NOTICE OF INTENT TO AWARD

This notice is not a request for applications. This provides public notice of the Bureau of Reclamation's intention to fund the following project activities without full and open competition.

OPPORTUNITY NUMBER	BOR-DO-20-N005
PROJECT TITLE	Evaluating Contaminates of Emerging Concern's Fate in Potable Reuse Membrane Treatment
RECIPIENT	Cal Poly Pomona Foundation
ANTICIPATED FEDERAL AMOUNT	$120,000.00
STATUTORY AUTHORITY	**Public Law 111-11, Section 9509, Research Agreement Authority** *The Secretary may enter into contracts, grants, and cooperative agreements, for periods not to exceed 5 years, to carry out research within the Bureau of Reclamation.*
CFDA NUMBER	15.560
RECLAMATION POINT OF CONTACT	Matthew Reichert mreichert@usbr.gov 303-445-3865
SUMMARY OF PROJECT ACTIVITIES	Under this Cooperative Agreement, the Cal Poly Pomona Foundation will assist in development of Closed-Circuit Reverse Osmosis (CCRO). The intent of the proposed project is to further development needed by Reclamation and stakeholders, municipalities and academics, with a Reverse Osmosis process that can remove most Contaminants of Emerging Concerns (CEC) yet produce concentrate streams with increased CEC concentrations that require further understanding. The discharge of CEC rich concentrate stream can increase plant operational costs and thus provide a roadblock for the implementation water reuse. The research areas of focus: • Understanding the fate and removal of CECs in any water reclamation pilot study would respond to the lack of knowledge around CECs in water reclamation • Reducing the discharge volume of concentrate stream is important since it directly affects the cost of water reclamation process specially in inland water reclamation plants Researchers at Cal Poly Pomona Foundation will focus on the following tasks: • Literature studies will be performed to investigate and compile the available data on CECs in CCRO, and similar high recovery membrane setups • Development of an experimental procedure in regard to sample collection, and laboratory analysis of CCRO's feed, product, and

	concentrate samples • Studying the fate and removal of CECs under different operating conditions by commissioning, operation, and monitoring of the pilot CCRO, as well as sampling and sample analysis practices for water samples for CEC study • Data collection and analysis for developing a comprehensive data log that includes operating conditions and water quality of feed, concentrate, and permeate as well as CEC analysis
SELECTION JUSTIFICATION	Reclamation did not solicit full and open competition for this award based on the following the unique qualifications of the Principal Investigator, the location of the project, proximity to Water Reuse projects, and collaborators, the results of previous research studies and project performed collaboratively with Reclamation, and the ability to reduce the overall cost of the project by performing the work under the Californian Cooperative Ecosystem Studies Unit Agreement. Dr. Ali Sharbat is uniquely qualified in CEC analysis with an excellent record in the development of approaches for the Reverse Osmosis (RO) treatment and management of concentrate streams. He has collaborated with regional RO facilities with great success in experimental work in the field. The Principal Investigator and Cal Poly Pomona has the expertise and performance in the research field of Reverse Osmosis and Contaminants of Emerging Concerns while working with Reclamation. The work to be performed under this agreement builds upon previous work performed under Cooperative Agreement R16AC00140 and will improve project outcomes.