolitan Water Reclamation District of Greater Chicago and Clearas Water Recovery Inc. (CWR). The agreement period will be five years from the date of execution with the option to renew for two one-year extensions.

CWR has developed and commercialized a proprietary process for the removal and recovery of phosphorus and nitrogen from effluent using algae called Advanced Biological Nutrient Removal (ABNR). The District wishes to enter into project specific agreements with CWR as the sole-source supplier for the design, procurement, installation and start-up of a demonstration ABNR process at the Hanover Park Water Reclamation Plant (WRP). The benefit of the ABNR process for nutrient removal is that its byproduct is algae biomass, which can be harvested and converted into a saleable commodity for use in a variety of means such as bioplastics or bio-based industrial acids. The process has the added benefit of sequestering atmospheric carbon dioxide and adding dissolved oxygen to the effluent. This project is being done in conformance with the pending NPDES permit for the O'Brien WRP, which contains a special condition which requires the District to undertake the investigation of the use of algae technology for the uptake and recovery of phosphorus from the treatment plant effluent. Due to its size, the Hanover Park WRP is better suited for installation of a demonstration project than the O'Brien WRP; therefore, the demonstration module is planned to be installed at the Hanover Park WRP. If the project is successful, the experience gained at Hanover Park WRP will be applied to a full-scale installation at the O'Brien WRP.

The DCA will serve as a master agreement, establishing the overall terms and conditions under which the District and CWR will work collaboratively upon various projects at both Hanover Park WRP and O'Brien WRP. The DCA will establish terms and conditions for intellectual property rights, licensing arrangements, requirements for confidentiality and benefits to the District. Project-specific agreements will be developed for each project and brought forth to the Board of Commissioners for approval prior to execution. The projects envisioned at this time included: design, procurement, and installation of a demonstration module at Hanover Park WRP; collaborative research on process optimization and development of a local market for commercial sale of the algae biomass; design, procurement, and installation of a full-scale system at Hanover Park WRP; and design, procurement, and installation of a full-scale system at O'Brien WRP. The demonstration module at Hanover Park WRP will be designed in-house and constructed under a competitively bid contract.

CWR was selected as a sole-source supplier for this application because it has developed a patented process which removes phosphorus and other nutrients from wastewater effluent in an efficient and sustainable means using algae and other biological constituents. This process is apparently being successfully employed in

several commercial applications in the United States.

The terms of the DCA are subject to the approval of the Law Department prior to execution. No funding is included with this DCA; however, any actual use of services would occur only after Board approval for projects equal to or greater than \$10,000.00, execution of a project specific agreement, and issuance of a purchase order for a designated purpose, scope of work, and a not-to-exceed amount of funds.

Inasmuch as Clearas Water Recovery Inc. possesses a high degree of professional skill, and is the sole-supplier of their patented technology, it is recommended that the Director of Procurement and Materials Management be authorized to negotiate and enter into a Development and Collaboration Agreement without advertising, per Section 11.4 of the Purchasing Act.

Requested, Catherine A O'Connor, Director of Engineering, CAO:TK  
Recommended, Darlene A. LoCascio, Director of Procurement and Materials Management  
Respectfully Submitted, Barbara J. McGowan, Chairman Committee on Procurement  
Disposition of this agenda item will be documented in the official Regular Board Meeting Minutes of the Board of Commissioners for February 18, 2016