

First Project in Mexico

By Duncan Cox



In late 2009 Green Gas through Green Gas Americas joined a consortium with companies IDEAL, ACCIONA, Atlatec, ICA and DYCUS for the purpose of bidding for the National Water Commission of Mexico (CONAUGA) for the construction and 25 year operation of one of the world's largest wastewater treatment plants.

The project was bid for by two competing consortiums and although our consortium was slightly higher in price we were deemed technically superior and were awarded the project. The construction of the US\$710 Million waste water plant started at the end of Q1 2010. The project is located in the town of Atotonilco in Hidalgo State, 60 km north of Mexico City. Currently in this area only 11.6% of waste water is treated per day and untreated water is used for the irrigation of local agricultural fields which account for one of the largest in the country. This causes health issues and environmental pollution.

The new plant will have the capacity to treat 3.6 million tonnes of water per day which equates to 60% of the area's wastewater. The project will have a positive impact on the environment, irrigating more than 80,000 hectares of the Tula Valley and improving the living conditions of more than 300,000 inhabitants in the surrounding area.

The wastewater treatment plant has within it a 33MW CHP plant which will supply power and heat for internal consumption. Green Gas's role within the consortium will be to provide expertise for the design, construction and operation of this combined heat and power (CHP) plant.

The expertise that Green Gas will provide is in the form of engineering services and operation and maintenance supervision in relation to the CHP plant. This CHP plant will convert the greenhouse gas, methane that is produced from the waste water treatment utilisation process into electricity and heat. The CHP plant will potentially have the capability to reduce emissions in excess of 1 million tonnes CO₂ equivalent per year.

This project will provide Green Gas the opportunity to establish itself in Mexico and it will be the stepping stone to many more projects in the future.