

**MEMORANDUM OF UNDERSTANDING**  
Between the  
**METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO**  
And  
**KRISHNA UNIVERSITY, MACHILIPATNAM, Andhra Pradesh, India**

This Memorandum of Understanding (“MOU”) is made and enacted on the \_\_\_\_\_ day of \_\_\_\_\_ 2016, by and between the Metropolitan Water Reclamation District of Greater Chicago (“District”) and Krishna University, Andhra Pradesh, India (“Krishna University”). The District and Krishna University may hereinafter collectively be referred to as the “Parties.”

WHEREAS, the District is an independent government and taxing body encompassing approximately 91 percent of the land area and 98 percent of the assessed valuation of Cook County of Illinois, United States of America; and

WHEREAS, the District’s mission is to protect the health and safety of the public in its service area, protect the quality of the water of the water supply source (Lake Michigan), improve the quality of water courses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service areas; and

WHEREAS, the District owns and operates seven water reclamation plants that treat domestic, industrial, and combined sewage, serving a population of approximately 5.25 million real people, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow equivalent of 0.5 million people; and

WHEREAS, the District has a great history for more than 12 decades in the operation, maintenance, and management of wastewater collection and treatment infrastructure and the application of best management practices for the sustainability of water resources, not only in its service area, but also of Lake Michigan, which serves as the primary drinking water source for most of the residents of Cook County; and

WHEREAS, the District is committed to achieving the highest standards of excellence in fulfilling its mission; and

WHEREAS, Krishna University is an independent and autonomous University dedicated to excellence in educating its students in various fields of arts, science, and engineering, and awarding them with diplomas and degrees; and

WHEREAS, Krishna University was established under vide Andhra Pradesh Act.No.4 of 1991, G.O’ Ms. No.89 Higher Education (U.E.II) dated 25/06/2008 and G.O Ms. No.109, Higher Education (U.E.II) department dated 14/07/2008 at Machilipatnam, as the town is the headquarters of Krishna District of Andhra Pradesh and is engaged in educating, training, research, consultancy, publications and organization of conferences with a view to strengthening the cause of vocational, employment-centric, technological and practical education in the Andhra Pradesh State of India; and

WHEREAS, staff at Krishna University has extensive knowledge, expertise and resources related to water and wastewater treatment; and

WHEREAS, Krishna University has made it as one of its primary missions to educate and train many of its students to prepare them to play active professional roles to operate and manage the numerous water and wastewater treatment plants and the associated infrastructure as India is preparing to build them; and

WHEREAS, Krishna University plans to implement a one-year diploma program entitled **“Technology, Operation, and Maintenance of Water and Wastewater Treatment Plants,”** on a regular basis to prepare and train students to become operators and managers of water, sewage, and effluent treatment plants for a lifetime of employment and community service to protect the water environment; and

WHEREAS, the District and Krishna University would mutually benefit by sharing knowledge, engaging in exchanges, and conducting thoughtful discourse about the water sector and the wastewater treatment area for the benefit of the entities, their employees, their communities, and the environment.

Now, therefore, the District and Krishna University hereby acknowledge and declare as follows:

1. The Parties agree to establish a basis for knowledge sharing and cooperation as it relates to best practices in wastewater treatment and related services.
2. AREAS OF INTEREST: The following are the suggested areas of common interest, which may be expanded upon, modified, or added to over time as needs arise:
  - a. Water and Wastewater treatment technology
  - b. Energy Management and Energy Neutrality
  - c. Storm water Management
  - d. Operation of wastewater and water treatment plants
  - e. Process control, monitoring, and instrumentation
  - f. Sustainable Utility Management
  - g. Staff Exchange
3. INITIAL ACTIVITIES OF COOPERATION: A number of activities will initially be undertaken for the purpose of developing a working relationship between the Parties. The activities described below reflect the initial intentions discussed between the Parties, but are not limited to same, as a more complete and appropriate list will be developed according to the wishes and capabilities of the Parties. It is understood by the Parties that these elements may be updated as experience is gained.
  - A. KNOWLEDGE SHARING: During the term of this MOU, the Parties will consider mutual visits (Krishna University, Machilipatnam to Chicago, and possibly Chicago to Machilipatnam, India) during which the Parties will learn how wastewater and water treatment plants are organized and operated. To the extent possible, the Parties will

- share information and benchmarking on their main activities within wastewater. On the Indian side, Prof. S. Ramakrishna, Vice Chancellor, or his designee, with the help of Prof. Prakasam Tata (Retd. Assistant Director of R&D Department of the District and currently the Executive Director of the Center for Transformation of Waste Technology, Naperville, IL 60540 USA), plans to develop an appropriate course for the award of a diploma in the Water and Wastewater Treatment Technology and Operation of Wastewater Treatment.
- B. **COURSE DEVELOPMENT:** Krishna University plans to design, develop, deliver and offer a diploma course in the Water and Wastewater Treatment Technology (1 year duration) for the B.Sc. MPC/ITI civil/Mechanical/M.Sc Chemistry and Biology and background graduates, future plant operators and water treatment managers. Krishna University will build off of the shared knowledge, expertise and experience with the District to assist it in developing course content. Krishna University intends to offer structured syllabi and class work for the course.
  - C. **WORKSHOPS:** Krishna University and the District plan to develop, offer and hold seminars, workshops, conferences, etc., which would be of mutual benefit and interest.
  - D. **INTERNATIONAL FRIENDSHIP OPPORTUNITIES:** The Parties intend to promote international friendship through cooperation and information sharing, as Krishna University creates opportunities for students interested in entering the field of water or wastewater treatment technology, enabling prospective plant operators and managers to obtain their certification, the process of which is not currently available in India.
  - E. **EXCHANGE OF VISITS:** Krishna University welcomes the opportunity to discuss the framework for potential visits of District personnel for 1 to 2 weeks to Krishna University and to other wastewater and effluent plants in Andhra Pradesh and its neighboring states. Visits of staff of Krishna University and other managers and operators of wastewater treatment plants may be facilitated by Krishna University or its designee to the District's water reclamation plants and other facilities at mutually agreeable dates.
  - F. **OTHER MATTERS:** During the mutual visits, other subsequent activities may be discussed and developed. For example, these activities could include the establishment of specific technical working groups on physical, chemical and biological treatment of wastewater, energy management, sustainable utility management, cooperation on research and development projects, etc. Each technical group or project team may establish its own functional criteria to track its progress, as needed.
4. **COSTS:** All travel, hotel, living costs, and other expenses are to be covered by the respective Parties for their own personnel, in accordance with the existing policies and procedures of each Party for such expenditures. Expenditures by the District of greater than \$10,000 will require approval of the District's Board of Commissioners.

5. **INSURANCE.** Each Party maintains insurance coverage for its own personnel at all times, and will hold the other Party harmless for its own employee's actions, including when employees are on the other Party's property.
6. **TIME SCHEDULE.** The term of this MOU is three years from the date of execution. Prior to expiration, the MOU will be evaluated and upon mutual agreement, extended and modified.
7. **DISCLAIMERS:** The provisions set forth in this MOU are intended solely as guidance to improve the working relationship of the Parties in carrying out their respective responsibilities for their communities. This MOU does not, and is not intended to, impose any legally binding requirements on either Party. This MOU is to be construed in a manner consistent with all existing laws and regulations. This MOU neither expands, nor is in derogation of, those powers and authorities vested in the participating Parties by applicable laws, statutes, or regulations.
8. **FUNDING:** Any endeavor involving the reimbursement or contribution of funds between the Parties to the MOU shall be in accordance with applicable laws, regulations, and procedures of the respective Party. Such endeavors, if any, will be outlined in separate agreements that shall be made in writing by representatives of the Parties and shall be independently authorized by appropriate legal authority. Nothing in this MOU, in and of itself, requires any Party to enter into any contract, grant, or interagency agreement. All provisions in this MOU are subject to the availability of funds.
9. **MODIFICATION AND TERMINATION:** This MOU may be modified or amended at any time upon written request of either party hereto and the subsequent written concurrence of the other. This MOU may be terminated by either party upon providing sixty (60) days advance written notice.

[SIGNATURE PAGE FOLLOWS]

Krishna University

By \_\_\_\_\_

S. Ramakrishna  
Vice Chancellor

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

Metropolitan Water Reclamation District of Greater Chicago

By \_\_\_\_\_

David St. Pierre  
Executive Director

Date: \_\_\_\_\_

\_\_\_\_\_  
Chairman of Committee on Engineering

\_\_\_\_\_  
Date

ATTEST:

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

APPROVED AS TO ENGINEERING AND TECHNICAL MATTERS:

\_\_\_\_\_  
Director of Engineering

\_\_\_\_\_  
Date

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
Head Assistant Attorney

\_\_\_\_\_  
Date

\_\_\_\_\_  
General Counsel

\_\_\_\_\_  
Date