UNITED HUMANITARIAN TRUST

UNITED HUMANITARIAN TRUST & PARTNER PROJECTS

The Following Projects in Food, Energy and Water, were undertaken by UHT and its Partners in various countries around the World

FOOD, ENERGY & WATER

Petrochemical and gas facilities

1. Ethane Separation Plant, Rayong, Thailand for Petroleum Authority of Thailand, one of world's largest gas processing facilities, capacity of 800 million standard cubic feet per day.

2. Gladstone Liquified Natural Gas project in Queensland Australia; capacity of 7.8 million tonne-per –year of liquefied natural gas (LNG)

3. LNG Terminal, Altamira, Mexico; 5 billion cubic meters of re-gasified LNG per year

4. Oil refinery for Chevron, Capetown, South Africa, 30,000 barrels per day

5. Oil refinery, Port Arthur, Texas, USA

6. Repsol Cartagena Refinery, Spain, $3 billion investment

7. Oil Refinery, Pertamina, Java, Indonesia, capacity of 100,000 barrels a day, Rayong Refining Company and Petroleum Authority of Thailand, $2.2 billion investment.

FOOD, ENERGY & WATER

8. Antwerp, Belgium Refinery for Esso, 250,000 barrels per day

9. Marathon Garyville Oil Refinery, Garyville, Louisiana, USA, 4th largest in the USA

Power Plants

1. Brazos Electric Cooperative Jack County Gas-fueled power plant, Jacksboro, Texas, USA, 620 Megawatt capacity

2. Dominion Virginia Power Bear Garden Power generating station, New Canton, Virginia, USA, 590 megawatt capacity

FOOD, ENERGY & WATER

3. Guadalupe gas-fueled electric generation facility, Santa Clara, Texas, USA, 1000 megawatt capacity, gas fired cogeneration plant

4. Urquhart Power Project, South Carolina, USA, 450 megawatt capacity

5. Arco Solar Photovoltaic Power Plant, Carrisa Plains, California, USA

Manufacturing Facilities

1. Elkem Solar Grade Silicon Manufacturing Facility, Kristiansand, Norway, 5000 metric tons per year production facility

2. LDK Polysilicon manufacturing facility, Xinyu City, China; $1.2 billion investment

Waste to Energy Plants

1. Waste to Energy Plant, Bangkok, Thailand, 2500 tons per day capacity, $450 million investment, gasification of solid municipal waste

FOOD, ENERGY & WATER

2. Agricultural Power Biomass Plant, Fresno, California, USA, 750 tons per day of agricultural waste and waste paper; 25 megawatt capacity.

Pillsbury South Africa Prepared Dough and Cake Mix Manufacturing Facility - Construction

Location: Johannesburg, South Africa

Completed construction of international food manufacturer Pillsbury's new Johannesburg factory on schedule. The estimated R25 million project, which complied with the stringent standards demanded by Pillsbury in the construction of plants around the world, was completed within a year.

Three Valleys Water

Three Valleys Water

Since December 2005 have been managing asset delivery for Three Valleys Water (now Veolia) which supplies clean water to more than three million people in a region to the north of London that extends from Woking in the west to Great Dunmow in the East.

Have helped to deliver a £250m capital programme over a five year period (AMP 4 2005 to 2010) in which we undertook design, engineering, programme and project management, contract administration, commercial management and client income maximisation.

The programme comprised diverse projects ranging from treatment works, pumping stations and reservoirs to the replacement of over 600km of water mains. Also provided support to developers and individuals requiring new connections into the clean water network. The contract award involved the transfer of 48 personnel, each with varying skills including specialist engineering, project management and customer care expertise.

FOOD, ENERGY & WATER

Iraq Public Works Water Infrastructure

Client: Coalition Provincial Authority
Location: Iraq

The combined total value in excess of $1 billion. Provided design/build construction services for the rehabilitation of existing, and construction of new, potable water distribution and treatment systems, municipal sewer collection and treatment systems, and solid waste management systems throughout Iraq.

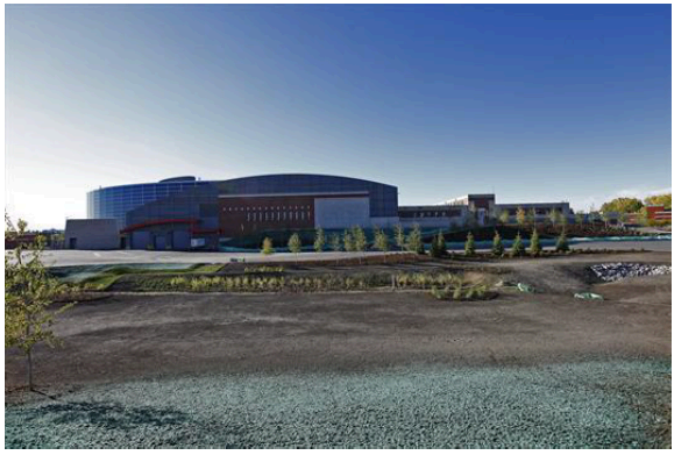
SilTerra Wafer Fabrication Facilty

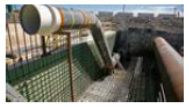
Location: Kuala Lampur, Malaysia

Provided engineering, procurement, and construction management to for a wafer fab facility in Malaysia.

Required maximum use of local content of building materials, systems, and labor, and that the project contributed a strong legacy back to Malaysia. Malaysians were trained in architecture, engineering, and construction technologies of semiconductor factory design and critical fabrication processes.

Glenmore & Bearspaw Water Treatment Plant



- 
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PROJECT OVERVIEW

The project increased capacity to 550 million liters per day at Bearspaw Water Treatment Plant and 400 million liters per day at Glenmore Water Treatment Plant.

Extensive mechanical and electrical process systems were part of mandate: the team completed pre-start, start-up, and commissioning first; wet well and pump house commissioning followed six months later. Also installed four new 500+ horsepower motors with complex shut down and start-up procedures. The earthworks package included constructing bio-retention ponds, roads, and asphalt paving over two seasons. Final grading, top soil placement, and the planting of trees and shrubs were final touches, all completed to the very high environmental standards.

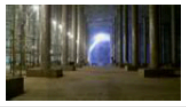
FOOD, ENERGY & WATER

South Bay International Wastewater Treatment Plant

Project Overview

The South Bay International Wastewater Treatment Plant (SBIWWTP) is owned and operated by the United States section of the International Boundary and Water Commission (IBWC) , and is located near the United States/Mexico border on a 100-acre site south of San Diego. Its purpose is to treat wastewater from Tijuana, Mexico, before discharging it into the Pacific Ocean. Waste water currently flows via several pump stations through a 96-inch pipe from Mexico into the plant. Originally constructed in 1996, the SBIWWTP provided only primary sewage treatment. With the need to provide higher levels of treatment. This expansion and upgrade, completed in 2011, added secondary treatment to the process. The project consisted primarily of constructing two large cast-in-place concrete tanks, the activated sludge tank (AST), and the secondary sedimentation tank. Other features were new gravity thickeners, a new chlorine injection system, and a new non-potable water system for the plant.

San Juan Chama Water Treatment Plant



PROJECT OVERVIEW

The major component of the project was a 92 MGD, state-of-the-art surface water treatment plant. The plant included many complex components, with three major processes being flocculation/sedimentation, ozonation, and filtration. A few of the facilities constructed include the following: 10 MG finished water storage tanks, a finished water pump station (with the ability to pump a total of 184 MGD), 6 MG grit removal basins, eight-acre settled water storage basins, a settled water pump station, a rapid-mix facility, gravity thickeners, and others.

The plant has an extensive controls package and sophisticated security, and now has the capacity to supply up to 70 percent of the area's future water supply.

FOOD, ENERGY & WATER

Jordan Basin Water Reclamation Facility

PROJECT OVERVIEW

One of the goals of the project is to make it fit in with the beautiful surrounding landscape; another is to use the latest technology in wastewater treatment: membrane bioreactors.

This will be one of the largest MBR plants in North America. The plant consists of an influent pump station, a headworks building, process basins and building containing the MBR equipment, a UV disinfection building, a dewatering building, and ancillary facilities.

Kyrene Reclamation Facility

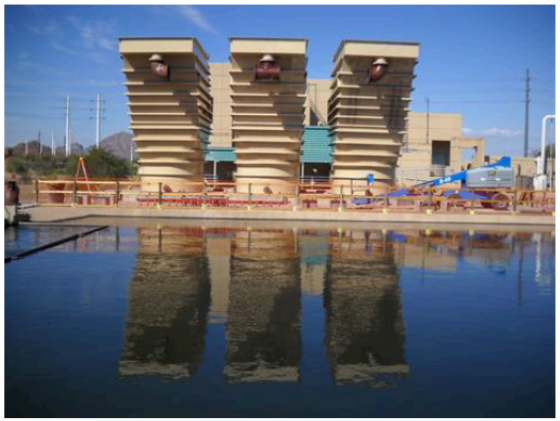
PROJECT OVERVIEW

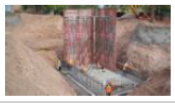
Improvements were made to allow the high-quality reclaimed water to be provided to various end users, such as the Salt River Project (SRP), for cooling tower use. This project was a 9 MGD expansion of the existing conventional water reclamation plant to a state-of-the-art membrane and ultraviolet technology plant.

The project included modifications to the existing influent pump station, a new screenings and grit removal facility, two new aeration basins, modifications to the existing aeration basins, reconfiguration of the existing secondary clarifiers to membrane basins, a new blower building, construction of a new ultraviolet disinfection and reclaimed water pump station, a new odor-control system, and significant underground utility work.

FOOD, ENERGY & WATER

Johnny G. Martinez Water Quality Improvement

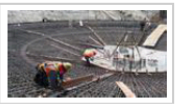


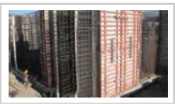


PROJECT OVERVIEW

The improvements included a new granular activated carbon (GAC) facility, a new GAC influent pump station, a new generator building, and a new solids-thickening tank. The project also included modifications and upgrades to the existing infrastructure, consisting of the secondary sedimentation and flocculation basins; chemical systems; solids-handling building; and numerous valve, pump and slide gate replacements. The existing plant control system was upgraded from a network of remote terminal units to a state-of-the-art programmable logic control system, allowing a higher degree of automation in the plant.

San Jacinto Valley Regional Water Reclamation Facility





PROJECT OVERVIEW

Elements of the project include retrofitting existing plant facilities, plus adding several new facilities: two new digester structures, a sludge storage structure, an additional chlorine contact structure, primary and secondary clarifiers, an aerobic basin structure, a new flocculation basin, an effluent pump station, new head works, new biofilters, new operations and administration buildings, a main electrical building, four minor electrical buildings, and a new warehouse.Work also consists of installing yard piping, process equipment, process piping and mechanical installations. A complete electrical, instrumentation and controls installation is in the scope of the contract. Concrete flatwork, paving, site lighting, fencing, irrigation, and landscaping complete the project scope.

HYDRO DAM & PIPELINES

Tempe Town Lake Downstream Dam Replacement

Pipelines

1. Trans-Alaska pipeline. North Slope, Alaska, 800 mile pipeline and 1000 acre marine terminal

2. Uriente Villano Oil Pipeline for Arco, Uriente, Ecuador, facilities included, central processing facilities, electrical power generation facilities, 170 kilometer pipeline, pump stations and water handling system.

3. YPF and ENAP Trans- Andean Oil Pipeline, Argentina and Chile, 265 mile trans-Andrean oil pipeline through Argentina and Chile.

4. Pipeline (Caspian Pipeline Consortium), 1700 kilometer pipeline, Tengiz, Kazakhstan to Black Sea at Novorossiyske; $3.2 billion investment

AQUACULTURE PROJECTS

Kevin Hopkins, Co Director: Dr. Hopkins holds a PhD in Fisheries from Auburn University, one of the top teaching and research universities in the field of aquaculture. Through his research and teaching at the University of Hawaii at Hilo, he has been actively involved in aquaculture for almost 40 years. Dr. Hopkins is currently President of the United States Aquaculture Society and a Professor of Aquaculture at the College of Agriculture at University of Hawaii at Hilo; he oversees the Pacific Aquaculture and Coastal Resources Center.

Daniel P. McVeigh, Co Director: McVeigh holds a Ed. M in Computing, in Education and Cognitive Science. From Teachers College Columbia University one of the top teaching and research universities in the field of education. Through his research and teaching at Teachers College Columbia University, Rutgers University and New York City schools, he has been actively involved in aquaculture for almost 20 years.

Aquaculture Design and Construction Experience
Pacific Aquaculture & Coastal Resources Center, Hilo, Hawaii

Designed, supervised construction and managed 13 acre coastal aquaculture R&D center
College of Agriculture, Forestry & Natural Resource Management, Hilo, Hawaii

Designed, supervised construction and managed 8 acre inland aquaculture R&D center

Also teach a course in aquacultural engineering.
Day2 Resources LLC, Kapoho Hawaii

Designed renovation and managed 15 acre tropical fish farm (personally owned)
Akolea Aquatics, Hilo, Hawaii

Renovation and operation of small sturgeon hatchery and grow-out facility
Auburn University, Auburn University

Pond design and fish hatchery construction, particularly for tilapia Netarts Chum Salmon Hatchery, Oregon State University

Renovated and managed chum salmon hatchery
Abassa, Egypt

Design renovations and managed research project in freshwater ponds Asian Institute of Technology, Bangkok

Design and operation of freshwater research pond facilities
Ranong Province, Thailand

Technical assistance and planning for aquaculture redevelopment after tsunami
Freshwater Aquaculture Center, Central Luzon State University, Philippines

Designed, supervised renovation and managed integrated farming project (fish and livestock). Also design of small-holder farms. Northern Mindanao, Philippines

Planned and designed fisheries and aquaculture facility renovation and development across a 10 province region including freshwater (see Kialdin and Kitcharo entries), brackishwater, marine and processing facilities.
UCA, Nicarauga

On-going redesign of existing freshwater tilapia hatchery
Kuwait Institute for Scientific Research

Design, construction and operation of hatchery and research facilities with emphasis on recirculating systems
Kialdan Fish Farm, Lanao del Sur, Philippines

Designed renovation for a carp farm
Kitcharo Fish Farm,
Agusan del Norte, Philippines

Designed freshwater fish hatchery and pond renovations
Zomba, Malawi

Participated in early design of freshwater fish hatchery. Also, design of small-holder farms.
FUSDAES, El Salvador

Design of tilapia
Hawaii Institute of Marine Biology

Shrimp hatchery renovations
New York State: 15 acre farm (personally owned)

Aquaponics: Small installation Aquaculture: Tilapia, Trout 10 acre farm, Aquaculture: ponds and re-circulation aquaculture
New York State:

Private farm, 20 acre farm, Aquaculture: Trout, Aquaculture: ponds and re-circulation aquaculture
New York State:

Private farm, 50 acre farm, Aquaculture: Trout, Aquaculture: ponds New Jersey

5 acre farm,(personally owned) Traditional field crop production
Aquaponics: commercial installation, Aquaculture: Tilapia, Koi Aquaculture: re-circulation aquaculture
New Jersey

Rutgers University, 4 acre farm, Aquaponics: commercial installation Aquaculture: Tilapia, Aquaculture: re-circulation aquaculture New Jersey

Private farm, 2 acre farm, Aquaculture: Hybrid Striped Bass Aquaculture: re-circulation aquaculture
New York City

Urban farms (city wide),Roof tops and In buildings (42 farms) Aquaculture: Tilapia,Aquaculture: re-circulation aquaculture Aquaponics and Hydroponics, Active and in progress:
Hawaii USA:

600 acre farm, Aquaculture: Sturgeon, and other, Aquaculture: ponds and re-circulation aquaculture, Aquaponics: commercial installation Rhode Island , USA:

10 acre farm, Fresh water Aquaculture: Hybrid Striped Bass Aquaculture: re-circulation aquaculture, Aquaponics: commercial installation Salt water re-circulation aquaculture:
California

40 acre farm, fresh water Aquaculture: Tilapia, Hybrid Striped Bass, Aquaculture: re-circulation aquaculture, Aquaponics: commercial installation
Qatar:

1 acre farm expanding to 10 acres, Aquaculture: Cobia, Tilapia Fresh water Aquaculture: re-circulation aquaculture Saltwater Aquaculture: re-circulation aquaculture, Cobia, Aquaponics: commercial installation seaweed
Vietnam: