

Richardson Associates (1993) Limited

- Industrial Facility - Project Summary -

Project Name: Biovectra DCL Pharmaceutical Processing Facility, Charlottetown, PEI

BioVectra dcl, formerly the Biochemical Division of Diagnostic Chemicals Limited is a Canadian-based biochemical manufacturer. The award winning Charlottetown based chemical and diagnostic manufacturer produces a wide range of specialty and fine chemicals, advanced intermediates, enzymes and biomolecules as well as custom synthesis and manufacturing services for the pharmaceutical and nutraceutical industries. In the fall of 2000 Biovectra, announced the construction of a new multi-million dollar processing facility. The intent of the design was to provide an energy efficient, user friendly and maintenance friendly electrical system. The plant, itself, is a fully functioning processing plant, administrative office, wet lab for research, product development and testing incorporating storage / warehousing, shipping and receiving facilities. In addition, the facility includes a tank farm for storage of chemicals and hazardous process waste.

The building was designed and tendered in six separate phases ranging from site services to supply and installation of motor control centres. This posed a number of design challenges as many of the design requirements of future phases needed to be integrated into preceding phases. In addition, the entire facility was designed for future expansion. Therefore the entire electrical distribution system was designed not only to meet the current needs but also the future needs of the client. The design of the building was also complicated due to the requirement of a 4 hour fire separation between the process areas and the balance of the building. The process area is also divided into various classifications with respect to the process with the reactor suites and cone dryers being Class 1, Division 1 while the tray drying suites, clean rooms, tank farm and process support areas are classified as Class 1, Division 2.

The resolutions include an electrical distribution system designed to meet the current and future needs of the facility. The building's lighting system incorporates the energy efficient T8 lamp and electronic ballast technologies and was designed in strict compliance with the Illuminating Engineering Society's guidelines for pharmaceutical facilities utilizing computer based lighting design programs. The building's data and communications systems feature the latest Category 6 and fibre optic data networking technology, while the fire alarm system is based on a fully addressable microprocessor based protection system. Other technologies and/or electrical design features incorporated into this facility include Surge Protection, UPS power systems, Public Address and Internal Paging Systems, Automatic Transfer Switch and provision for emergency generation.

