

ENGINEERING, PROCUREMENT AND CONSTRUCTION OF 65 EMERGENCY WATER PURIFICATION PLANTS IN THE UPPER AMAZON BASINS, PERU



PROJECT INFORMATION

The scope of the project is to **supply drinking water to 65 indigenous communities of the Upper Amazon** in the Department of Loreto, Peru.

For this purpose, 65 drinking water treatment plants were designed for the flow rates and specific needs of each community in order to remove contaminants from the raw water. The raw water supply sources are the different rivers and tributaries of the Pastaza, Corrientes, Tigre and Marañón river basins.

The scope, for each location, includes the **design and construction of the civil engineering works** where the plants are to be installed and the **capture and conveyance** of water to the treatment plants. It also includes the **fabrication, transportation, assembly, installation and commissioning** of the water purification plants in the initial phase plus **maintenance and operation** of the 65 plants for 2 years in the second phase.

Nine different types of treatment were designed based on the quality of the water in each river to remove pathogens, turbidity and, as appropriate, a combination of hydrocarbons, iron, aluminium, boron and heavy metals. Treatment flow rates vary between 1,000 and 3,000 l/h, according to the needs of each community.



3D IMAGE – SCHEMATIC DIAGRAM OF OPERATION



LOADING A PLANT ONTO A BOAT



CONSTRUCTION OF STILT HOUSES



OPENING OF PURIFICATION PLANT



BOY USING THE PURIFICATION PLANT

RELEVANT INFORMATION

Year: 2014/2016

Customer: Ministry of Housing, Construction and Sanitation of Peru

Budget: \$21,500,000

PROJECT INFORMATION:

COUNTRY:	Peru
LOCATION:	Department of Loreto
PURPOSE:	Supply of drinking water to 65 communities of the Pastaza, Corrientes, Tigre and Marañón River basins
RANGE OF FLOW RATES:	1 – 3 m3/h
RANGE OF TANK CAPACITY:	2 – 15 m3
PURIFICATION TECHNOLOGY:	Pressure washing, deferrisation, pH adjustment and reverse osmosis