

EIA VOLUNTEER PROGRAM

ANCORAIMES 2017

1. Information about the participant organizations:

Volunteer Team:

Team leader:

Phone:

Email:

Host organization: EIA

Phone: 1(630)918-7716

Email: rod.beadle@engineersinaction.org

EIA Project Manager:

Email:

Partner Community: Ancoraimes

Contact:

2. Community Description:

Ancoraimes is in the coordinates, latitude 15°53'50.43"S, longitude 68°54'12.93"W and in an elevation of 3890 m. The community is next to the Lake Titicaca in a mountain area. Due to the altitude, there is little fauna and flora in the area. Ancoraimes has a water system which consists of one elevated tank, one spring, and a pipeline with household connections.

The Methodist Vocational School of Ancoraimes was founded August 10, 1957 by American Missionary Milton Robin. The school is currently directed by Lic. Miguel Osvaldo Siñani Flores who has a qualified teaching staff for each level, at a final number of 38 teachers, all of them are approved by the Ministry of Education. There are 295 students registered for 2017, male and female. The school has 22 courses: 16 from primary level up to the sixth grade. It is distributed in regular classes or technical classes, the students of secondary pass technical classes and finish the school with medium technical level. The careers that it imparts are: Industrial Carpentry,

Automotive mechanic, Industrial Mechanics, Industrial Electronics, Textiles and clothing, and Computing.

The water service provided to the U.E. Metodista Ancoraimes is not always available. The school has water for 3 hours daily. The flow rate is approximately 5 l/min and the quality of the water shows, according to a Petri film test, coliforms. The water serves the restrooms directly by one small elevated tank.

The Sanitary System consists in a sanitary pipeline, but the school is not connected to it. The Methodist school has three restrooms: one for the teachers, other for the students and one uncompleted new one for the students. Each of these have six toilets, and only one tap that is working. The new restroom is uncompleted because of the lack of funding. The new restrooms do not have operational handwashing stations.



3. Background

The Methodist church tried to improve the basic sanitation systems of the technical educational unit. However, these efforts were not enough, so the school now has an unfinished basic infrastructure and an old deteriorated infrastructure. Therefore, it is necessary to work on this basis to provide a quick and effective response to the health problems currently experienced in the technical education unit.



Engineers in Action and Methodist Church in Bolivia, working together, applied for funding from UMCOR (?) for making the maintenance and the all repairs needed in the actual basic sanitation system.

4. Problem

The restroom that the students are using is for boy and girl students, without differentiation and the infrastructure lacks doors for privacy. This is the main concern of the teachers and that is why they are building a new restroom that will allow the students to separate the service. The two old restrooms need different kind of repairs to make them ready for the students and the teachers, and the new one needs to be finished. The restrooms do not have the capability to store water for the daily use because of the lack of elevated tanks. The water flow during the night and the three-hour days will provide the enough water to be stored to provide a hand washing service, too. Finally, all the restrooms need to be connected to the Sanitary pipeline.

5. Specific Team Objectives

- Design the maintenance required for the restrooms.
- Create pay Items list and calculate the quantities(volume) required for the maintenance of the restrooms.
- Develop a list of materials and a Budget with the Volumes of the items.
- Design the alignment and details of connections for the water and the sanitary system for the restrooms in the U.E. Ancoraimes
- Design the elevated tank structure to store water for the school.

6. Profile team members

- **Team lead**
 - Civil Engineer P.E. , Background related to Sanitary system
- **Second lead**
 - Civil engineer P.E. , Structural background.
- **Member one**
 - ACAD Person, background in AutoCad management
- **Member two**
 - Civil Engineer or related, for support activities,
- **Member three**
 - Architect or related, for support the team on project.

7. Agreements



According to EIA guidelines for this type of volunteer program, the team needs to coordinate the date for the travel and pay 25% of the total amount to show a serious interest in the volunteer program and close that position.

8. Cost

The technical volunteer program is estimated to cost \$1550 which includes,

- 5 Days for engineer work with the team, 2 in field 3 in office
- 4 Days renting the car plus gasoline
- 2 Days Driver
- 4 Day for translator
- 1 Cell phone
- 6 days lodging (shared room)
- Airport transport
- Food for 4 days in field
- Volunteer fee

9. Permanence in country and trip activities

- The trip is estimated for 10 days; this 10 days are distributed as: one day for acclimating, two days for trip, two full days in field, three days of work office and one free day in the city
- The activities in field will be coordinated with the EIA staff member assigned to project
- The activities in office is going to be with technical expert.