

## PROJECT FACT SHEET

**Customer:** EASTERN TREATMENT PLANT

**Project:** ELECTRICAL HV AND LV DISTRIBUTION, LIGHT & POWER INSTRUMENTATION INSTALLATION

**Project Profile: Project Overview**

The Aeration Tanks project was designed to increase the capacity of the Eastern Treatment Plant and improve the water quality outflow to the ocean. The tanks are a series of deep concrete

channels that enable microscopic organisms to digest the nutrients from the sewage prior to its entry to other systems such as the settling ponds digesters and out flow reservoir. Nilsen was involved in the high voltage reticulation to the main distribution board, the LV reticulation to the motor load centres and the instrumentation wiring from the MLC's out to the field instruments.



**Nilsen scope of works:**

**Power:**

- The supply of two Transformers within the USS building
- The supply of two Ring Main Units within the USS building
- The supply and installation of two 70mm copper 3C Screened HV cables from 62H to 33M and associated control cables.
- Upgrading of two HV supply panels within 62H.
- The supply and installation of MLC and Distribution Boards and Associated Sub mains
- The supply and installation of General Purpose
- Power within the USS and MLC buildings.
- The supply and installation of a UPS system.
- The supply and installation of a Battery Charger Unit.
- The supply and installation of power and control cabling to the tanks.
- The supply and installation of the cable trays.
- Supply and installation of a HV earth grid.
- The supply and installation of all underground conduits and pits.
- The supply and installation of the fibre cables.

**Lighting: Instruments: Security: Fire Installation: Air Conditioning:**

**Lightning Protection:**

**Specific Project Obstacles to be overcome**

- Integrating current technologies with 40 year old technology.
- Working within a highly corrosive environment.
- Working on an extremely large and industrious site
- Highly technical and specific tasks

**Added value accrued to customer because of Nilsen involvement**

Nilsen was the head contractor for Security, Fire, Air Conditioning and commissioning sub contractors. Nilsen was able to provide expertise across a large range of services such as Switchboards manufacturing, High Voltage engineering, Fibre optic cabling and Instrumentation.