TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	URUGUAY/CSC - Southern Cone
▪ TC Name:	Arsenic management improvement in water supply systems
▪ TC Number:	UR-T1274
▪ Team Leader/Members:	REZZANO TIZZE, NICOLAS GUILLERMO (INE/WSA) Team Leader; BASANI, MARCELLO (INE/WSA) Alternate Team Leader; CRESPIN VILLATORO, LESLIE ALEXANDRA (INE/WSA); VERISSIMO DA SILVA, CAROLINA (LEG/SGO); SASAKI, KEISUKE (INE/WSA); BACHINO, FEDERICO (CSC/CUR); MARIA EUGENIA DE LA PENA (INE/WSA); GUIZA CERON, CARLOS ANDRES (INE/WSA); BRUSA, FEDERICO (CSD/CCS)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	15 Dec 2021
▪ Beneficiary:	Obras Sanitarias del Estado (OSE)
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US$500,000.00
▪ Local counterpart funding:	US$0.00
▪ Disbursement period:	24 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	INE/WSA - Water & Sanitation
▪ Unit of Disbursement Responsibility:	CSC/CUR - Country Office Uruguay
▪ TC included in Country Strategy (y/n): ▪ TC included in CPD (y/n):	No Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability

II. Objective and Justification

2.1 The main objective of the Technical Cooperation (TC) is to develop innovative tools to facilitate the implementation of public policies aligned with the Sustainable Development Goals in the country, focusing on planning investments for the management of arsenic in the existing supply systems.

2.2 Uruguay was one of the first countries in the world to incorporate access to drinking water and sanitation as fundamental human rights at the constitutional level. 95.2% of its population access drinking water through water supply networks; 4.2% access improved water sources and 0.5% from unprotected wells, cisterns and / or pipes. Approximately 6% of the country's schools still do not have a drinking water supply. More than 350 million cubic meters of drinking water are produced annually. 90% of the water used for drinking comes from surface sources and 10% from groundwater sources.

2.3 Throughout the country, the provision of drinking water services through networks is carried out by the state utility Administración de Obras Sanitarias del Estado (OSE), which is also in charge of providing sanitation services in the interior of the country.

2.4 As for drinking water, the country faces the following challenges: 1) reduction of Non-Revenue Water (NRW), which at the national level surpass 50%; 2) the universalization of access to drinking water services, especially considering the small

nuclei of houses and rural schools; and 3) the capacity to guarantee drinking water quality as well as the redundancy of sources, considering critical issues in the purification systems and supply to the population (e.g., emerging pollutants).

2.5 Based on the recommendations of the Drinking Water Quality Guidelines of the World Health Organization (WHO), the United States Environmental Protection Agency (EPA), the UNIT 833-2010 standard and a decree emanated by the Executive Power; Uruguay established in 2011 stricter values for arsenic limits in drinking water, a potentially carcinogenic chemical element found naturally in water and not as a result of human contamination. According to the adjusted regulation, the maximum limit of arsenic per liter of water, previously in 50 micrograms, was lowered to 20 micrograms (0.02 milligrams) per liter and set a timeframe of 10 years to reach a maximum limit of 10 micrograms (0.01 milligrams) per liter. In Uruguay there are currently 163 places (287 boreholes, 50 small, populated centers, with about 136,000 inhabitants (4% of the population)) where arsenic concentrations are higher than 10 micrograms per liter.

III. Description of Activities and Outputs

3.1 **Component I: Component I. Prioritization and action plan.** The Component will finance baseline studies on the arsenic situation in different supply systems. Systems will be categorized and typified. An arsenic management proposal will be developed for each typology (including by-products management). A technical, environmental and social analysis of alternatives will select the optimal solution, including economic costs, operation and maintenance. An action plan will be developed including activities and their prioritization, staging, and impacts.

3.2 **Component II: Component II. Feasibility Studies and designs.** Based on the results of the studies financed under component I, and to facilitate the proper planning of public policies for the management of arsenic in drinking water systems, feasibility studies and advanced designs of the priority works will be financed. Technical specifications and procurement documents will be developed to facilitate the bidding processes to ensure the to ensure the acquiring of cutting-edge knowledge.

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component I. Prioritization and action plan	US$50,000.00	US$0.00	US$50,000.00
Component II. Feasibility Studies and designs.	US$450,000.00	US$0.00	US$450,000.00
Total	**US$500,000.00**	**US$0.00**	**US$500,000.00**

V. Executing Agency and Execution Structure

5.1 According to the need to ensure an interinstitutional approach and capitalize on regional knowledge, the Bank will be the executing agency. The Water and Sanitation sector specialists from the IDB Uruguay Country Office (WSA / CUR) will be performing the necessary tasks to achieve the objectives of the technical cooperation.

5.2 Considering the need to ensure coordination among all actors involved (OSE, Ministry of Health, Ministry of Environment among others) and focusing on the need to bring about international expertise and lessons learned from other countries, specifically on the management of arsenic according to international standards, the IDB through its Water and Sanitation Division (INE/WSA) have been requested by the country to lead the execution of the TC.

VI. Project Risks and Issues

6.1 The following risks have been identified: (i) The potential lack of interest from consulting firms will be mitigated through proper dissemination at the national and international level. (ii) According to the work plan, the products in component I represent direct inputs for the next phase. To achieve an effective coordination, a strict monitoring plan will be implemented by the water and sanitation specialists, in coordination with OSE the beneficiary institution of this operation.

VII. Environmental and Social Classification

7.1 The ESG classification for this operation is "undefined".